*Please note that several photographs have been removed or replaced in this document, no other changes to the content were made (12/20/23)

Waterfront Specific Plan

for the City of Berkeley Public Tidelands Area

PUBLIC DRAFT SEPTEMBER 11, 2023

CITY OF BERKELEY

Parks Make Life Better!

ACKNOWLEDGMENTS

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SECTION 1

INTRODUCTION & BACKGROUND

1.1 Introduction

1.1.1 Waterfront Specific Plan Introduction

The Berkeley Waterfront is a public asset and community resource within the City of Berkeley and San Francisco Bay area. The Waterfront is well-loved by the local community, who enjoy the diverse recreational opportunities and the exceptional coastal landscape and biodiversity.

The long-term planning vision presented in the Waterfront Specific Plan strives to balance the community's current and future needs at the Waterfront for the next 25-50 years. Based on community feedback and consultant input over the past three years, the City has led the creation of a planning document with clear guidelines to preserve the natural beauty of the coastal landscape, maintain and enhance existing Waterfront amenities and infrastructure, and introduce new uses that benefit the public and ensure essential community values are preserved.

1.1.2 How to Use this Document

The Waterfront Specific Plan (WSP) is organized into 5 sections, which are interrelated to create a complete vision and strategy for sustainable development, operation, and maintenance of the Berkeley Waterfront. These sections may be read or referenced individually.

SECTION 1: INTRODUCTION & BACKGROUND

Presents an overview of the Berkeley Waterfront, including its physical location and history, its environmental and regulatory context, existing conditions of essential infrastructure and assets, and financial challenges for ensuring a sustainable and resilient public landscape for the next generation. This section also outlines why the WSP was created, the purpose of the programmatic EIR, and the engaged community and stakeholder process that have influenced the final document. This section concludes the list of community-supported principles that have guided the Berkeley Waterfront Vision presented in Section 2, as well as the regulatory land use and development standards presented in Section 3.

SECTION 2: BERKELEY MARINA VISION

Visualizes the potential future for Berkeley Waterfront as a sustainable and resilient public resource and a destination with broad appeal to the entire community to connect with nature, with the Bay, and with each other. Areas of focus include: Parks & Nature, Recreation, Redevelopment Opportunities, Supporting Infrastructure, and Fiscal Sustainability. This vision is intended to serve as a guideline for on-going Waterfront operations, maintenance, and programming, as well as future redevelopment proposals. The vision is intentionally flexible and adaptable to change as the Waterfront evolves over the next 50 years.

SECTION 3: LAND USE & DEVELOPMENT

Outlines the regulatory context, processes for new Waterfront projects, and parameters for appropriate development. Allowable land uses, development standards, and design guidelines provide a guide to evaluate and implement future redevelopment within the Waterfront.

SECTION 4: IMPLEMENTATION & FINANCING

Details short-term and ongoing implementation strategies to realize the vision and land uses described in Sections 2 and 3.

SECTION 5: APPENDIX

Contains a common glossary of terms and abbreviations used throughout the document, as well as supporting documents developed as part of the Waterfront Specific Plan process. These include reports on current physical conditions and recommendations for capital improvements, Marina operations, transportation and parking, Waterfront economics and potential revenue generation, and projected sea level rise impacts at the Waterfront.

How can YOU use the Waterfront Specific Plan?

Community Members & Visitors | For community members and visitors who are interested in learning about the WSP, Section 1 provides background on the fascinating history of the Waterfront, as well as its current urban and regional context. It also outlines the WSP's public process and community-supported planning principles. Section 2 will help you understand the vision and key strategies for the Berkeley Waterfront over the next 25-50 years. Section 3 graphics will illustrate where and how recreational and redevelopment opportunities can occur; while Section 4 describes plans for implementing the Specific Plan vision for the Waterfront.

City Staff / Elected Officials | City staff and elected officials should use this plan to evaluate development projects and permit applications, and when planning public improvements to ensure projects are consistent with the overall vision and policies of the WSP. Section 3 will be essential guiding private developers in their project decisions, reviewing permit applications, and negotiating lease agreements and permit applications to state and federal regulatory bodies (i.e. USACE, BCDC, CSLC, and others). Section 2 is an important overview of the holistic vision for public infrastructure, mobility, recreation, and public realm improvements at the Waterfront. The City should regularly monitor the progress being made on public projects, programs, and implementation strategies described in Section 4.

Waterfront Business | For existing and prospective businesses operating in the Waterfront, Section 2 provides a comprehensive vision for the Waterfront over the next 25-50 years, outlining the environmental context, recreational amenities, supporting infrastructure, and development potential that will influence commercial and organizational success. Prospective businesses should refer to Section 3 to assess how to operate within the Waterfront and the development standards and design guidelines required for redevelopment of existing or new structures.

Private Developer | Developers who are interested in redevelopment opportunities should become familiar with the WSP's overall future vision as described in Section 2. Development applications and project designs will need to be consistent with the Specific Plan's development standards and guidelines provided in Section 3. The typical development process and relationship between leasing Waterfront public land and project permitting is also described in Section 2.

1.1.3 Related Planning Documents & Regulations

The Waterfront Specific Plan has been developed in coordination with related municipal and regional planning documents. The Berkeley Waterfront is a unique destination, but it is also defined and strengthened by its successful integration into its urban and regional context. This includes the mobility networks that bring visitors to the Waterfront, the native Bay Area plant communities that create habitat for native fauna, projections for regional sea level rise, or civic goals to reduce carbon emissions.

The following planning documents have been used in the development of the Waterfront Specific Plan, and should be referenced in coordination with the WSP for redevelopment proposals at the Waterfront, as well as for on-going capital improvements to public waterfront assets, including site infrastructure, mobility networks, public realm amenities, and shoreline resiliency:

City of Berkeley, Marina Master Plan (City of Berkeley, adopted 2003)

The Marina Master Plan of 2003 represents a commitment on the part of the community and the City to provide a long-term recreation, capital projects, and open space enhancement program for the Marina.

General Plan (City of Berkeley, adopted 2001)

The City's current General Plan (adopted in 2001) defines a long-range vision and priorities for future growth, development, and conservation in the City of Berkeley. The City's General Plan consists of ten "Elements", including: 1) Land Use; 2) Transportation; 3) Housing; 4) Disaster Preparedness and Safety; 5) Open Space and Recreation; 6) Environmental Management; 7) Economic Development and Employment; 8) Urban Design and Preservation; 9) Citizen Participation; and 10) Implementation. With the exception of the Housing Element, which is required by State law to be updated on a regular basis, the General Plan has not been comprehensively updated since it was adopted in 2001.

Climate Action Plan (CAP) (2009)

Adopted in June 2009, the Berkeley Climate Action Plan (CAP) outlines a vision for a more sustainable Berkeley and addresses policies and actions for transportation, energy, waste, community engagement, and climate adaptation, in order to achieve the goal to reduce community-wide GHG emissions 33 percent below 2000 levels by the year 2020 and 80% by 2050. The City regularly tracks and reports its progress towards its climate action goals. CAP goals and policies relevant to the Adeline Corridor Specific Plan relate to Sustainable Land Use and Transportation, Building and Energy Use, and Climate Adaptation.

Specific Plan: City of Berkeley Waterfront Plan (1986)

The 1986 plan refers to the land that is now Eastshore State Park, and only has jurisdiction over the area to the east of Marina Blvd, not the current Berkeley Waterfront. However, this document provides planning context for the surrounding waterfront area. Note that the 1986 plan still has jurisdiction over the lands east of the current existing shoreline, and include Tom Bates Sports Fields, the Stables, and the Berkeley Beach.

Berkeley Marina 5-Year Capital Improvement Plan (City of Berkeley, 2021)

Berkeley prepares a five-year Capital Improvement Program (CIP) and updates it every two years. The CIP outlines the specific projects, schedules, and the funding needs for the following infrastructure systems: city facilities, information systems, parks and marina, sanitary sewer, storm drains, sidewalk repairs, street repairs, transportation, other infrastructure, and equipment.

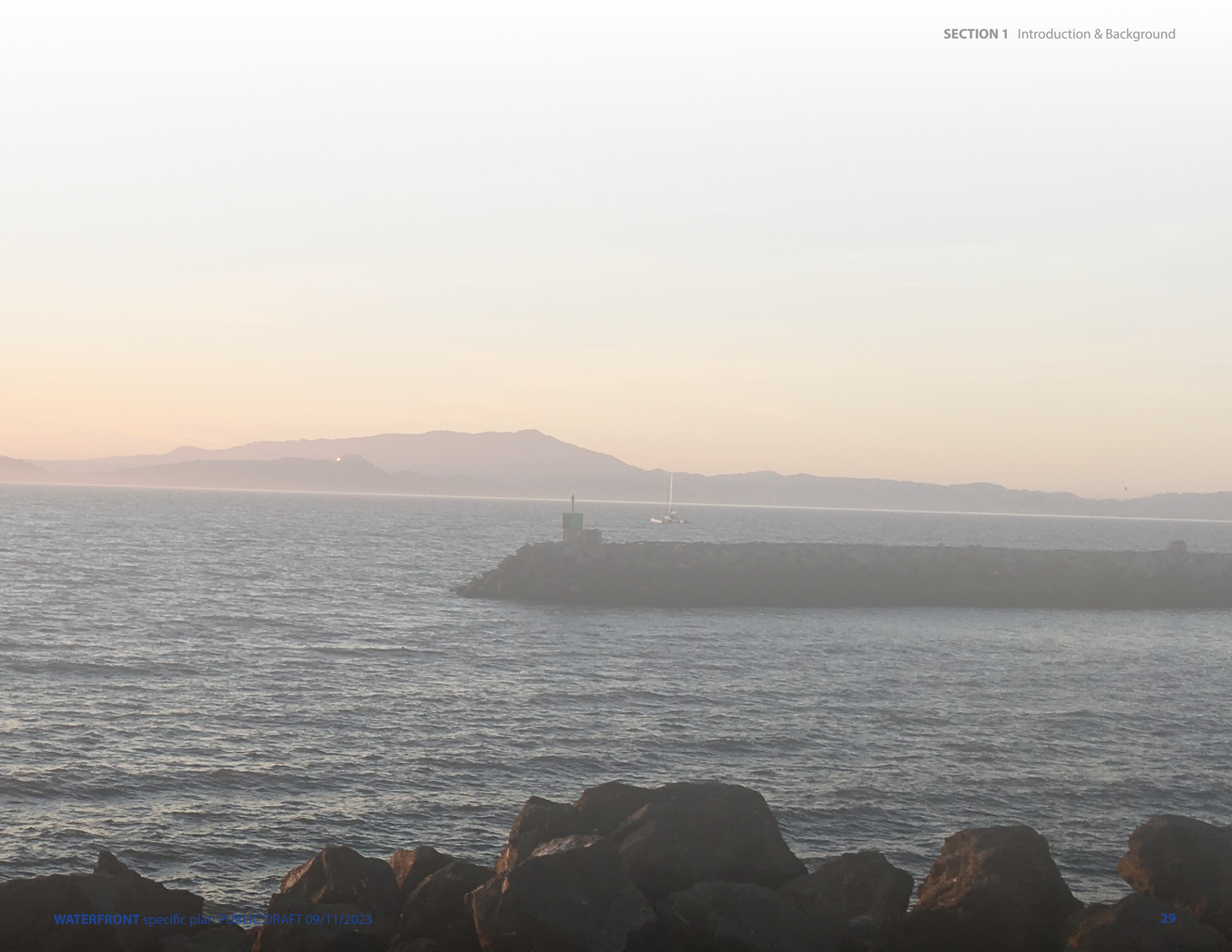
Berkeley Waterfront Sea Level Rise AB 691 Assessment Study (2022)

As part of an statewide effort to evaluate sea level rise impacts for state lands throughout California coastal areas (California State Lands AB 691 Synthesis Report), the City commissioned a sea level rise assessment study. The report evaluates impacts, adaptation plans and strategies, and recommendations for ways the state can support the work of localities to ensure a collaborative approach is taken to reduce the risks and increase resilience to the impacts of sea level rise.

Green Infrastructure Plan (City of Berkeley, 2019)

The purpose of this Green Infrastructure Plan (GI Plan) is to guide the identification, implementation, tracking, and reporting of green infrastructure projects within the City of Berkeley in accordance with the Municipal Regional Stormwater Permit (MRP), Order No. R2-2015-0049, adopted by the San Francisco Bay Regional Water Quality Control Board on November 15, 2015. "Green infrastructure" refers to a sustainable system that slows runoff by dispersing it to vegetated areas, harvests and uses runoff, promotes infiltration and evapotranspiration, and/or uses bioretention and other low impact development practices to improve the water quality of stormwater runoff.

1.2 Waterfront History



1.2.1 Location & Geography

Located on 125 acres of land, the Berkeley Waterfront is a unique, human-made site that is almost entirely surrounded by waters of the San Francisco Bay. While the Waterfront is fully situated within the Bay's shallow subtidal flats, the Waterfront is located within the formal boundaries of the City of Berkeley. Interstate 80 runs north-south and parallel to the shoreline, separating the Waterfront from the majority of Berkeley's urban fabric. There is only one way for vehicles to access the Waterfront, which is by the University Avenue Extension road, which is City-owned property that runs east-west right through Eastshore State Park. The Berkeley Marina forms the heart of the Waterfront, a dredged public harbor for boats that is protected by two breakwaters at the main entrance to the marina harbor.

César Chávez Park on the northern end of the Waterfront is a 90-acre capped landfill that offers broad open views of the Bay, while Shorebird Park on the southern edge of the site is a diverse landscape of woodlands, recreation, and beach (the only existing soft shoreline at the Waterfront), which is otherwise covered by 3.85 miles of riprap revetment (shoreline stabilization). Significant adjacent public open space and trail systems including Eastshore State Park and the San Francisco Bay Trail that reinforce the Berkeley Waterfront's role as a premier regional destination for waterfront recreation and immersion in nature.

Figure 1-1 | Map of Berkeley Waterfront relative to the City of Berkeley

1.2.2 Physical, Commercial & Recreational History

The Berkeley Waterfront has evolved over the past century as the population has grown and the economy has changed. Up until the 20th century, the Berkeley Waterfront was defined as the area along the original Berkeley shoreline. Over time, certain parts of the shoreline were filled in for commercial purposes and the actual shoreline moved westward. The current location of the Berkeley Waterfront is over ½ a mile west of the original shoreline (except for four locations: Berkeley Beach, North Basin Strip/Tom Bates Fields, the Stables, and University Ave Extension). Now, when we use the term "Berkeley Waterfront", we refer to the entire area shown in Figure 1-2, containing all areas to the west of Eastshore State Park.

"Berkeley Marina" refers to a subset of the Waterfront: the main harbor with 1,000 boat slips. The University Ave right-of-way from West Frontage Rd to Marina Blvd is also included. The entire area is located on "public tidelands".

The tidelands that run from the original shoreline westward to Marina Blvd were parceled and sold by the State to the private sector in the 1860s, and were thus referred to as "private tidelands". All of the private tidelands west of Interstate 80 are now part of McLaughlin Eastshore State Park.

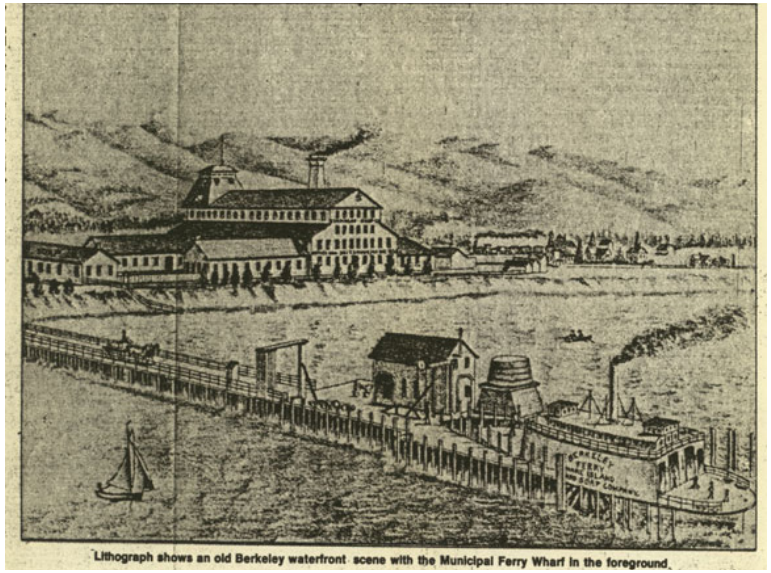
In 1913, Berkeley decided to build a yacht harbor in Bay waters. To proceed with the project, the City obtained a grant of state tidelands that designates the City as the "trustee" with ownership rights that allows the City to implement various projects as long as they comply with State tideland public trust requirements (e.g., fishing, navigation, commerce and public access to the waters of the state that must be available to all peoples of the state). The boundary for this initial grant of state tidelands ran from the original Berkeley shoreline westward over three miles to the middle of the Bay where it met the San Francisco County boundary. At that time, the state tidelands parcels adjacent to the shoreline were already defined as privately-owned tidelands and the state tidelands to the west of that zone were defined as public tidelands. The new City yacht harbor was developed in the public tidelands. The City began installing dikes and piers heading westward into the Bay, but it took over twenty years, several rounds of funding, and four amendments to the grant of state tidelands to complete the original yacht harbor in 1936, which ultimately used federal Works Progress Administration (WPA) funds to be completed.

In 1926, the Golden Gate Ferry Company constructed a causeway to bring automobiles from the original Berkeley shoreline (at 2nd Street) westward three miles over Bay waters to a ferry terminal in deeper waters for a ferry to San Francisco. The causeway was the last link of the Lincoln Highway (from 1910) that brought travelers from across the country to San Francisco. When the Bay Bridge was completed in 1937, most ferry service in the Bay area ceased operations, and the causeway was formally abandoned to the City. The City operated the causeway as a public fishing pier until it closed in 2015 due to structural problems. (As of the late 1950s, most of the causeway had deteriorated and become unusable, but the first 3,000 feet from Seawall Drive heading westward was renovated in 1959-61 using state Wildlife Conservation Board grants).

In 1937, the State constructed the Eastshore Highway by creating a levee in tidelands just west of the original Berkeley shoreline to run from Emeryville northward to Richmond. The soils for the levee were excavated from the tidelands on the east side of the highway, which created an excavation (borrow) pit in Berkeley. Rather than fill it in, the City chose to convert it into Aquatic Park for public recreation as well as an attractive visual feature along the highway that would bring travelers to Berkeley. The highway and Aquatic Park projects were funded in part by the federal WPA. The highway was upgraded to become Interstate 80 in 1956.

Figure 1-2 | Map of Berkeley Waterfront Depicting Tidelands Boundary

Berkeley Municipal Wharf (ca. 1915), Bancroft Library, UC Berkeley.



Lithograph of original Municipal Pier at Second Street and University Ave. (1874), BAHA Archives.

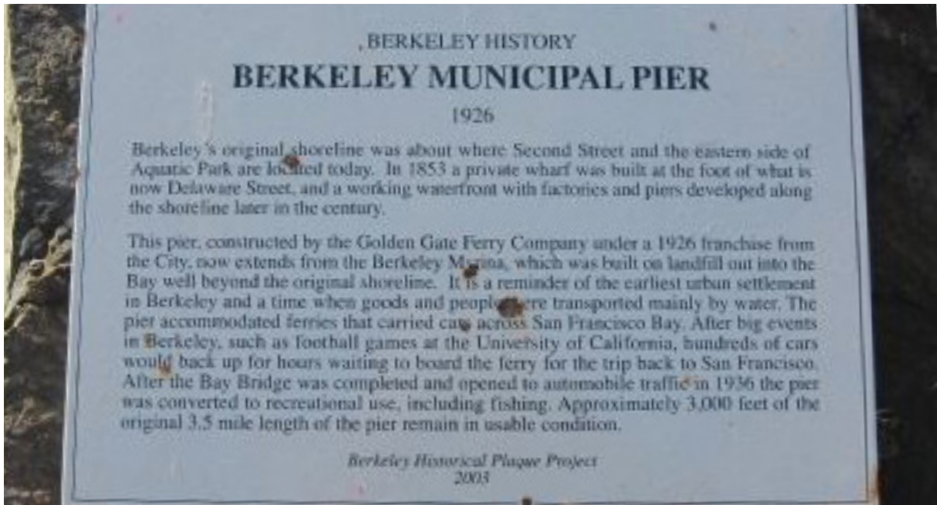
By the 1950s, the Santa Fe Railroad had acquired most of the privately-owned tideland parcels off the Berkeley shoreline and attempted several commercial development projects over the next three decades.

During this period in the 1960s, the City also participated in regional planning efforts to develop concepts for a regional approach to develop an East Bay Shoreline for recreation and public access. Within this context, Berkeley decided to re-develop the existing Yacht Harbor of 1936 into the modern Marina that exists today, which consists of a protected harbor for 1,000 recreational boats and upland areas for recreation and certain commercial activity. The City contracted with a design firm to produce the Marina Development Plan (1960-1964). The City financed the project with two loans from the state's new Small Craft Harbor Loan program ($1.8 million in 1964 and $1.5 million in 1970). A key condition of the loans required the City to have various businesses at the new marina (restaurants, hotel, fuel station, boat repair, etc.) to generate revenue so the City could pay back the loans.

In 1961, the City amended the original Grant of State Tidelands of 1913 to obtain state authorization for the new marina development project. This amendment involved a new survey of the boundary of the grant of state tidelands to the City. The survey clarified that the public tidelands began at the western boundary of the zone of privately-owned tidelands that were initially created in the 1860's (e.g. along current Marina Blvd). This explains why the Berkeley Marina on public tidelands is located westward into the Bay over ½ mile from the actual Berkeley shoreline. The Berkeley Marina was formally dedicated in May of 1966, and fully built out in the early 1970s.

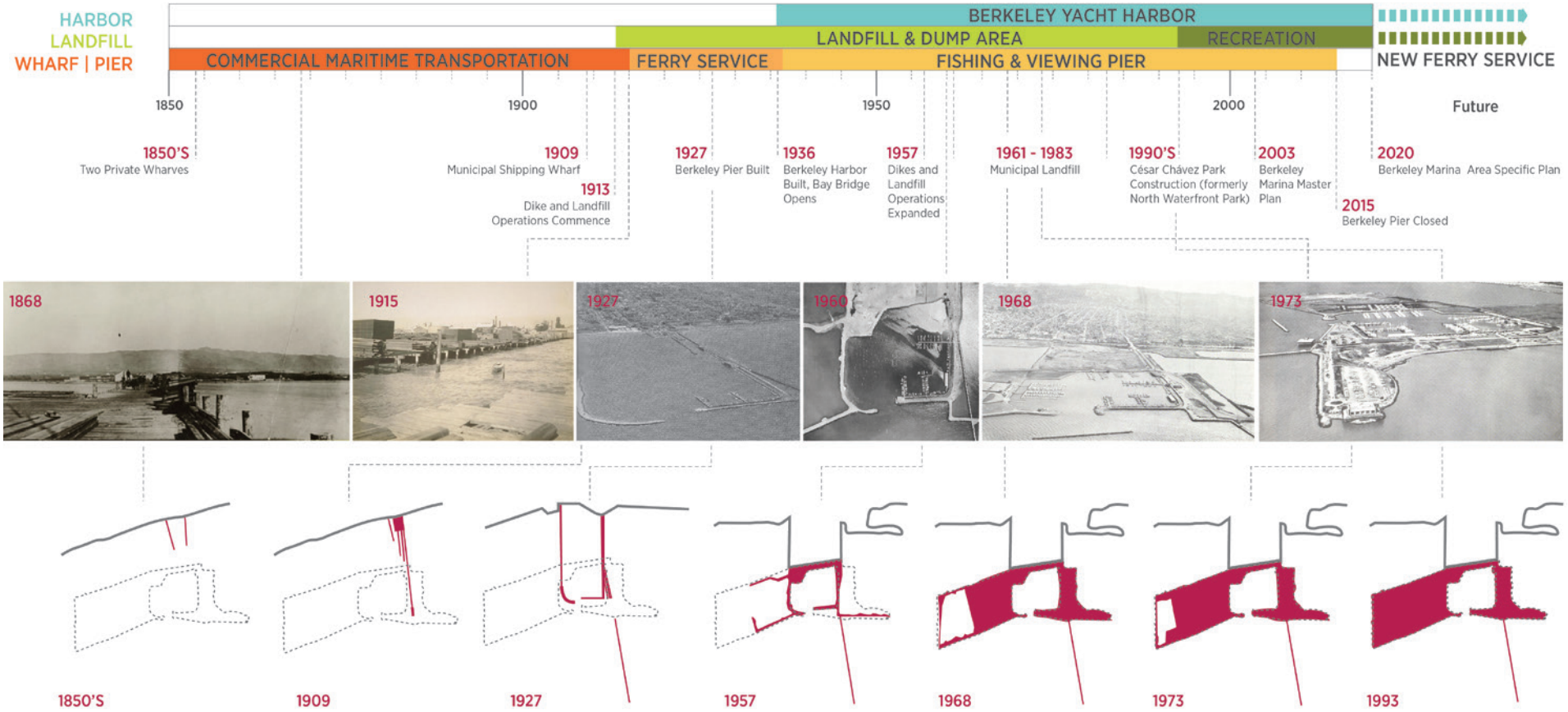
From 1957 through 1991, the City operated the Berkeley Landfill on public tidelands on the north side of the Berkeley Marina. From 1981-1991, the landfill was filled in, capped, and opened to the public as North Waterfront Park over five phases, and was renamed Cesar E. Chavez Park in 1994.

Berkeley Marina Vintage Postcard, Published by R. and C. Hakanson



Berkeley Municipal Pier (2010), photograph by Andrew Ruppenstein, The Historical Marker Database.

Figure 1-3 | Development of Berkeley Waterfront Over Time



1.2.3 City Planning & Regulatory History

Starting in the 1950s, the City's priorities for the Waterfront shifted from industrial uses to a mix of commercial development and recreation and public access. In 1951, the Berkeley Waterfront was rezoned from "Industrial" to "Unclassified." From 1955 through the early 1960s, the City considered several proposals to fill in the shoreline area with commercial development. However, in the early 1960s, strong public concerns emerged about filling in Bay waters for commercial purposes, e.g., the Save San Francisco Bay Association and other groups, which in turn led the City of Berkeley to change policy direction and prioritize recreational and public access uses of the shoreline over large-scale industrial and redevelopment projects.

The Berkeley Marina docks, infrastructure and commercial buildings were built during the 1960s and 1970s using state loans, and leases for the hotel, restaurants, office space and boatyard were used to repay the loans. The physical layout of those commercial uses has not changed since then. The zoning designation for the Berkeley Marina is "Unclassified" per the City's zoning ordinance. A Use Permit in an Unclassified zoning district must first go to the Planning Commission, which makes a recommendation to the Zoning Adjustments Board (ZAB). The ZAB takes action to approve, conditionally approve, or deny the Use Permit. The ZAB's decision is then forwarded to the City Council, which must affirm, reverse, or modify the ZAB decision within 30 days. Given that there is also a lease process for Waterfront properties, this sets up significant hurdles to any new uses and prevents the existing commercial areas of the Waterfront from adapting to current needs.

Public Tidelands Area & Public Trust Doctrine

The Berkeley Waterfront is a Public Tidelands Area granted to the City of Berkeley by the State, and regulated by the State Lands Commission. It is intended to serve "for the statewide benefit, use, and enjoyment of the public". The guiding principle of the Public Trust Doctrine is that these significant marine landscapes are to be used to promote publicly beneficial uses that connect individuals and communities to the water. The mission of the Waterfront Specific Plan is fully consistent with the Public Trust Doctrine, and emphasizes nature, recreation, and equitable waterfront access as presented in Section 2, with guidelines that identify appropriate land uses, as well as environmentally-sensitive development standards and contextual design guidelines as presented in Section 3.

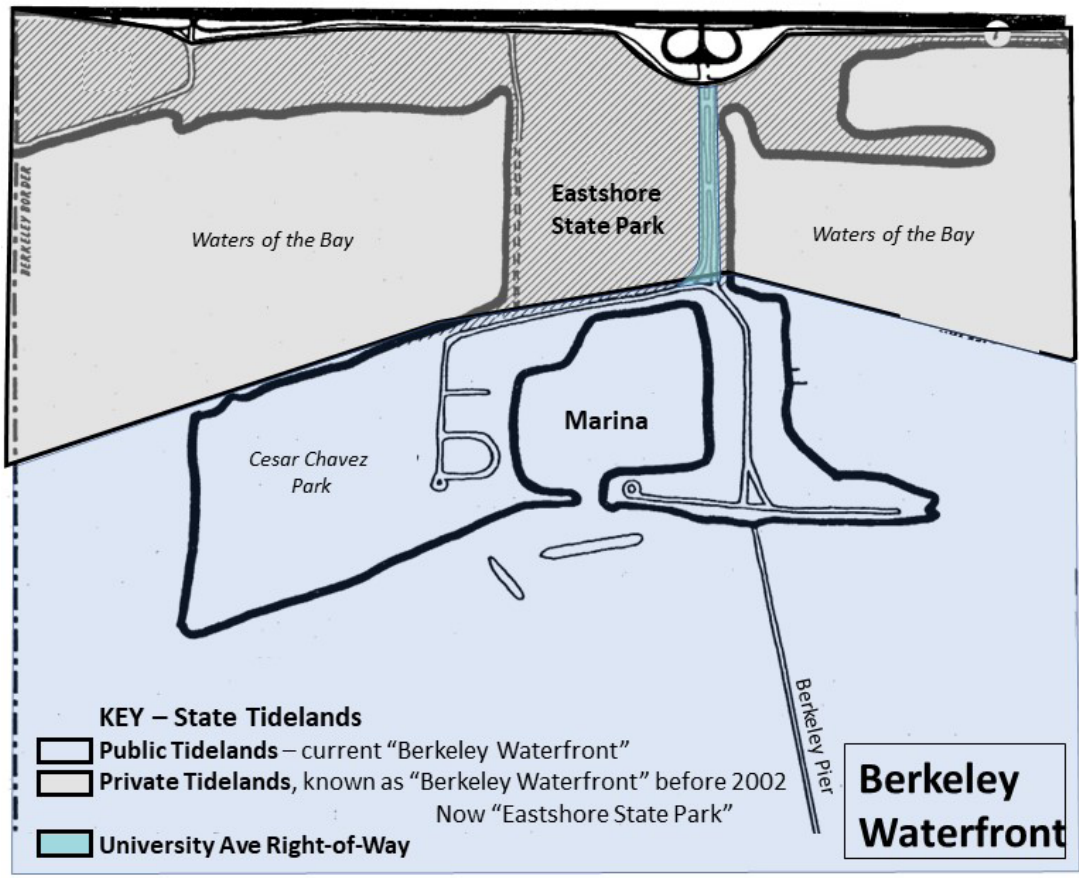
Berkeley Waterfront 1962, photograph by R.L. Copeland, Berkeley Historical Society.

Private Tidelands Regulatory History

In 1986, in order to counter the strong pressures for new commercial development on the private tidelands, the City adopted two Waterfront regulatory planning documents to set the direction for limited development on the private tidelands: the "Waterfront Amendment to the General Plan" and the "Waterfront Specific Plan".

After this and other legal actions, the Santa Fe Railroad sold their parcels of private tidelands to the State in order to become the Eastshore State Park. The General Plan for the new state park was approved in 2002 and was formally named McLaughlin Eastshore State Park in 2012. Once the private tidelands became Eastshore State Park, the two City of Berkeley planning documents from 1986 (the Waterfront Amendment & Waterfront Specific Plan) no longer had jurisdiction over these areas. It should be noted that there are still four areas that are still covered by the Waterfront Specific Plan (North Basin/Tom Bates Fields, the Stables at Golden Gate Fields, Berkeley Beach, and the University Ave Extension Right-of-Way).

Figure 1-4 | Public & Private Tidelands at the Berkeley Waterfront



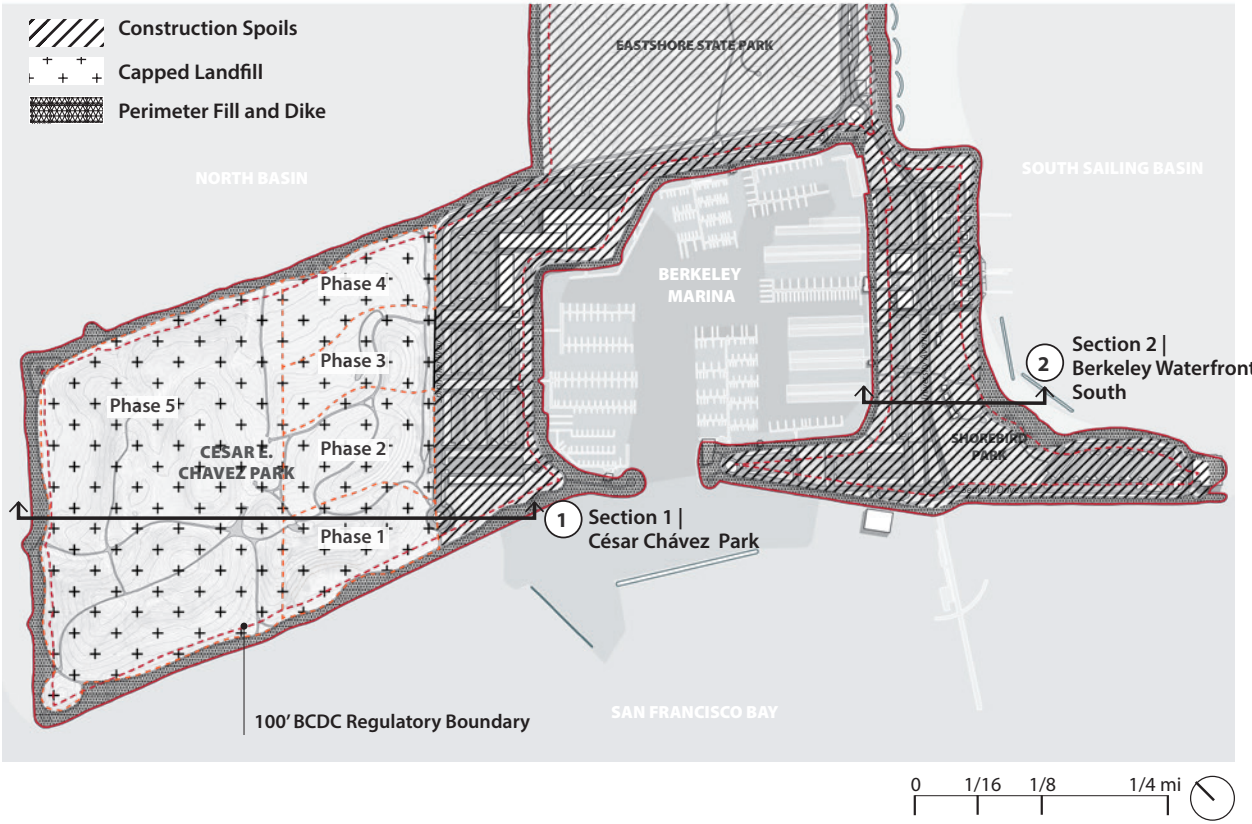
1.3 Existing Conditions & Challenges

1.3.1 Constructed Waterfront Land

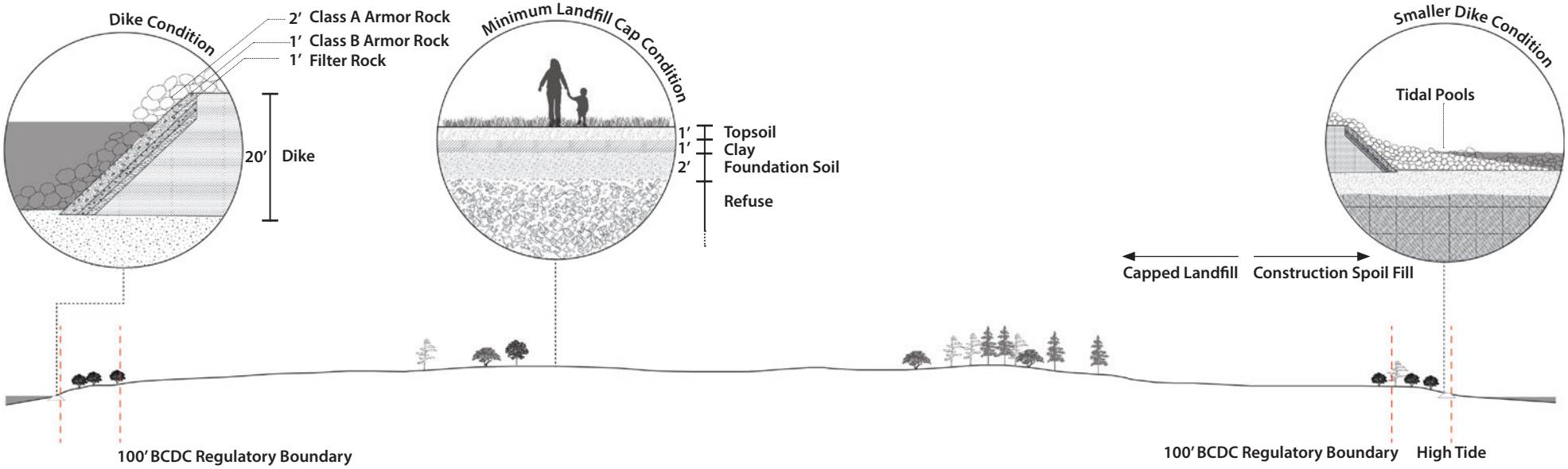
The Berkeley Waterfront is human-made land, incrementally constructed over open water with materials ranging from dredged sediment, construction spoils and even residential waste. As outlined in Subsection 1.2 "Waterfront History", the Waterfront we know today initially emerged with the construction of private wharves, followed by the formation of the harbor that is today's Berkeley Marina, and the subsequent encircling and filling of lands to the north and south. César Chávez Park was originally constructed as a municipal landfill containing municipal garbage, municipal soil refuse, and spoils from the construction of I-80. The landfill was capped in five phases, with phase five completed in 1991, when it opened to the public as North Waterfront Park and later renamed César Chávez Park in 1994.

Over the last several decades, planning and conservation efforts have transformed the Berkeley Waterfront into a beloved resource for access to nature and water-based recreation, centered on a full-service public marina. The material history of the site is important for the on-going process of establishing and protecting ecological habitats at the Waterfront and supporting diverse recreational activities. It is also important for ecological, recreational, and commercial development projects and site improvements, which must consider site-specific subsurface conditions, brownfield restrictions, and shoreline stabilization requirements into project design and engineering.

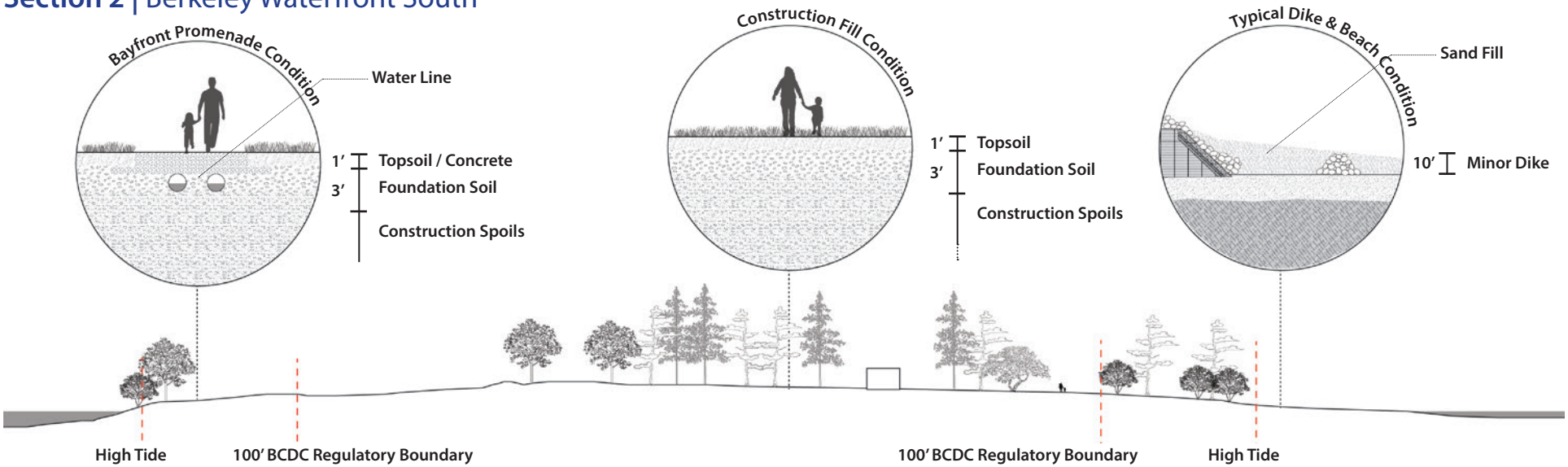
Figure 1-5 | Berkeley Waterfront Infill Type Diagram



Section 1 | César Chávez Park



Section 2 | Berkeley Waterfront South



1.3.2 Existing Conditions & Amenities

The Berkeley Waterfront is an iconic landscape, beloved by the Berkeley communities that frequent it and a significant public resource for the Bay Area region at large, connecting people to the water. The Waterfront includes limited development and large amounts of green space, which is essential to its character and attraction for local and regional visitors.

Within the Specific Plan area, there are over 100 acres of parklands and 5 miles of pedestrian trails. Centered within this landscape is the Berkeley Marina, the largest public marina in the San Francisco Bay, see Figure 1-6, including over 1,000 boat slips ranging in length from 20' to 84'. The Berkeley Waterfront also includes three public access docks, a boat launch ramp, and 11 parking lots. Current building assets include 1 hotel, 4 restaurants, 1 boatyard, a yacht club, a two-story office building (commercially-leased), and 9 restroom buildings.

On the north side of the site (Figure 1-8) is César Chávez Park, the DoubleTree Hotel with 378 guest rooms, the Berkeley Boat House restaurant, the Berkeley Marine Center, dry dock storage, and parking lots. On the south side of the site (Figure 1-9) is Shorebird Park, Horseshoe Park, the Bait Shop, Hana Japan Steak & Seafood restaurant, Berkeley Marina Sportsman Center, the Waterfront Office, Cal Adventures & Cal Sailing Club, the Adventure Playground, the Shorebird Park Playground, the Berkeley Nature Center, the former HS Lordships, Skates On the Bay Restaurant, and the Berkeley Yacht Club. The Berkeley Pier extends from the western edge of the site, currently fenced off due to disrepair as it awaits restoration and adaptation as a recreational pier and ferry terminal.

The coastal infrastructure of the Waterfront includes two breakwaters adjacent to the 300' wide harbor entrance, which dissipate wave energy to create a sheltered boat Marina. In addition, there are three small sailing docks for non-motorized watercraft use, a boat launch facility, and various dock structures built over the water.

Figure 1-6 | Network of Slips in the Bay Area by Type and Size

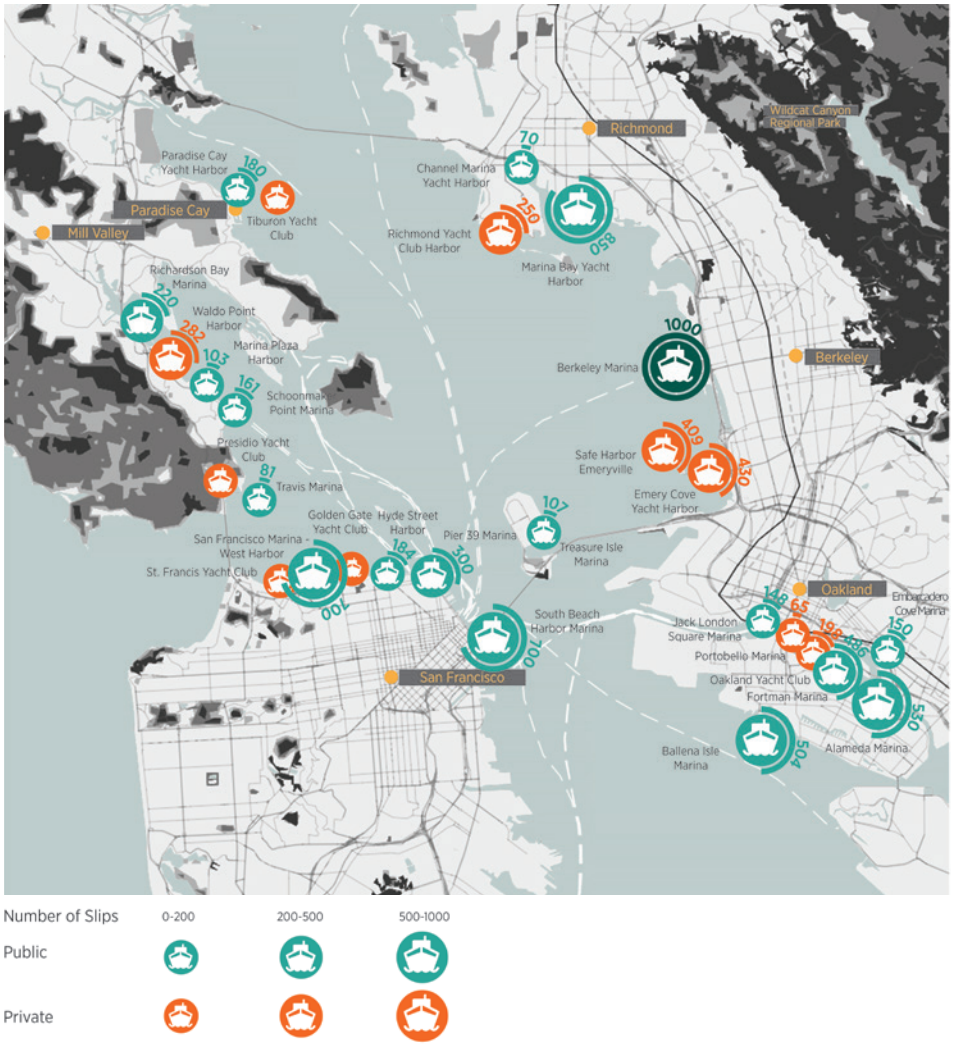


Figure 1-7 | Aerial of the Existing Condition of Berkeley Waterfront

Figure 1-8 | Berkeley Marina North Existing Condition

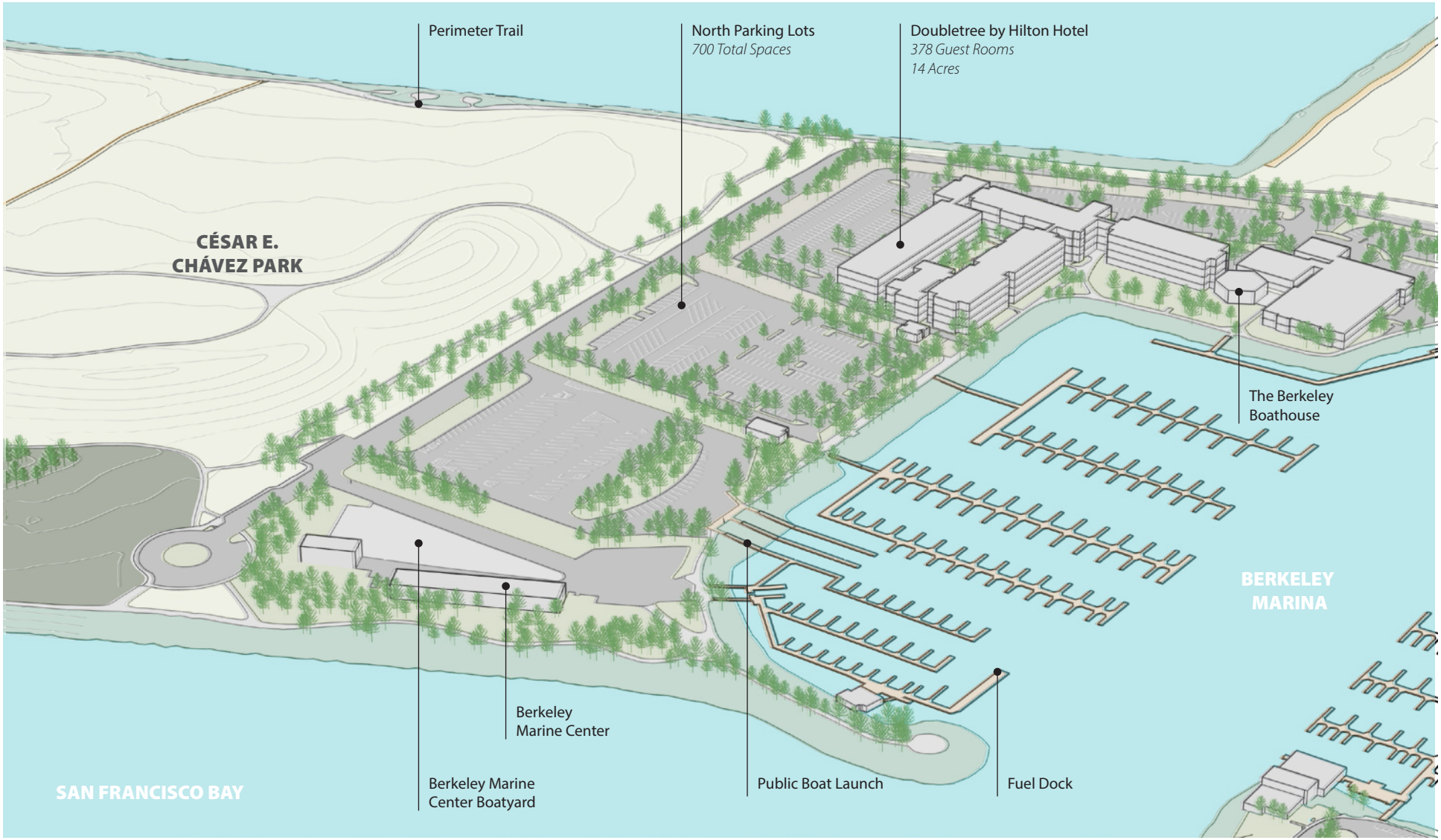
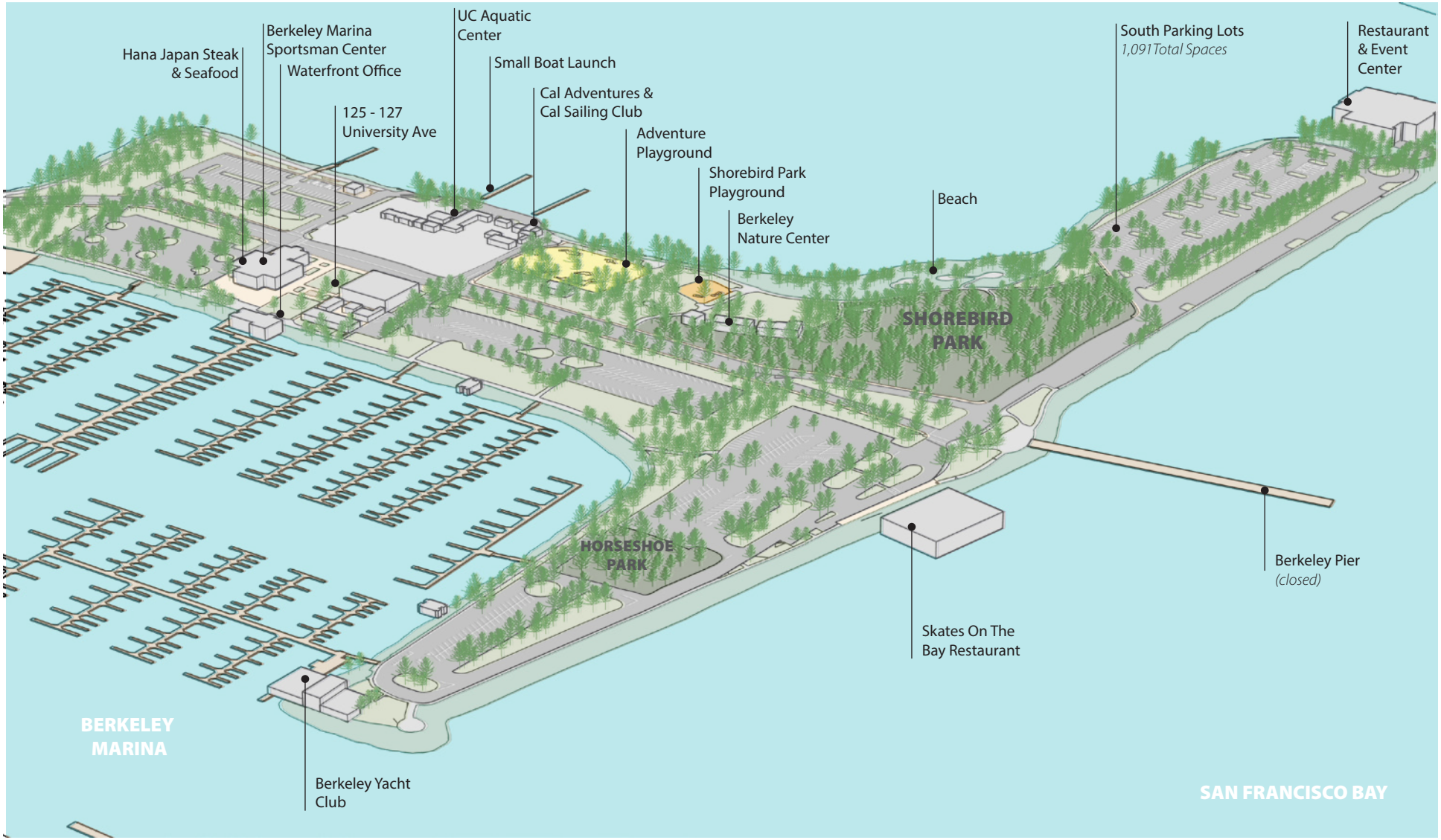


Figure 1-9 | Berkeley Marina South Existing Condition



Waterfront Organizations & Businesses

The Berkeley Waterfront is home to many non-profit organizations, water and club sport organizations, and marina-based businesses. The participation and feedback from these groups in the planning process has been essential to developing the Waterfront Specific Plan. The Berkeley Waterfront is currently home to the following businesses and organizations:

- DoubleTree (hotel)
- Skates on the Bay (restaurant)
- Hana Japan (restaurant)
- The Berkeley Boat House (restaurant)
- The former Hs Lordships building (restaurant, currently advertised for new operator)
- Hornblower (dinner cruise)
- Cal Sailing Club (non-profit)
- Cal Adventures (non-profit)
- Berkeley Yacht Club (non-profit)
- Berkeley Marine Center (boat repair facility)
- Berkeley Marina Sportsman Center (bait shop)
- Multiple charter operators

The Waterfront Specific Plan celebrates and supports the contributions and interests of existing Waterfront users, organizations, and businesses to the vitality and current experience of visitors.

1.3.3 Environmental Context

Due to its location, roughly 0.8 miles out into the San Francisco Bay, the Berkeley Waterfront experiences a climate that is somewhat different than is experienced on the shoreline. The overall ambient temperatures are mild year-round, with average daytime temperatures that range between a pleasant 52-63°F and between 49-60°F on average at night.

The waterfront is surrounded by the waters of the Bay on three sides (north, west and south) and is affected daily by the ebb and flow of the tide, the winds, and water temperatures. Strong prevailing winds come from the west during the summer months, which vary between 1-8 mph with frequent 8-25 mph days; prevailing winds adjust slightly to the southwest during the winter months and are mostly between 1-8 mph. Water recreation is a key component to the Waterfront and daily tide schedules are highly important due to the shallowness of the Bay. New moon high tides can range between 5-8 feet (NAVD). Other extremes include King Tides that can drop sea levels to negative 2 feet and surge between 7-10 feet (NAVD) during storms. These extremes are glimpses of what sea levels could look like in the future under predicted climate change scenarios. The average annual water temperature can range in the 50s to 60s°F during the winter months and in the 60s to low 70s°F in the summer.

Figure 1-10 | Climate and Weather Diagram for Berkeley Waterfront Area

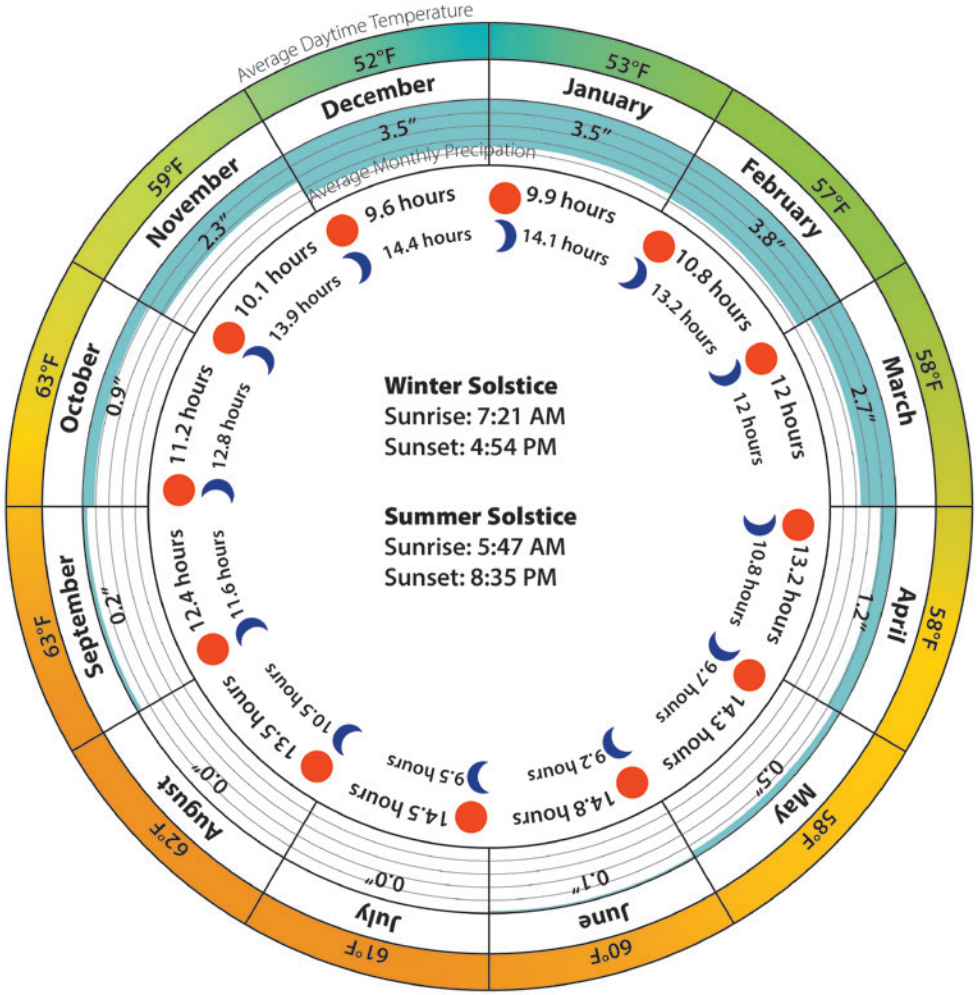
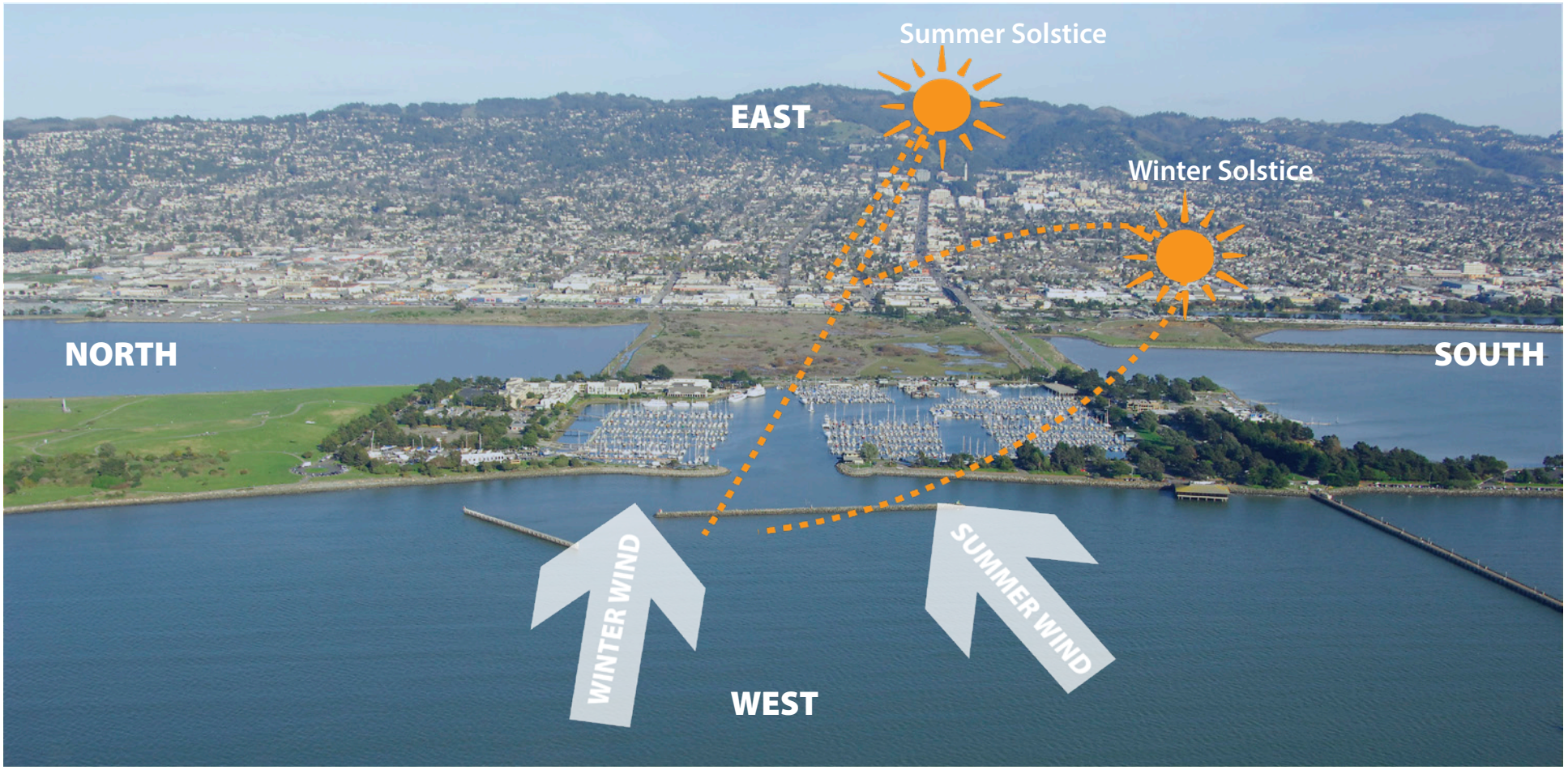


Figure 1-11 | Environmental Conditions Diagram for Berkeley Waterfront



1.3.4 Sea Level Rise & Climate Adaptation

The most significant impacts of sea level rise and tidal inundation at the Waterfront have been identified at the shoreline at the corner of Marina Boulevard and the Virginia Street extension, the northeast corner of the Marina Harbor Basin where the DoubleTree Hotel currently resides, and along University Avenue on the South Sailing Basin. Temporary flooding of roads, such as Marina Boulevard, the northeast portion of the protected area of the Marina, and parking areas already occur during king tides, and are expected to increase over the next 50-100 years.

If there are no improvements to these areas of shoreline vulnerability, access to the Waterfront via University Avenue will be periodically disrupted during 100-year storm events by 2030 and flooding will increase in frequency near the end of the century. The City has identified three projects estimated to cost $11.26M in total to address these locations. These projects are included on the Unfunded Projects List (see Appendix, p. 278, Table 2-2) and the City is actively pursuing grants to seek funding to complete them.

Tidal inundation during a 100-year storm and extreme high tide were used in the sea level rise assessments of the Berkeley Waterfront. According to The City of Berkeley's Vision 2050 Plan, the State of California recommends using the extreme sea level rise and low-risk aversion scenario when planning for projects meant to last more than 50 years. With this guidance, the location of key infrastructure can also be placed strategically to minimize the impact of these future conditions. Planning with these changes in mind is key, as the AB 691 Synthesis report notes the frequency of these events is forecasted to increase by the end of the century. If unaddressed, the loss of connectivity and potential damage to both marina slips and commercial buildings will have a direct impact on the revenue generation for the Waterfront, while the damage to roads, utilities and other infrastructure, and habitat would have longer-term implications.

In addition to sea level rise, more extended periods of drought may be expected, combined with extreme rain events, also known as "boom and bust". The increased frequency of extreme events brings a rise in air temperature and longer heatwaves, which can also strain existing infrastructure, particularly for a location that should serve as a welcoming destination of respite for the public on hot days. Current planning and land use decisions at the Waterfront will need to adapt to these new conditions.

Figure 1-12 | 2050 100-Year Exteme Tide Event & Low Risk Aversion Scenario Projected Impacts of Sea Level Rise

2050 Inundation, Water Level: +10.8' NAVD88 (100-Year Extreme Tide + Low Risk Aversion SLR Estimate), 5-Year CIP Plan.

2050 SLR building impacts. Red buildings are impacted. 5-Year CIP Plan.

2050 SLR trail impacts. Red trails are impacted. 5-Year CIP Plan.

Figure 1-13 | 2100 100-Year Exteme Tide Event & Low Risk Aversion Scenario Projected Impacts of Sea Level Rise

2100 Inundation, Water Level: +13.1' NAVD88 (100-Year Extreme Tide + Low Risk Aversion SLR Estimate), 5-Year CIP Plan.

2100 SLR building impacts. Red buildings are impacted. 5-Year CIP Plan.

2100 SLR trail impacts. Red trails are impacted. 5-Year CIP Plan.

1.3.5 Infrastructure

Largely constructed in the 1960s and 1970s, much of the essential infrastructure at the Berkeley Waterfront has reached the end of its useful life, in addition to the pressures for climate adaptation and sea level rise mitigation. Current unfunded capital improvement needs are estimated at $128M (FY 23).

Infrastructural failures in recent years at the Waterfront include deteriorating dock systems, the closing of the Berkeley Pier in 2015, crumbling roadways, deteriorating parking lots, and more. In addition to the repair of various infrastructure components, the long-term viability of the Waterfront will be dependent on creating a consistent revenue stream to fund these maintenance and capital replacements over time.

Increasing the annual infrastructure funding is crucial to maintain the Waterfront's short- and long-term viability. As additional revenue sources are identified, these funds can be reinvested directly in the maintenance of the Waterfront's aging facilities and infrastructure and facilitate the much needed incorporation of environmental and recreational enhancements. Such capital needs have been prioritized and outlined in the 5-Year CIP, such as the maintenance and replacement of docks, pilings, buildings, parking lots, and restrooms that have reached the end of their useful life and require repair.

In addition to addressing existing and deferred maintenance needs, good Waterfront asset management will require proactive financial planning for the cost of future infrastructure replacements/repairs and future infrastructure needs (i.e. micro mobility, electric vehicle charging stations, and transportation investments to provide more equitable access to and accommodate more people at the Waterfront).

A parallel infrastructure effort that will directly impact the Berkeley Waterfront is the Pier/Ferry Planning Project, which will reopen the now-closed Berkeley Pier and provide public ferry transit to San Francisco and other locations around the San Francisco Bay. (see Subsection 2.5.3 "Transportation & Parking").

Berkeley Marina Vintage Postcard, Published by R. and C. Hakanson, Cak Collectibles Online


BANANA WIND
NO FISHING IN HARBOR
BERTHERS AND GUEST ONLY
L

1.3.6 Economics of the Waterfront

The Marina Fund covers all Waterfront operations including the Marina, landscaping, facilities, parks, roads, recreation programs and special events. Specific examples include the daily maintenance of over 1,000 berths, repairs to docks, pilings and buildings, staffing in Shorebird Nature Center and Adventure playground and the daily administration of what essentially is a "small city". These costs are paid via revenues from berth fees, special fees, and commercial leases and licenses. Berth fees comprise 55% of all Marina Fund revenue, while lease revenue makes up approx. 35% of Marina Fund revenue.

Marina Fund History

In 1964, the Council passed a resolution creating the Marina Fund. The purpose of the Fund was to receive a $1.8M loan from the State to build the Marina, including a breakwater, dredging, adding 600 new slips to the existing 200-slip marina, slip utilities, lockers, pilings, roads, parking lots, pathways, landscaping, Marina office building, restrooms, bait shop, and chandlery. The loan required that revenue from slips and future hotel and restaurant leases would cover the costs of debt service, maintenance and operations of the Waterfront.

In 1970, the City took on a second State loan to increase renovated slips to 1,000, complete the upland areas and sailing basin south of University Ave. In the 1970s and 1980s, the City completed César Chávez Park (previously known as North Waterfront Park) using grant and other local funding. However, by the late 1990s, the Marina Fund showed signs of distress. Budget updates and fee reports continually described structural deficits threatening to exhaust Marina Fund reserves. For example, Council minutes from November 9, 1999 note:

"…The Marina is significantly under-funded and there is no current source of funds to implement core capital projects while maintaining existing Marina operations… Without a commitment by the Council to actively seek additional sources of ongoing funding beyond non-recurring grants, Marina infrastructure will continue to deteriorate..."

Funding Needs

Over the next 20 years, staffing reductions and deferral of capital and maintenance kept the Marina Fund solvent. But over the last several years, as capital infrastructure further deteriorated and staffing levels could not be further reduced, Marina Fund revenue could no longer cover basic operational costs. This was exacerbated in 2019 with COVID-19, which significantly reduced hotel and restaurant lease revenue at the Waterfront.

General Fund support has been needed since 2021 to maintain Waterfront operations. The Council authorized transfers to the Marina Fund of $1.4M in FY22 and$1.15M in FY23 using American Rescue Plan funding to keep the Fund solvent. In FY24, Council authorized more than $800k in one-time cost shifts off the Marina Fund, as well as an internal loan that saved the Marina Fund 30 years of debt service costs of $385k/year. These efforts are being buoyed by improved revenue forecasts. Marina slip occupancy rose this year to 86% (from 78% in 2020), and is expected to continue to increase with multiple capital improvements underway. Additional revenue is projected from the eventual lease of 199 Seawall (former Hs Lordships), and higher rent from existing tenants as well as special event revenue as we emerge from the Covid-19 pandemic. These policy actions and improved revenue are projected to reduce but not eliminate the Marina Fund structural deficit from $1.1M to an estimated $200k by 2027.

In addition to this operating gap of $200k per year, there are significant capital funding needs. Current unfunded infrastructure needs are estimated to be more than $128M. In addition, it would cost an additional $2M to $3M per year to set-aside sufficient funds to cover end-of-life replacement costs for infrastructure that was recently replaced, (see Table 1-1 and Appendix 5.2).

Table 1-1 | Waterfront Funding Needs

Funding Needs	Amount
Current Marina Fund Revenue	$8.3 M / year
Current Marina Fund Expenses	$8.5 M / year
Structural Deficit	$0.2 M / year
Current Unfunded Capital Needs	$128 M
Need for Future Replacement Costs	$2M-$3 M / year*
Need for Future Infrastructure Costs	TBD

*See Waterfront Life Cycle Cost Analysis, Appendix 5.2

New Revenue & Funding Sources

Market analysis indicates demand for new hotel and food & beverage in the Waterfront, which could potentially increase revenue to address some of the Marina Fund's structural deficit, by raising an estimated $860,000 (FY23) in lease revenue.

Funding the remaining needs will require a mix of City funds, grant funds, private funds, and a range of other possibilities. The City has a strong track record in recent years of leveraging local funds to attract external funds to complete Waterfront projects. As shown in Table 1-2, this has resulted in nearly $73M in capital investment at the Waterfront. The pace and scale of this funding has accelerated in recent years with capital spending of more than $11M/year on average from 2020 to 2025.

Table 1-2 | Waterfront Capital Funding (2008-2025)

Berkeley Waterfront CIP Projects			
Project	Year*	Funding Source	Amount
Dock Replacement (H-I)	2008	DBAW Loan, Marina Fund	$ 4,300,000
Dock Replacement (B-C)	2010	DBAW Loan, Marina Fund	$ 3,650,000
Finger Dock Float Replacements	2010	MF	$ 407,000
South Cove Middle Dock Replacement	2010	DBAW, MF	$ 100,000
Landfill Rip Rap Repair	2011	Zero Waste Fund	$ 464,000
Boat Pump-out Station	2011	DBAW Grant, Marina Fund	$ 75,000
Selective Piling Replacement	2011	MF	$ 555,000
Shorebird Nature Center Classroom	2011	State Parks Prop 12 Grant Funds	$ 911,000
Selective Piling & Float Replacements	2012	MF	$ 828,500
Skates/ N Lot ADA Pathway	2013	GF, MF	$ 80,000
Bay Trail Phase 1 and 2	2014	MTC, SCC, ABAG Grants	$ 2,400,000
Bait Shop Beam & Wall Renovation	2017	GF, MF	$ 180,000
Launch Ramp Gate, Pay Station, Bollards	2017	Marina Fund	$ 118,000
Cesar Chavez Park Flare Station Replacement Complete	2018	GF, ZWF	$ 832,000
South Cove Parking Lot and Restroom	2018	DBAW, NFW, SCC Grants, Marina Fund	$ 2,410,000
Finger Docks Phase 1	2019	General Fund, Marina Fund	$ 145,000
Landfill Rip Rap Repair- South East Area	2020	Zero Waste Fund	$ 435,000
Finger Docks Phase 2	2020	General Fund	$ 160,000
South Cove Bay Trail Phase 3, Docks and ADA Gangway	2020	PCA, Costco Busan(2), SCC Grants, Marina Fund	$ 1,122,000
Bike Lockers	2021	Grant, General Fund, Marina Fund	$ 125,000
Corporation Yard Electrical Upgrade	2021	T1p1	$ 410,000
Berther parking Lot Security Camera System	2021	Marina Fund	$ 140,000
Finger Docks Phase 3	2021	General Fund/Marina Fund	$ 230,000
Pier- Ferry Feasibility Study	2021	T1p1, WETA, Marina Fund	$ 465,000
Slip Holder Restrooms (4) Renovation	2021	General Fund	$ 350,000
Launch Ramp Paving Improvements	2021	Marina Fund	$ 80,000
199 Seawall Painting and Roofing	2021	Marina Fund	$ 94,000
Marina Streets Proj (University/ Marina Blvd/ Spinnaker W	2022	T1p2, Streets Fund, Double Tree	$ 8,034,000

Berkeley Waterfront CIP Projects			
Project	Year*	Funding Source	Amount
Marina Sea Level Rise Study (AB691)	2022	T1p1, Marina Fund	$ 214,000
FG Dock Gate Replacement	2022	Marina Fund	$ 25,000
Fire Hose/Ladder Replacement	2022	Marina Fund	$ 38,000
LM, FG, BC, DE, N Restroom Fencing	2022	Marina Fund	$ 45,000
Dock Gates Key Fob Replacement	2023	Marina Fund	$ 100,000
Selective Piling Replacement	2023	T1p2, General Fund, ARPA	$ 3,630,000
Finger Docks Phase 4	2023	ARPA, General Fund	$ 350,000
Sewer Replacement -University Avenue	2023	COB Sewer Fund, General Fund	$ 440,000
199 Structural Evaluation	2023	Marina Fund	$ 100,000
Old Ferry Pier/Gateway Platform Structural Evaluation	2023	Marina Fund	$ 30,000
Tree Removals Due to 2023 Storms	2023	General Fund	$ 200,000
Steel Plates/Reinforcement -Dock Repairs	2023	Marina Fund	$ 320,000
South Cove Cranes (Small 2021- Large 2023)	2023	Marina Fund	$ 90,000
125-127 University Ave Improvements	2023	General Fund	$ 300,000
Caltrans Gateway Improvements	2023	Caltrans via Clean California grant	$ 3,400,000
Shorebird Nature Center Painting and Repairs	2023	Marina Fund	$ 34,000
Vessel Removal/ Boat Repairs 2008-2023	2023	SAVE Grant	$ 450,000
O and K Dock Electrical Upgrades	2024	General Fund	$ 1,753,000
Dredging: Main Entrance and Inner Channel	2024	ARPA, Marina Fund, SCC grant	$ 7,700,000
Waterfront Specific Plan	2024	General Fund	$ 1,050,000
D and E Dock Replacement	2024	T1p2, Marina Fund, COB Loan, SCC grant	$ 8,260,000
South Cove West Parking Lot	2025	MF, SCC grant	$ 1,236,000
Cesar Chavez Restroom (New)	2025	T1p2	$ 445,000
K Dock Public Restroom Renovation	2025	T1p2	$ 400,000
Cesar Chavez Main Path Replacement	2025	SCC grant	$ 2,113,000
Pier - Ferry Design Development	2025	SCC and ACTC Grants, WETA	$ 11,103,900
Totals			$ 72,927,400

** Year completed or anticipated to be complete.*

Waterfront Regulatory Context

The Berkeley Waterfront is subject to the jurisdiction of the following regulatory documents and agencies:

- California State Lands Commission (CSLC; Tidelands Trust)
- Bay Conservation and Development Commission (BCDC)
- U.S. Army Corps of Engineers
- Regional Water Quality Control Board
- Alameda County Stormwater C3 Discharge Permit
- Bay Area Air Quality Management District
- Land and Water Conservation Fund (LWCF) grant program
- City of Berkeley Open Space Ordinance (Measure L)
- City of Berkeley Use Permit No. 5567 (Berkeley Marina)
- City of Berkeley Permit Center (building department)

The regulatory scope of these entities and the proposed approach to Waterfront land use and development standards is described in detail in Section 3.

1.4 Why a Specific Plan

1.4.1 What is a Specific Plan?

The current Berkeley Marina is over 60 years old, César Chávez Park is over 40 years old, and the entire area needs revitalization. At the same time, three new projects have transformed the entire Berkeley Shoreline since 2000: McLaughlin Eastshore State Park, the Pedestrian Overcrossing at Interstate 80, and the Bay Trail Extension. With the new world of electric vehicles, e-bikes, and ride-shares, etc., public access to the Berkeley shoreline has never been better. The cost of operating and maintaining the Waterfront area, however, is continually rising, and the challenge is how to bring in appropriate new uses to the Waterfront that generate new revenue, that also help meet community needs and preserve community values.

At present, the Waterfront is zoned as "Unclassified", which makes any new uses extremely difficult to implement. The Waterfront Specific Plan provides specific regulatory and zoning clarity to the community, staff and potential investors. This document includes a set of guidelines and zoning ordinance amendments that will expedite potential new, appropriate revenue generating and recreation opportunities, and includes a CEQA process to ensure that any environmental impacts are considered and mitigated.

As an example, most recently in Berkeley, the Adeline Corridor Specific Plan was created to establish a community vision and plan for how that area should evolve into the future. As a specific plan, it proposed detailed zoning changes and development standards, which give the community, staff and potential investors a clear set of guidelines for any future changes. The level of detail in the Adeline plan is helpful, especially given that most of the properties in the plan area are privately owned. The plan becomes the City's main tool for guiding private development in the future.

In contrast, the Waterfront is entirely public land and the Specific Plan is one of two tools the City has to shape policy at the Waterfront. The second tool is the lease process. Any new development would need to be consistent with the Specific Plan and have a Council-approved lease. This allows the City to retain a high level of control to determine what is built and how, and to obtain more community benefits like trails, restrooms, and other amenities.

What this means in practice is that the Specific Plan will describe new uses, and general large-scale design guidelines; and small-scale details can be negotiated and approved by Council through the lease process.

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1.4.2 What will the Waterfront Specific Plan mean for Berkeley?

The Waterfront Specific Plan will guide the future evolution of Berkeley's Waterfront and Marina through a community-driven vision that balances stewardship of its diverse ecological and recreational resources for visitors with integrated and appropriate development, guided by clear land use regulations, development standards, and design guidelines.

Environmental stewardship and equitable access to the Waterfront and its resources are central to the Waterfront Specific Plan. The community process reinforced that the Waterfront is a highly valued resource within the City, and that preserving access to Bay waters, views, nature, and recreation opportunities are among the community's highest priorities. There was overwhelming consensus that the shoreline, parks, and natural areas should be preserved for these purposes, supported by existing and new recreational amenities that enhance the public's use and enjoyment of those areas.

As specific projects and capital improvements are proposed for the Waterfront over the next 25-50 years, the City of Berkeley will now have a comprehensive document to use for evaluation to ensure consistency with a collective yet flexible vision for this significant public landscape.

Berkeley Waterfront: CEQA / Environmental Impact Report

The Waterfront Specific Plan includes a programmatic Environmental Impact Report (EIR) that must be adopted by City Council. The EIR evaluates future land use and development changes anticipated by the WSP, in order to ensure that the proposed vision and redevelopment projects will meet requirements of the California Environmental Quality Act (CEQA).

The Waterfront Specific Plan EIR includes an outline of foreseeable environmental impacts, as well as mitigation requirements for proposed future changes to land use or development at the Waterfront. As individual projects emerge, this will require an evaluation of the following:

a) compliance with CEQA

b) site-specific mitigation measures required for implementation

c) consistency with Waterfront vision and holistic approach to future Waterfront development (i.e. changes to land use from current baseline)

1.4.3 Who created the Waterfront Specific Plan?

In 2019, City Council funded a study to provide a long-term vision and plan for achieving a financially self-sustainable, publicly-owned Waterfront in the City of Berkeley. The final Waterfront Specific Plan is the result of a comprehensive and collaborative process, led by City of Berkeley staff, professional consultants, and the engaged participation of community members, stakeholders, and civic leaders.

The process started with an evaluation of baseline conditions in the Waterfront, followed by an evaluation of potential new appropriate revenue generating opportunities. The planning process included extensive community outreach and engagement to generate ideas, take feedback, and re-evaluate opportunities. The Specific Plan document has been drafted by staff from multiple City departments, including Planning and Development, City Attorney's Office, and Parks, Recreation & Waterfront together with a consultant team led by Hargreaves Jones.

Participatory Planning Tools Used for the Waterfront Specific Plan

PUBLIC MEETINGS
City Staff and Consultants held multiple public meetings throughout the Specific Plan process as a way to disseminate information to a vast group of people for feedback.

FOCUS GROUPS
Focus groups are targeted community meetings that focus on different topics and areas associated with the Berkeley Waterfront and Specific Plan. These meetings provide a way for specific user groups to give feedback on the specific topics they care about in a more intimate group discussion setting.

COMMUNITY WORKSHOPS
Community workshops presented an opportunity for visitors of the Berkeley Waterfront

TABLING AT EVENTS
As an ongoing public outreach effort, the primary goal of pop up events are to collect public input on the Berkeley Waterfront in an approachable way and also help target a more diverse audience of current or potential visitors of the Berkeley Waterfront.

OUTREACH EVENTS
City Staff periodically conduct community outreach events at the Waterfront. These interactive walking and biking tours as well as open house events, show people first-hand all that the Berkeley Waterfront has to offer, and provide an avenue for more site-specific feedback.

QUESTIONNAIRES
City staff conducted several surveys throughout the Specific Plan process to collect a wide range of information about needs and opportunities at the Berkeley Waterfront.

Engaged Public Process & Community Stakeholder Outreach

4 Community Workshops
+/-300 participants

24 Focus Groups
+/-200 participants

2 Community Questionnaires
1,799 responses

1 Project Website
1,127 subscribers

2 Council Updates & **2** Council Work Sessions

Waterfront Specific Plan – Guiding Principles

PRINCIPLE 1
Existing Resources

Support and enhance **existing recreation, parks, green space, development,** and **programming** currently enjoyed by Berkeley residents and visitors.

PRINCIPLE 2
Unique Identity

Reinforce the **identity and character** of the unique landscape of the Berkeley Waterfront for the **recreational, environmental, social** and **economic values** it provides to the surrounding community.

PRINCIPLE 3
Sensitive Development

Encourage re-development opportunities that are **complementary with the land uses** appropriate at the Waterfront, respect the **uniqueness of the site** and maintain shoreline access and **views**.

PRINCIPLE 4
Equitable Access

Promote opportunities for all **Berkeley residents and visitors** to **access** and experience the Waterfront, including its remarkable **natural environment, diverse waterfront recreation**, and **community** resources.

PRINCIPLE 5
Enduring Waterfront

Establish a sustainable approach to **long-term revenue generation** and funding to effectively **operate and maintain** the Berkeley Waterfront, and **proactively plan** for and implement capital improvements.

PRINCIPLE 6
Adaptable Implementation

Develop a strong **vision** plan and roadmap with a **flexible phasing** strategy that is incrementable and **adaptable** to respond to **local needs**.

SECTION 2

BERKELEY WATERFRONT VISION

2.1 Overall Vision & Orientation

The Berkeley Waterfront

The Berkeley Waterfront is a municipal treasure and regional asset reflecting years of public investment, community initiative, creativity, and activism. The Waterfront Specific Plan builds upon, protects, and enhances the best aspects of the existing Waterfront experience, acknowledges and addresses challenges, and proposes responsibly planned uses and activities. The plan will invite new and diverse users, and welcome Berkeley residents who have not felt welcomed in our past. This "Waterfront for all" approach will attract and invite the additional public and private investment that is necessary to maintain and enhance the Waterfront Area's utility, attractiveness and environmental value for the entire Berkeley community, the residents of the East Bay, and visitors to the area.

Set off from the mainland, the Waterfront is a singularly immersive environmental experience — a unique opportunity within the City to be surrounded by the San Francisco Bay and to engage directly with the water. The constructed history of the Waterfront from open water to landfill to iconic public waterfront designation reflects how essential "transformation" is to the identity of the Berkley Waterfront. The Waterfront is a place where Berkeley's diverse residentscommunities and visitors establish connection to the water via spectacular views of the Bay, dynamic ecologies, and many recreational opportunities.

Section 2 outlines a generational shift in perspective, reorienting the Waterfront to serve the entire City and region through equitable access to natural resources, diverse multi-modal transportation options, inclusive programming, and strategic development. This vision for the Waterfront is conceived to guide capital improvements and on-going maintenance, strategize landscape enhancements, encourage appropriate and sensitive redevelopment, and establish a long-term financial strategy to sustainably support equitable public access to the Waterfront's spectacular natural and recreational resources for the next 25 to 50 years.

The vision for the Berkeley Waterfront presented in this section reflects the guiding planning principles identified in Section 1.4, and outlined further in Table 2-1.

Table 2-1| WSP Guiding Principles & Key Objectives

Specific Plan Guiding Principles	Key Objectives
Principle 1: Support and Enhance Existing Resources	• Enhancement of recreation, parks and open space • Sensitive development • Increased programming
Principle 2: Reinforce the identity and character of the Berkeley Waterfront	• Emphasize ecological characteristics • Maintain core values of Waterfront • Placemaking initiative
Principle 3: Encourage Selective Redevelopment	• Development that is complementary to land uses • Development that maintains access to key natural resources and viewsheds • Development that drives residents and visitors to the Waterfront.
Principle 4: Promote Equitable Access	• Inclusive Waterfront bringing a diverse range of visitors • ADA accessibility and wayfinding across the Waterfront • Free access to recreation and inclusion considerations for programming.
Principle 5: Establish a Sustainable Approach to Long-term Revenue Generation	• Increase revenue generating potential • Plan for capital improvements • Consider direct and interrelated impacts of recreational and commercial improvements.
Principle 6: Develop a flexible phasing strategy and roadmap for implementation	• Strong vision for the future • Milestones and phasing to achieve long term goals

The vision for the Berkeley Waterfront addresses 4 distinct plan areas:

- Berkeley Marina
- Berkeley Waterfront South
- Berkeley Waterfront North
- César Chávez Park

Each area has its own specific goals and potential. In addition, overarching goals and objectives for the entire Specific Plan area reflect a systems-based approach to creating an integrated and cohesive Berkeley Waterfront.

Illustrative View of Potential South Sailing Cove

Illustrative View of Potential Spinnaker Way

Illustrative View of Inner Harbor Development

Illustrative View of Shorebird Park Nature Play Enhancements

Figure 2-1 | Vision for the Berkeley Waterfront

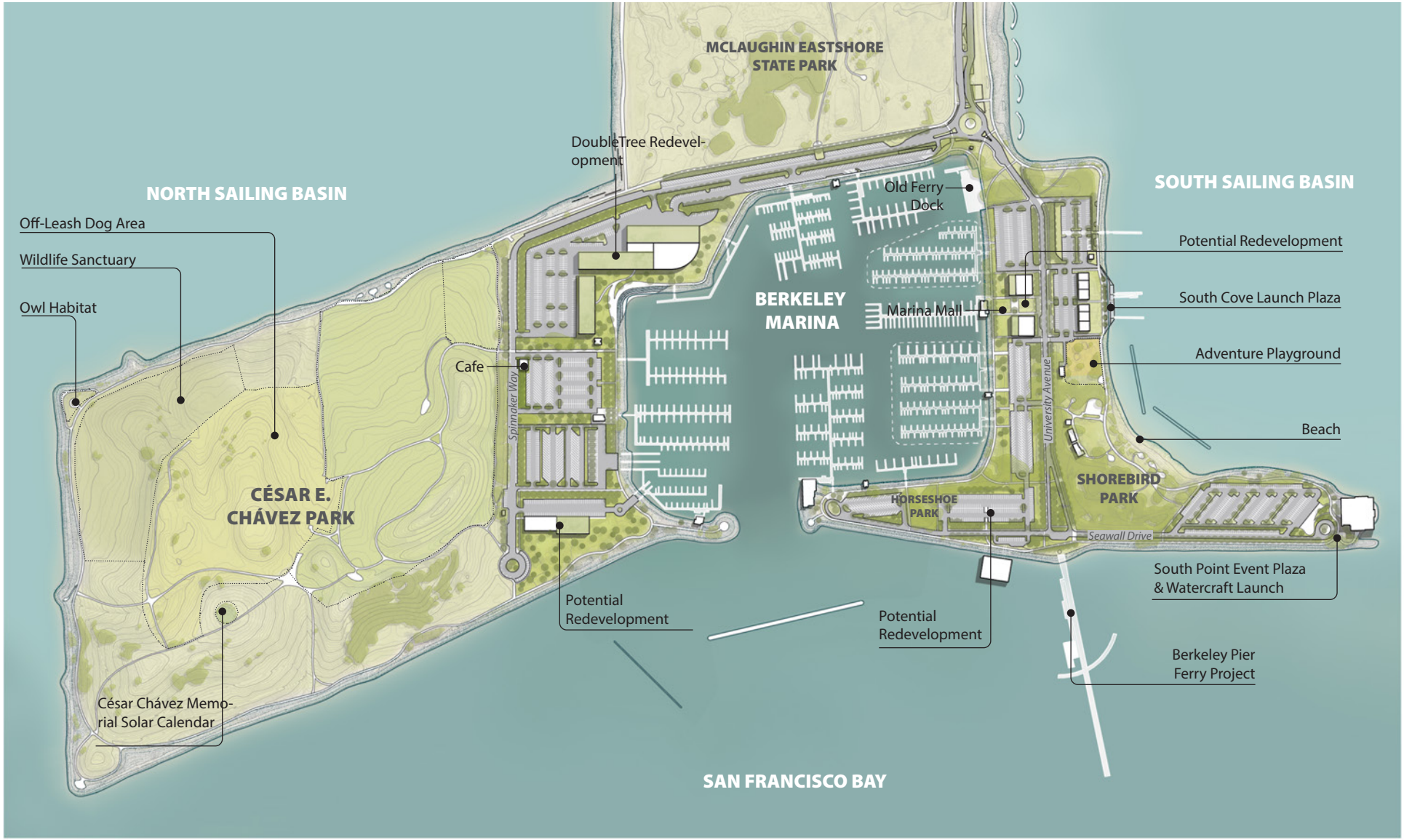


Figure 2-2 | Illustrative Aerial of the Berkeley Waterfront

Berkeley Waterfront North

Key Goals

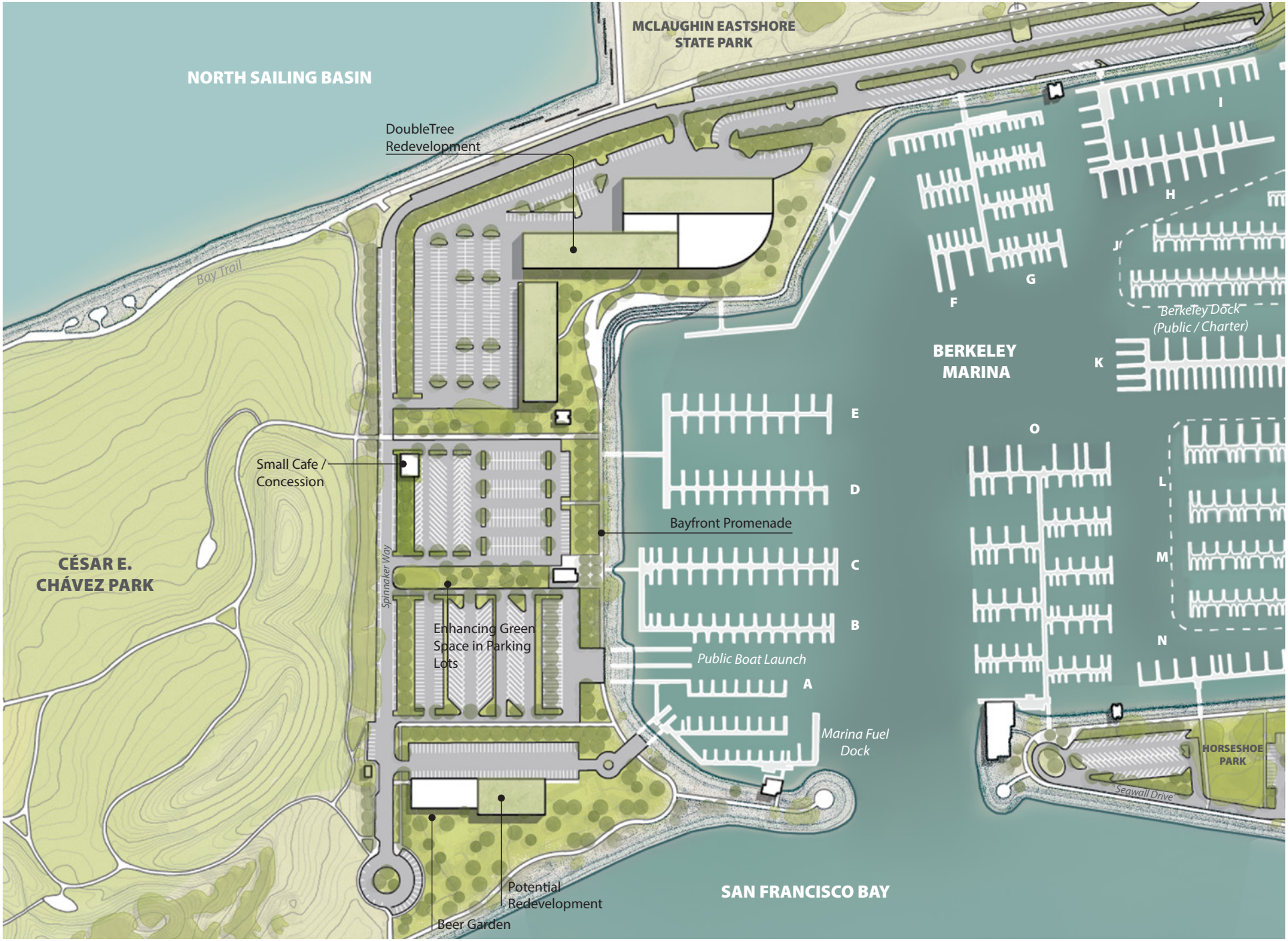
- Enhance and expand prime waterfront public space
- Add food and beverage opportunities
- Optimize access to scenic views and connections to surrounding open space

A large portion of the Berkeley Waterfront North is occupied by the existing DoubleTree. With 378 guestrooms on 14 acres of land, the Berkeley Marina DoubleTree by Hilton was built in 1972 and is the largest hotel in the City of Berkeley. The DoubleTree offers abundant event space, a restaurant, and a variety of amenities for guests. The preferred plan shown at right proposes to push the boundaries of the current DoubleTree hotel by rebuilding and densifying the hotel to allow for an expansion of waterfront open space to be enjoyed by the public.

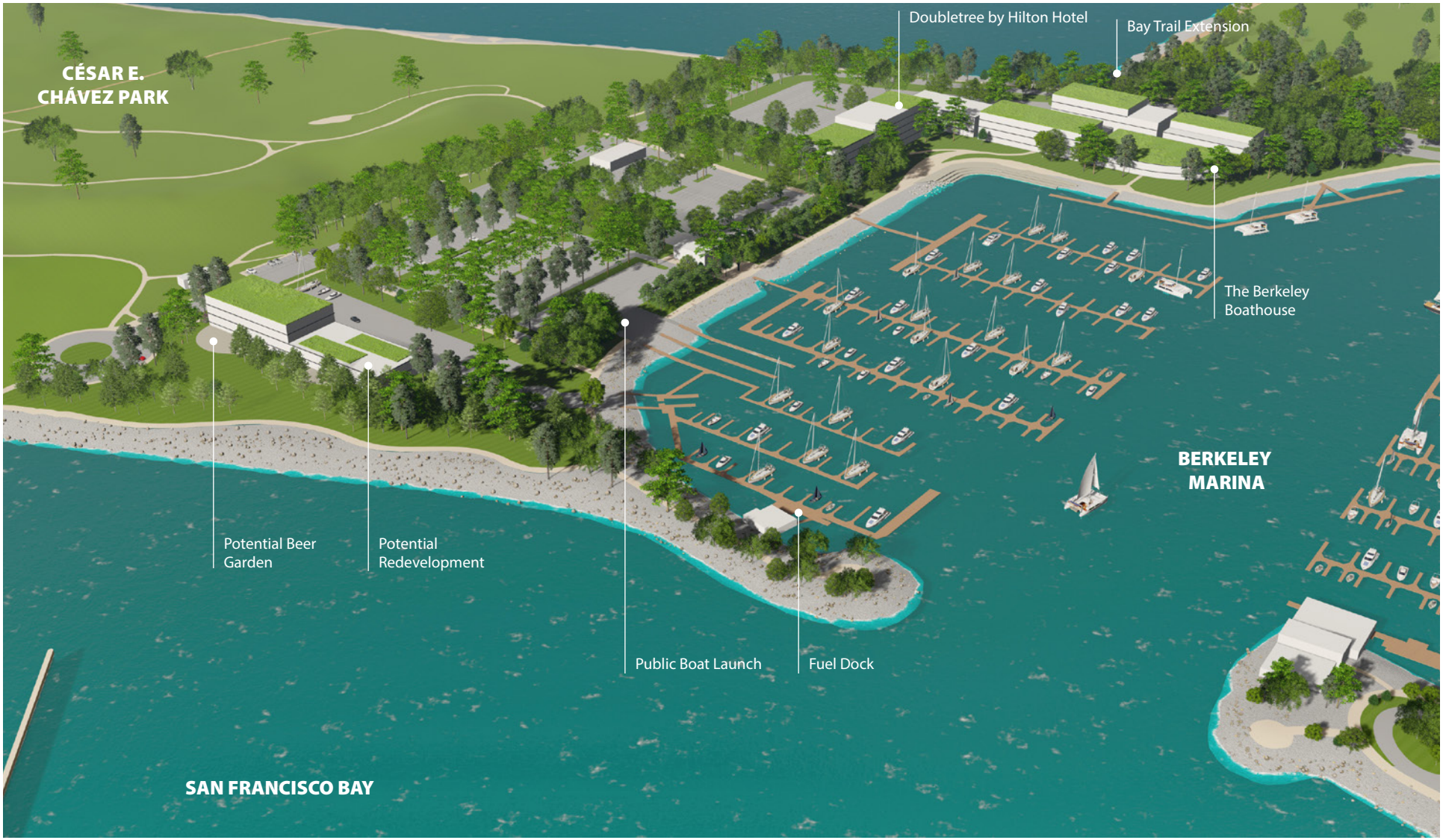
Berkeley Waterfront North offers ample parking for DoubleTree guests and slip holders as well as free public parking along Spinnaker Way along the southern boundary of César Chávez Park. Maintaining ample slipholder and commercial parking as well as improvements to green open space will be vital to the future success of the Berkeley Waterfront.

Lastly, this plan illustrates the potential redevelopment of the existing Marine Center with a new Marine Center, a beer garden and outdoor patio as well as the redesign of the North Bayfront Green. This will not only increase usable public realm area but also allow visitors to stay longer because of expanded amenities.

Figure 2-3 | Vision for Berkeley Waterfront North



Illustrative Aerial of Berkeley Waterfront North



Illustrative View of Potential Bayfront North Development at the Marine Center

Berkeley Waterfront South

Premier destination for water-based recreation, nature play, community gathering, and dining on the San Francisco Bay

Key Goals

- Redevelopment of the Southern Core area where the existing Hana Japan restaurant resides as well as recreation facilities such as the Cal Sailing Club and the Cal Adventures Program.
- Enhance the perimeter trail and promenade for increased access to the natural scenery and views by pedestrians
- Enhancement of landscaping and habitat where feasible throughout Berkeley Waterfront South,including Shorebird Park, Shorebird Beach, University Ave Shoreline, and Seawall Drive.

Berkeley Waterfront South is a hub for recreational opportunities, both land and water based. The preferred plan for Berkeley Waterfront South is meant to amplify the public realm around the existing and cherished Shorebird Park, Adventure Playground and Horseshoe Park. These parks currently offer a diverse range of opportunities from the Shorebird Nature Center to the Adventure Playground equipped with various hand-made climbing structures repurposed from scrap lumber and materials, a zip line, tool library and work tables for kids to engage in creative play.

Proposed changes to the Berkeley Waterfront South are centered around increasing connections across the site through enhanced public realm landscapes, the redevelopment of various commercial sites, as well as promoting equitable access to the Waterfront such as the implementation of cooling opportunities in accordance with the policies and programs of The Office of Energy & Sustainable Development. Redesigned open spaces shown here include the Gateway Green, rebuilt Ferry Dock, restoration of South Cove Beach, improvements to South Marina Green and the South Point Event Plaza and Watercraft Launch. Commercial uses play a vital role in providing continued revenue generation for the Berkeley Waterfront. The vision for Berkeley Waterfront South includes the redevelopment of the 'Southern Core' and accompanying Marina Mall. This would include rebuilding the Hana Japan restaurant, part of which is currently vacant, to be occupied fully by food and beverage opportunities. This would also include the redevelopment of the vacant 25,000-square foot, two-story building at 199 Seawall Drive, which was occupied by a full-service restaurant and event space (Hs Lordships) until 2018.

Figure 2-4 | | Vision for Berkeley Waterfront South

Figure 2-5 | Illustrative Aerial of Berkeley Waterfront South

Illustrative View of Potential Shorebird Park Enhancements

The Berkeley Marina

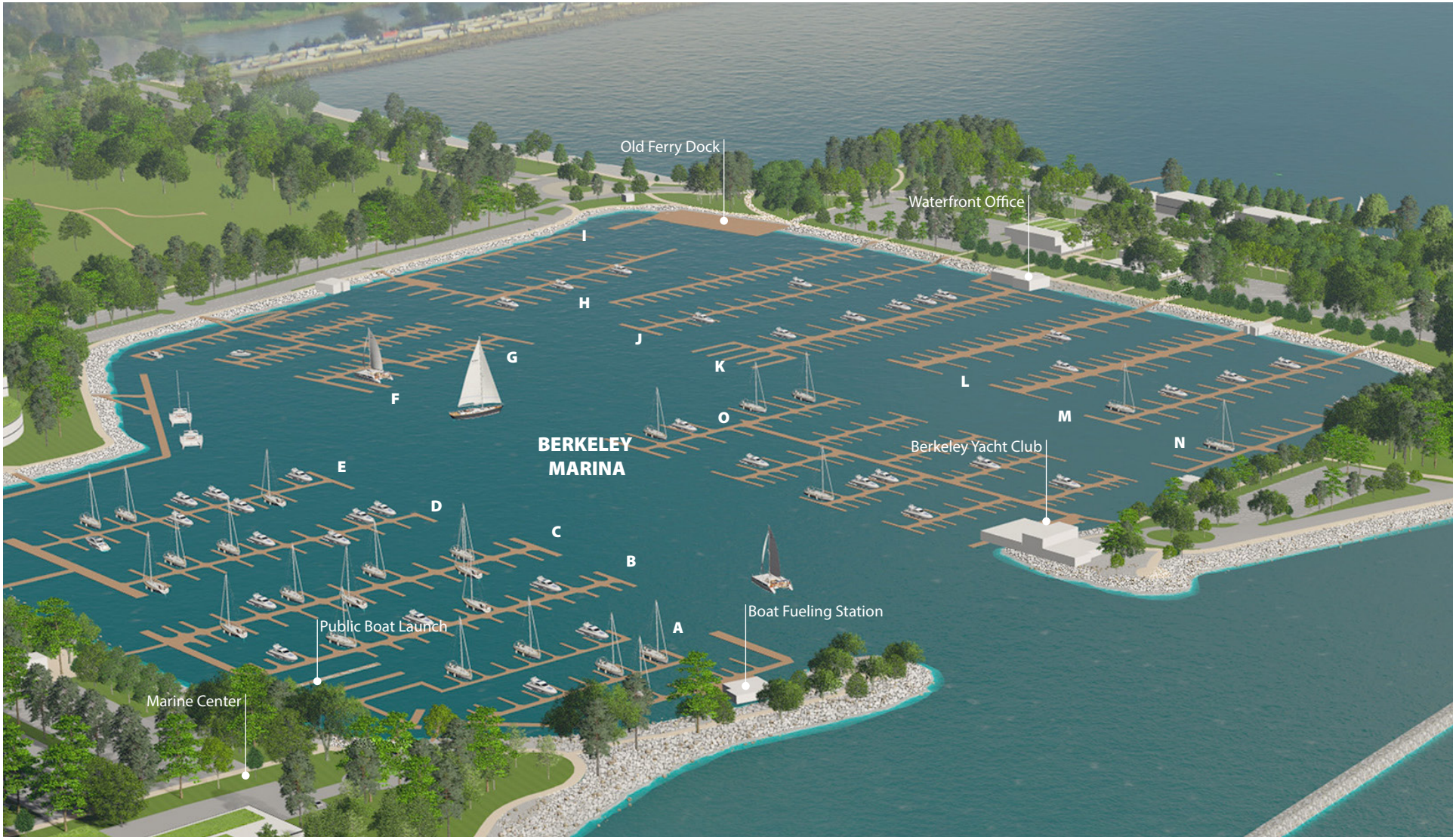
Community amenity for maritime recreation and commerce in the City of Berkeley, regardless of experience or boat ownership

Key Goals

- Celebrate the unique character of the Berkeley Marina
- Promote and integrate inclusive programming or partner organizations to welcome new boaters and watersports participants to the Marina Harbor and Waterfront.
- Foster harmonious relationship between commercial and revenue generating opportunities and the natural integrity of the Waterfront area.

The Berkeley Marina includes the revenue-generating and recreation waterside operations of the Berkeley Waterfront, as well as the inner perimeter land area with trails, parking lots, restrooms, laundry facilities, and support buildings for the Marina. Facilities associated with the Berkeley Marina include all docks and slips, potential future ferry services, public restrooms dotted along the perimeter and the Yacht Club and Yacht Club Dock, and Marine Center and Fueling dock, repair queue docks, and buildings, and Modern Sailing classrooms with fleet docks. A recent Slip Mix Study (August 2022, Moffatt & Nichol, see Appendix) found that amenities available onsite at the Berkeley Marina are more comprehensive than those offered by many competing marinas.

Illustrative Aerial of the Berkeley Marina



Illustrative View of the Potential Berkeley Marina Inner Promenade Destination and Development

César Chávez Park

A constructed landscape that transformed a former municipal landfill into a public waterfront park for all.

Key Goals

- Support current recreation uses and amenities as well as park wayfaring and interpretive signage.
- Support habitat enhancement for local flora and fauna, as well as adaptability to climate change
- Complete a public process for a master plan for César Chávez Park.

Once a landfill, César Chávez Park is today a 90-acre open space offering views of the Bay and the adjacent Berkeley Waterfront, picnic sites, internal walking trails, a 17 acre Off-Leash-Dog-Area, a Protected Nature Area, and several outdoor art installations.

A 1.5 mile paved shared-used perimeter trail wraps around the park's edge, with plans to connect with a Bay Trail Extension pathway along Marina Blvd.

Future projects at César Chávez Park include the renovation of existing paths and cohesive site furniture that best complement the natural character of the park. Potential improvements also include re-landscaping with species that are appropriate for the local coastal ecology and adaptable to climate change. A new public restroom facility has been funded and will be completed in 2025. These updates will accentuate the existing natural and recreational resources of César Chávez Park, while also preparing for future needs.

A new master plan should be developed if any significant changes are considered for César Chávez Park.

Figure 2-7 | Vision for César Chávez Park

Illustrative Aerial of César Chávez Park

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2.2 Parks & Nature

2.2.1 Parks, Playgrounds & Public Realm

Key Goals

1. Explore expansion of park and recreation elements at Shorebird Park to create a premiere recreation destination on the Bay.
2. Create continuous, connected public paths and access around all edges of the Waterfront and Berkeley Marina.
3. Encourage connections between parks, trails, and redevelopment through a landscape that visually and functionally integrates all land uses.
4. Support the City's Shorebird Nature Center and Adventure Playground programming.
5. Use cohesive design standards for site materials, furniture, planting, lighting, and wayfinding.
6. Enhance landscaped areas to include adaptable plants and trees to promote biodiversity, reduce invasive species, and reinforce Waterfront placemaking.
7. Create a natural environment with local and adapted plants and trees that will successfully establish, thrive, and adapt to the effects of climate change at the Berkeley Waterfront

The community process reinforced that the Waterfront is a highly valued resource within the City, and that preserving access to Bay waters, views, nature, and recreation opportunities are among the community's highest priorities. There was consensus that the shoreline, parks and natural areas should be preserved for these purposes, and that integrated recreational amenities could enhance the public's use and enjoyment of those areas.

The Berkeley Waterfront includes seven miles of trails and over 100 acres of parks and playgrounds, including César Chávez Park, Horseshoe Park, Shorebird Park, and the Adventure Playground. Parks, playgrounds, and trails are the Berkeley Waterfront's most popular destinations among community members. A community questionnaire found that 73% of visitors to the Berkeley Waterfront use walking and bike paths, parks and open space, playgrounds, and dog parks or dog walking areas. Sustainable maintenance, operations, and expansion of these destinations are a top priority of the Waterfront Specific Plan.

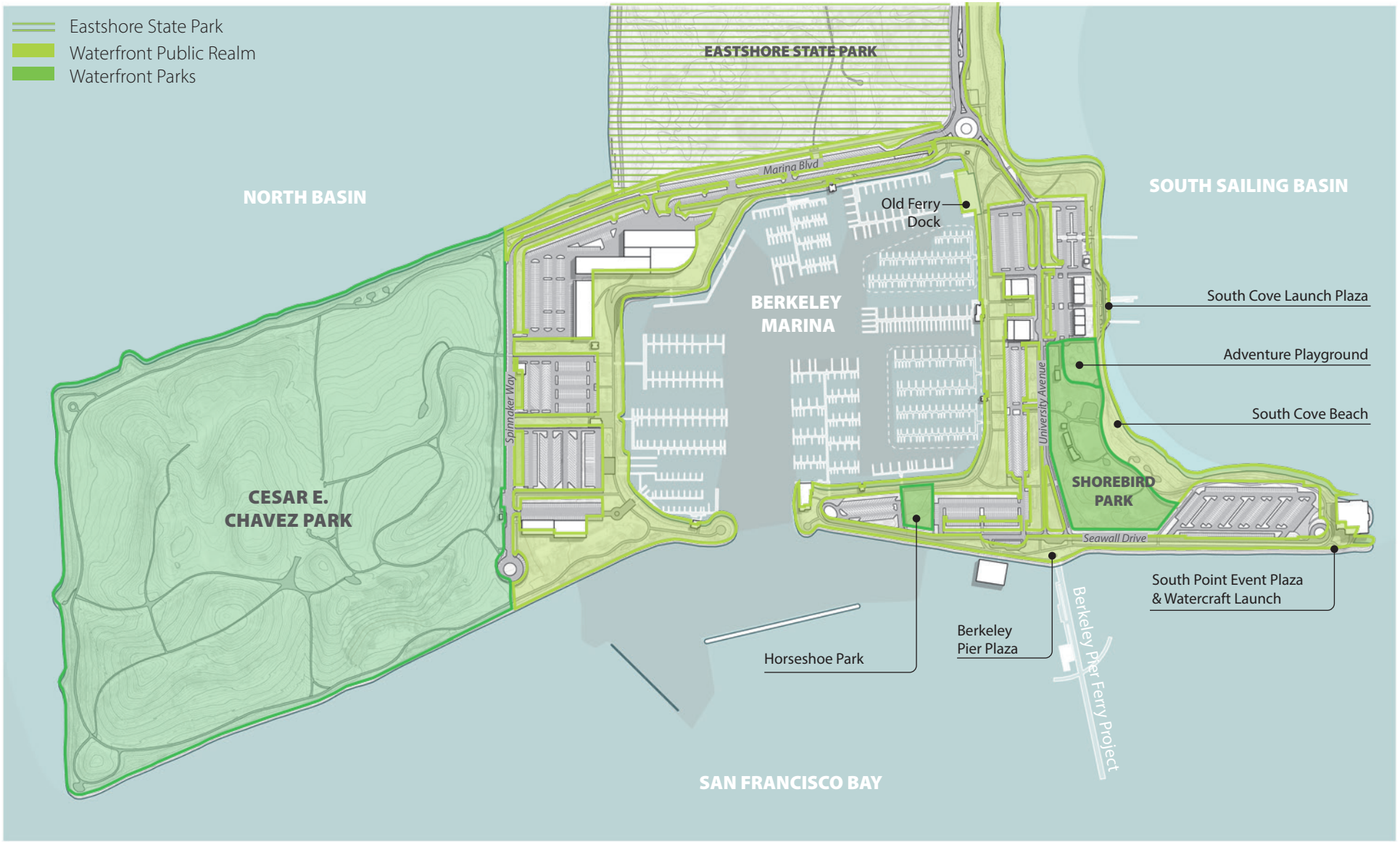
The Specific Plan embodies ecologically sensitive planning. Areas of particular ecological value throughout the Waterfront Area should be identified, protected and enhanced. New development should be consistent with the highest design and environmental standards and should complement and actively protect the nearby natural environment and promote more biodiverse green spaces, which generate proven public health benefits.

Passive and active recreation across the Waterfront is supported by formal and informal programming, such as environmental education activities and special event. Elements that support Waterfront activation include picnic sites, playgrounds, BBQ grills, seating, and other amenities. While the current Waterfront already provides numerous recreational resources, the preferred plan at right shows possibilities for enhancing the Waterfront's parks and green spaces. This includes potential redevelopment of the 199 Seawall Peninsula with an event plaza & small watercraft launch, integrating nature play within Shorebird Park, and enhancing the inner harbor promenade and waterfront trails. Additional potential opportunities include the restoration of the Berkeley Pier to provide enhanced public recreation as well as public ferry service, potential beach nourishment at Shorebird Beach, and living shoreline projects for sea-level rise that integrate public pathways, seating, and habitat within stabilized shoreline edges. Figure 2-8 depicts one possibility for programming the undeveloped area of Shorebird Park in a way that preserves many of its wild elements, while giving new access to views, play elements, and trails. This could be expanded to include the entire Seawall peninsula, creating a world class park and recreation destination.

These improvements will support continued and enhanced connections for people and wildlife to the coastal landscape of the San Francisco Bay.

Figure 2-8 | | Nature Play at Shorebird Park

Figure 2-9 | Parks and Public Realm



Adventure Playground, shown here, offers a unique play experience for all ages within Shorebird Park.


HAYLEY

2.2.2 Nature & Shoreline Ecology

Key Goals

1. Diversify plant communities for long-term resilience, and maximize plantings for environmental benefits.
2. Protect and expand tree canopy cover at the Berkeley Waterfront by planting significantly more trees to provide more shade, create habitat, and serve as green infrastructure.
3. Increase opportunities for visitor connection to the range of coastal wildlife habitat, both terrestrial and aquatic.

Priority Projects

1. South Cove Sailing Basin seawall replacement
2. Harbor Basin north shoreline revetment upgrade
3. Marina Blvd shoreline revetment upgrade
4. University Ave shoreline revetment upgrade

The Waterfront lies within a global biodiversity hotspot and various areas of the Waterfront have significant ecological value that should be protected and enhanced. The Waterfront Area lies adjacent to a half a million East Bay Residents whose access to the Bay is blocked by I-80 and at most points is limited to a narrow strip between the shoreline highway and the Bay. The Waterfront is one of the few areas of Berkeley that extends deep into the Bay to provide a myriad of water and Bayfront experiences for all.

Increasing the biodiversity and ecological value of the Waterfront is particularly important for coastal wildlife. North America bird populations have declined 29% since the 1970s, and two-thirds of the remaining birds are at risk of extinction. Several threatened avian species are documented to seasonally frequent the Waterfront Area. There has also been a 33% decline of butterflies and moth populations since 1999, with an ongoing decline of 2% per year, and global declines of insects up to 75% or more. Birding is already a popular activity at the Waterfront, and can attract new visitors.

The Waterfront Specific Plan encourages an approach to planting that emphasizes local and adapted plant species that support coastal wildlife and demonstrate strong potential for resilience and adaptability to the impacts of climate change. Urban development and intensive recreational programming add additional pressures on plants within the Berkeley Waterfront context, where the appearance of a "natural" landscape belies the site's complex history as constructed land. The Waterfront Specific Plan recommends a broad and inclusive approach to planting to ensure establishment and maintenance of successful plantings across the Berkeley Waterfront.

The Waterfront Specific Plan categorizes plant species per the following terms and definitions:

Local | terrestrial and aquatic plant species that have evolved and occur naturally in the San Francisco Bay Area, its regional ecosystem, and associated habitat.

Adapted | terrestrial and aquatic plant species that are not local, but reliably grow well in a given habitat with minimal attention in the form of winter protection, pest protection, irrigation, and fertilization once established. These plants can exist with a broader plant community without negatively impacting local wildlife or significantly displacing plant species that are significant for local wildlife.

Invasive | terrestrial and aquatic plant species that are not local to an environment, and once introduced, they establish, quickly reproduce and spread, and cause harm to the environment, local ecologies, the economy, or human health.

Figure 2-10 | Expanded and Enhanced Shoreline Landscapes

Coastal Plant Communities

The Berkeley Waterfront includes 4 distinct plant communities: Central Coast (César Chávez Park), Chaparral-Coastal Sage Scrub (urban marina & commercial areas), Coastal Sage Scrub (Horseshoe and Shorebird Park), and Coastal Strand (shoreline perimeter of the Berkeley Waterfront). Each plant community should be developed to achieve a sustainable, adaptable, and cohesive overall Waterfront landscape that supports wildlife habitat creation and enhances the visitor experience. These distinct landscape typologies will also reinforce placemaking and identity for the Berkeley Waterfront's different areas, reflecting the biodiversity and richness of coastal habitats on the San Francisco Bay.

The Central Coast plant community at César Chávez Park includes local coastal species that are already present at the park. The plants in this community include a mix of deciduous and evergreen trees and shrubs as well as a range of grasses and groundcover. Not only does this wide range of plant species offer visual interest and contrast in the landscape, but they also provide habitats for a variety of animal species, including birds such as the Cooper's Hawk and the tiny Checkered Beetle residing in the soil.

The Chaparral-Coastal Sage Scrub and Coastal Sage Scrub plant communities reside in the inland and urban zones of the Berkeley Waterfront. The planting palette of these communities considers tolerance of urban conditions, as in the choice of the New Zealand Christmas Tree, as well as suitability to an inland coastal habitat condition utilizing native species such as the Inland Scrub Oak. These planting communities take form in the landscape as a mix of large canopy trees dotted with low-lying shrubs and groundcover that soften and give dimension to the ground plane. Animal species that thrive in this environment range from small mammals like the Jackrabbit to coast loving birds like the Great Blue Heron and reptiles such as the Southern Alligator Lizard.

Lastly, the Coastal Strand plant community is located along the water's edge following the perimeter of the Berkeley Waterfront from César Chávez Park to the north to Shorebird Park to the south. This plant community contains fewer large tree species and tends towards scrubby shrubs, coastal grasses, and flowering bushes and groundcover interspersed throughout the rocky coast. Within the coastal strand, 3 areas have been identified as potential opportunity zones for improvement. These areas are investigated further in this section to improve coastal habitat as well as increase access to the water by pedestrians in 3 distinct ways.

Figure 2-11 | Plant Communities at the Berkeley Waterfront

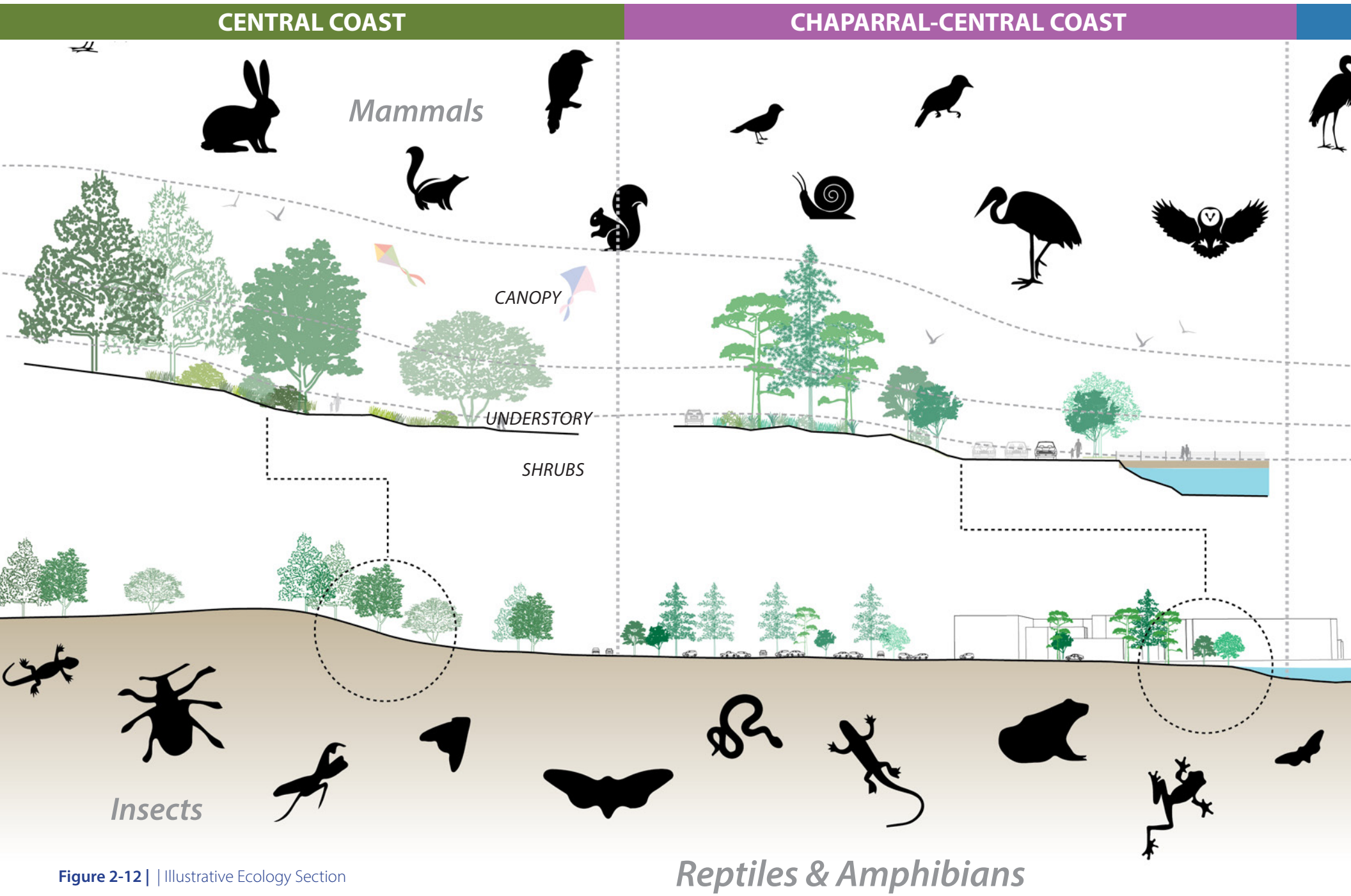
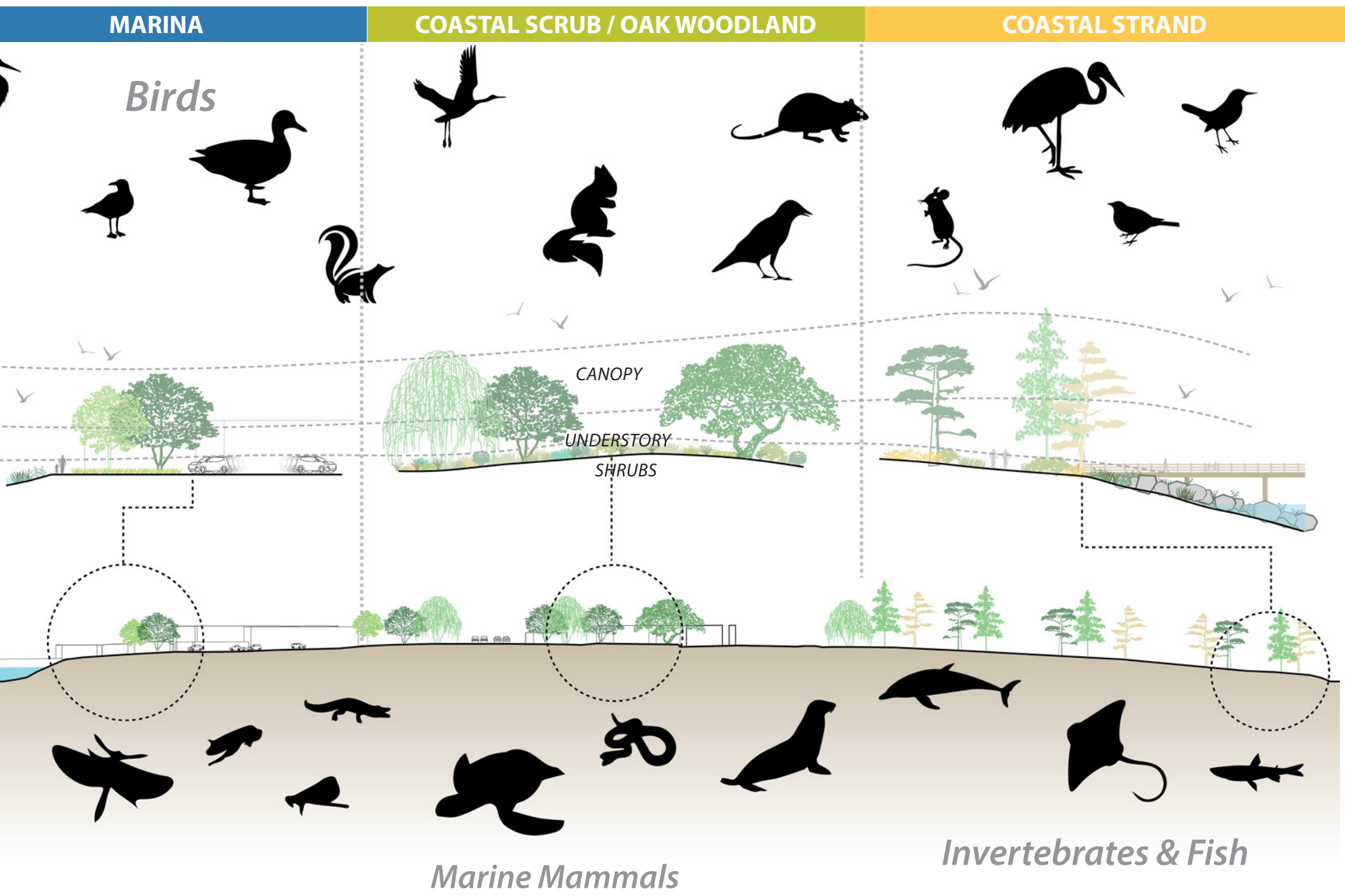


Figure 2-12 | | Illustrative Ecology Section


MARINA NATURAL
SHORELINE
MARINA
COASTAL SCRUB / OAK WOODLAND
COASTAL STRAND
Birds
CANOPY
UNDERSTORY
SHRUBS
Marine Mammals
Invertebrates & Fish

Waterfront Urban Forest

Existing urban forest at the Berkeley Waterfront functions as significant green infrastructure for the Waterfront, Bay, and the City of Berkeley – providing shade for people and habitat for wildlife, mitigation of urban heat island and strong coastal winds, and ecological benefits such as carbon sequestration. Protecting and expanding this canopy cover will require on-going urban forestry support and adaptation to climate change. A range of tree and plant species within existing and new urban forests at the Waterfront will ensure cover even as some species die out or fail. Regular interplanting of new trees to replace those reaching the end of life is also important for a sustainable urban forest

Placemaking Planting

The Berkeley Watrerfront's coastal landscape is essential to its identity as a destination for nature and recreation on the San Francisco Bay. Protecting and enhancing the Berkeley Waterfont's iconic landscape will sustain this shared resource for the next generation, attract more users to the Berkeley Waterfront's recreational and commercial amenities, and support memorable experiences for all visitors. The Waterfront Specific Plan recommends the following placemaking planting strategies at the Waterfront:

Seasonal Blooms | Stage flowering so that every month of the year something is in bloom and popping to create "natural fireworks". Although December - February is a relatively dormant period for blooms, plants with red berries (i.e. Coffee Berry) and early spring-blooming plants (i.e. Manzanita) can provide seasonal interest when much of the landscape is still "waking up" from winter. Evergreen trees and shrubs (i.e. Torrey Pine) are also important to integrate for strategic all-year landscape structure and presence.

Open Viewsheds | Install and manage tree canopies to open up important scenic views at the Berkeley Waterfront, including vistas out to the Berkeley Pier and the San Francisco Bay from University Avenue. Viewsheds from the Watefront's perimeter trail are also important, both out towards the water and inland to support connectivity between destinations. Density and locations of trees should also consider visitor safety at the Waterfront so that all feel welcomed and comfortable.

Street Trees | Trees that are resilient to tough streetscape conditions are important landscape tools to reinforce the Waterfront's nature-based identity and character. Locally-adapted trees are particularly successful at adding color, beauty, and structure on major streets. The Waterfront Specific Plan recommends diversifying species for resilience in case of environmental or pest problems for individual species; it also allows for intuitive wayfinding across the Waterfront (i.e. species with a distinct form for each major street or distinctive street trees at major gateways, developments, and points of interest).

Contextual Planting | The coastal plant communities listed in this section are outlined in broad brushes across the Waterfront to reflect their specific environmental and programmatic context. Specific planting projects associated with broad public realm and park improvements and development projects should continue this context-based approach to planting at the site scale. For example, this could include integrating medium to large dune species that tolerate salt spray and strong winds on western-facing and coastal areas, white introducing more forested and herbaceous perennial plant species on east-facing protected areas. Ultimately, the landscape should emerge in coordination with environmental conditions, which is how it will most readily thrive within the broader coastal ecology of the San Francisco Bay.

Landscape Establishment & Maintenance

The Waterfront is a constructed landscape, where poor soils, tough coastal environmental conditions, and irregular water can create challenges for plants and trees to establish and thrive. In addition to amending soils in place or importing landscape soils with beneficial physical and chemical properties, new street trees and new planting areas will typically require irrigation to establish. Irrigation may also be required at select lawns across the Waterfront to support recreational use, such as the southeast quadrant of César Chávez Park. The Waterfront Specific Plan recommends a comprehensive landscape management approach that includes consistent and streamlined oversight of new trees and plantings; on-going maintenance by arborists, horticulturalists, and lawn care professionals, and proactive planning for broad landscape initiatives and improvements at the Waterfront.

Living Document

The Waterfront Specific Plan recognizes that the approach to landscape and ecology at the Waterfront will evolve over time. Given changing environmental conditions and ecological best practices, the tree and plant lists included in this section will regularly change, and this section generally must be considered a "living document." It will be monitored and updated on a regular basis to reflect the most current regionally recommended planting palettes and landscape best practices, lessons learned based on planting trial success or failure, adaptation to climate change, educational opportunities, and community priorities over time.

Tree and plant lists in this document are recommendations at the time of Specific Plan adoption. These lists will be updated every 3 years by landscape staff from the City's Parks, Recreation and Waterfront Department.

The Solar Calendar art installation project in César Chávez Park, shown here, is an example of an educational tool to bring more awareness and interaction to visitors of the Berkeley Waterfront.

CESAR E. CHAVEZ PARK

URBAN MARINA

CENTRAL COAST

Planting Priorities

- Plant a biodiverse mix of local species
- Reduce & manage existing invasive plant species
- Introduce more pollinator gardens with local species

Wild meadows, grasses and shrubs at César Chávez Park

CHAPARRAL-CENTRAL COAST

Planting Priorities

- Plant a biodiverse mix of local & adapted species that can adapt to the changing climate conditions and can thrive in the urban context
- Plant tree and plant species with varied seasonal qualities for all season interest and strong structural form for a more "refined" planting appearance compared to the Waterfront Parks and shoreline edge
- Increase canopy cover on streetscapes and in parking lots, and decrease impervious surfaces for better stormwater management

Example of Chapparal Coastal Ecology

MARINA NATURAL

COASTAL SCRUB / OAK WOODLAND

Planting Priorities

- Reinforce and expand canopy cover with local coastal tree species, emphasizing biodiversity for resilience
- Establish a diverse range of understory shrub and grass plantings that are "rough" or "wild" in character; limb up trees for clear sight lines below the canopy

Example of Coastal Scrub and Woodland Ecology

SHORELINE

COASTAL STRAND

Planting Priorities

- Establish living shorelines where appropriate
- Decrease impervious surfaces for better stormwater management
- Plant a biodiverse mix of local and adapted grasses and shrubs for habitat.
- Plant local and adapted trees that can withstand the strong wind and high salt conditions along the shoreline, limbed up as necessary to ensure open water views

Example of Coastal Strand and Living Shoreline

PLANT COMMUNITY TYPE 1: CENTRAL COAST *(CÉSAR E. CHÁVEZ PARK)*

PREFERRED NATIVES

TREES

Salix lasiolepis	Arroyo Willow
Pinus torreyana	Torrey Pine
Hesperocyparis macrocarpa	Monterey Cypress
Umbellularia californica	California Bay
Quercus agrifolia	Coast Live Oak
Lyonothamnus floribundus	Catalina Ironwood
Aesculus californica	California Buckeye
Quercus tomentella	Island Oak

SHRUBS

Atriplex lentiformis	Big Saltbush
Ceanothus thyrsiflorus	Blueblossom
Ceanothus	California Lilac
Frangula californica	Coffeeberry
Artostaphylos manzanita	Common manzanita
Epilobium canum	California Fuchsia
Baccharis pilularis	Coyote bush

GRASSES

Sisyrinchium bellum	Blue Eyed Grass
Juncus sp.	Rush
Carex praegracilis	Clustered Field Sedge
Elymus condensatus	Giant Wild Rye
Hordeum brachyantherum var. californicum	California Barley

FLOWERS/GROUNDCOVER

Nemophila menziesii	Baby Blue Eyes
Galium aparine	Bedstraw
Cardmine oligosperma	Bittercress
Symphyotrichum chilense	California Aster
Achillea millefolium	Common yarrow
Phacelia campanularia	Desert Bluebell
Iris douglasiana	Douglas Iris
Taraxia ovata	Goldeneggs
Lupinus nanus	Sky Lupine

PLANT COMMUNITY TYPE 1: CENTRAL COAST *(CÉSAR E. CHÁVEZ PARK)*

EXISTING NON-NATIVES

** denotes non-natives on watchlist or with limited invasive qualities*

*** denotes moderately to aggressive invasive species that should be managed, not planted*

TREES

**Leptospermum laevigatum*	*Australian Tea Tree
***Acacia melanoxylon*	**Blackwood Acaia
***Eucalyptus globulus*	**Bluegum Eucalyptus
Prunus cerasifera	Cherry Plum
Betula populifolia	Gray Birch
Quercus ilex	Holly Oak
***Eucalyptus citriodora*	**Lemon Scented Gum
***Myoporum laetum*	**Lollypop Tree

SHRUBS

***Foeniculum vulgare*	**Fennel
***Genista monspessulana*	**French Broom
***Rubus armeniacus*	**Himalayan Blackberry
Persicaria capitatad	Himalayan Smartweed

GRASSES

Poa annua	Annual Bluegrass
***Holcus lanatus*	**Common Velvetgrass
***Hordeum murinum*	**Foxtail Barley
***Festuca perennis*	**Italian Rye Grass
***Dactylis glomerata*	**Orchard Grass
Briza minor	Shivery Grass

FLOWERS/GROUNDCOVER

**Lobularia maritima*	*Alyssum
Lotus corniculatus	Birdsfoot trefoil
Malva nicaeensis	Bull Mallow
Calendula officinalis	Calendula
Tecoma capensis	Cape Honeysuckle
Trifolium incarnatum	Crimson Clover
**Glebionis coronaria*	*Crown Daisy
Bellis perennis	English Daisy
**Geranium purpureum*	*Little Robin
Oxalis purpurea	Purple Woodsorrel
Lysimachia arvensis	Scarlet Pimpernel

PLANT COMMUNITY TYPE 2: CHAPARRAL-CENTRAL COAST *(URBAN MARINA)*

**denotes recommended street trees or flowering placemaking trees that are non-native*

TREES

Sambucus mexicana	Blue Elderberry
Sambucus nigra	Black Elderberry
Quercus gravesii	Chisos Red Oak
Quercus hypoleucoide	Silver Leaf Oak
Lyonothamnus floribundus	Catalina ironwood
Quercus agrifolia	Coast Live Oak
**Lagunaria patersonia*	Primrose Tree
**Metrosideros excelsa*	New Zealand Christmas Tree
**Corymbia ficifolia*	Red Flowering Gum
**Melaleuca armillaris*	Drooping melaleuca

SHRUBS

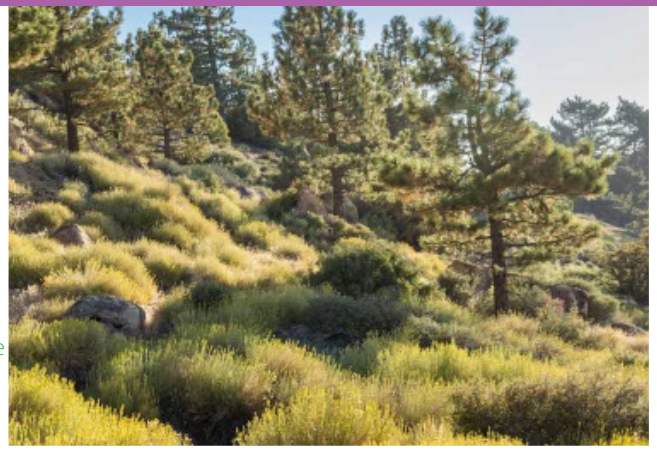
Acalypha californica	Copper Leaf
Arctostaphylos manzanita	Common Manzanita
Baccharis pilularis	Coyote Bush
Epilobium canum	California Fuchsia
Arctostaphylos pumila	Dune Manzanita
Salvia mellifera	Black Sage
Ceanothus thyrsiflorus	Blueblossom Ceanothus
Ceanothus gloriosus	Point Reyes Ceanothus
Cercocarpus betuloides	Mountain Mahogony

GRASSES

Agrostis pallens	Bent Grass
Poa secunda	One Sided Blue Grass
Melica imperfecta	Small Flowered Melica
Leymus condensatus	Giant Wildrye
Leymus condensatus	Canyon prince
Nassella pulchra	Purple Needlegrass

FLOWERS/GROUNDCOVER

Agoseris grandiflora	Mountain Dandelion
Argemone munita	Prickly Poppy
Eriogonum latifolium	Coast Buckwheat
Salvia clevelandii	Cleveland Sage
Ceanothus	California Lilacs
Epilobium species	Hummingbird Fuchsia
Ribes Sanguineum	Blood Currant
Clematis lasiantha	Chaparral Clematis
Lupinus nanus	Sky Lupine
Castilleja exserta	Purple Owl's Clover







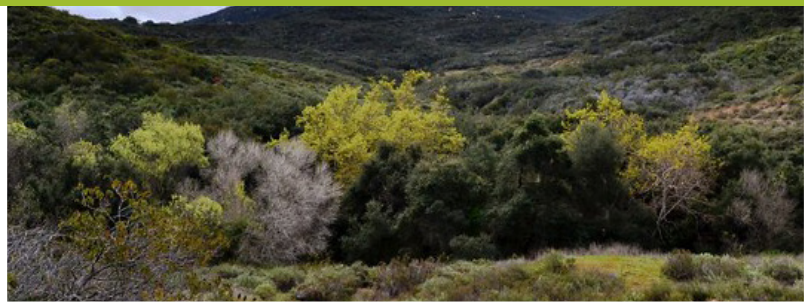




PLANT COMMUNITY TYPE 3: COASTAL SCRUB / OAK WOODLAND *(MARINA NATURAL)*

TREES

Quercus agrifolia	Coast Live Oak
Quercus tomentella	Island Oak
Arbutus menziesii	Pacific Madrone
Pinus remorata	Island Bishop Pine
Platanus racemosa	California Sycamore
Salix sitchensis	Sitka Willow
Salix lasiandra	Shining Willow
Quercus berberidifolia	Inland Scrub Oak
Quercus parvula var. shrevei	Shreve Oak



SHRUBS

Ceanothus	Frosty Blue Lilac
Ceanothus thyrsiflorus	Snow Flurry
Cercocarpos betuloides	Mountain mahogany
Fremontodendron species	Flannel bush
Frangula californica	Coffeeberry
Diplacus aurantiacus	Bush Monkeyflower
Lonicera involucrata	Black Twinberry
Arctostaphylos species	Manzanitas
Berbis species	Barberries
Artemisia californica	California Sagebrush

GRASSES

Bothriochloa barbinodis	Cane Bluestem
Carex fracta	Fragile Sheathed Sedge
Deschampsia elongate	Slender Hairgrass
Melica imperfecta	Small Flowered Melica
Elymus condensatus	Giant Wild Rye
Elymus condensatus	Canyon Prince
Nassella pulchra	Purple Needlegrass
Stipa pulchra	Purple Stipa

FLOWERS/GROUNDCOVER

Abronia maritima	Sand Verbena
Aster chilensis	California Aster
Mimulus species	Monkey Flowers
Salvia spathacea	Hummingbird Sage
Solidago velutina	Threenerve Goldenrod
Lasthenia californica	California Gold Field
Eschscholzia californica	California Poppy
Layia gaillardioides	Woodland Layla
Zeltnera davyi	Davy's Centaury
Eriophyllumm confertiflorum	Golden Yarros

PLANT COMMUNITY TYPE4: COASTAL STRAND *(SHORELINE)*

TREES

Pinus torreyana	Torrey Pine
Morella californica	California Wax Myrtle
Salix hookeriana	Coastal Willow
Quercus tomentella	Island Oak
Heteromeles arbutifolia	Toyon

SHRUBS

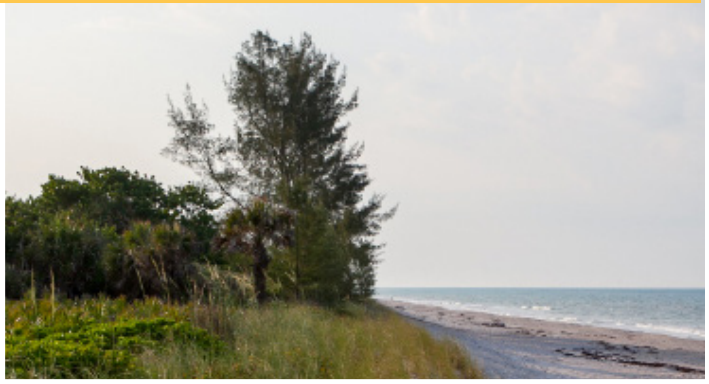
Arctostaphylos crustacea	Rose's Manzanita
Frangula californica	Coffeeberry
Eriophyllum staechadifolium	Seaside Woolly Sunflower
Eriogonum cinereum	Ashyleaf Buckwheat
Baccharis vanessae	Coyote Bush
Crocanthemum scorparium	Common Sun Rose
Lupinus chamissonis	Dune Bush Lupine
Lupinus arboreus	Coastal Bush Lupine
Lupinus chamissonis	Beach Blue Lupine
Salix sessilifolia	Northern Sandbar Willow

GRASSES

Muhlenbergia rigens	Deer Grass
Bouteloua gracilis	Blue Grama Grass
Carex pansa	Dune Sedge
Carex praegracilis	Clustered Field Sedge
Distichilis Spicata	Saltgrass
Equisetum hymale	Scouring Rush
Stipa pulchra	Purple Needle Grass
Elymus mollis	American Dune Grass
Elymus mollis ssp. mollis	Dune Wildrye
Juncus leseurii	Salt Rush

FLOWERS/GROUNDCOVER

Abronia maritima	Red Sand Verbena
Achillea millefolium	Common Yarrow
Ambrosia chamissonis	Silver Beachwood
Artemisia pycnocephala	Beach Sage
Clarkia purpurea	Winecup Clarkia
Eriogonum parvifolium	SeaCliff Buckwheat
Coreopsis species	Sea Dahlia
Coreopsis gigantea	Giant Coreopsis
Escholzia californica	California Poppy
Euthamia occidentalis	Western Goldenrod
Erysimum insulare	Dune Wallflower
Fragaria chiloensis	Beach Strawberry
Triglochin maritima	Arrowgrass
Erigeron glaucus	Seaside Daisies
Silene laciniata	Indian Pink Red Catchfly
Castilleja affinis	Coast Indian Paintbrush
Heterotheca	False Goldenaster






Shoreline Edges & Vulnerabilities

Key Goals

1. Stabilize shoreline areas vulnerable to future sea level rise consistent with BCDC regulations
2. Integrate living shoreline strategies where appropriate to support habitat & public access to water
3. Enhance and expand opportunities for all to access and experience the water's edge

As referenced in Subsection 1.3.4 Sea Level Rise & Climate Adaptation, sea level rise due to climate change is projected to affect select shoreline areas at the Berkeley Waterfront. To plan for this, this Specific Plan has identified three vulnerable areas of the Waterfront shoreline for reinforcement. These areas include the shoreline at the intersection of Virginia St Extension and Marina Blvd, the shoreline on the Marina side of the DoubleTree, and the intersection of Marina Blvd and Shorebird Beach.

For each of these areas, potential approaches are illustrated to raise the revetment crest above projected 2100 "Low Risk Aversion" SLR scenarios, while also integrating living shorelines and maximizing opportunities for people to get close to the water:

- Virginia St Extension & Marina Blvd Intersection: seat walls or revetment integrated into the slope of the shoreline provide a place for visitors to relax at the water's edge, and may involve creating habitat for coastal plants and wildlife.
- Harbor Basin North: stacked seat walls provide both a widened waterfront landscape for sitting with direct access to the water's edge. This space can be used for small gatherings as well as small events in the expanded public realm. The seat walls shown in both scenarios provide added protection for the DoubleTree against flooding in the 2100 extreme tide scenario by raising the grade.
- Marina Blvd & University Ave Intersection: options for reinforcement include creation of living shorelines using reef ball and coir log stabilization. These techniques create more habitat for shoreline species, while also reducing the impacts of tidal surges and flooding.

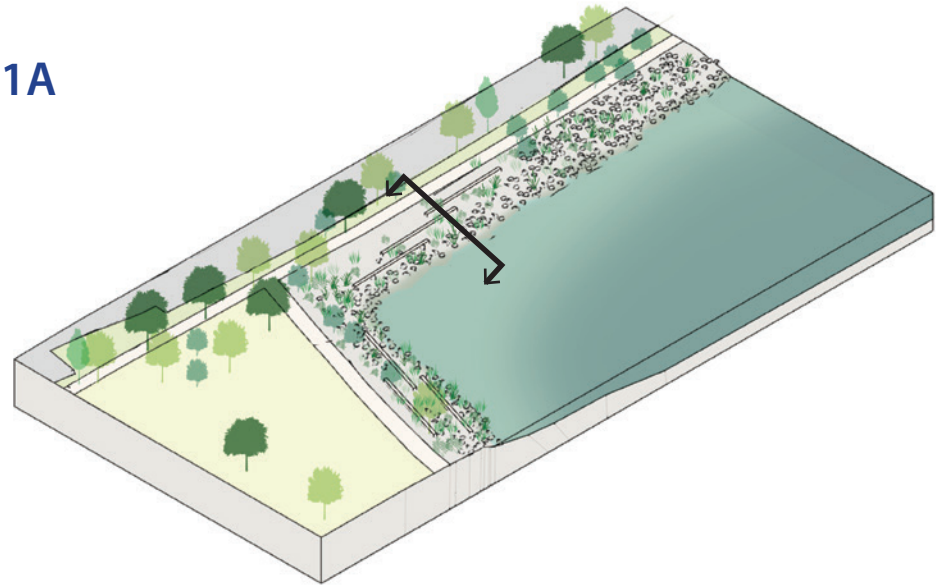
In addition to shoreline areas vulnerable to SLR, the Waterfront Specific Plan identifies enhancements to the Waterfront's only soft shoreline, where the Waterfront's riprap revetment perimeter transitions to a rocky Shoreline Beach:

- Shorebird Beach: proposed improvements could include beach nourishment integrated with stabilization strategies to prevent erosion and create habitat. Study 3A utilizes artificial reef balls that act as a breakwater, while also providing additional habitat for marine species. Study 3B similarly creates a breakwater to prevent erosion, but uses a traditional riprap material as opposed to the artificial reef balls. While this does not have the same potential for promoting reef habitat, the unique shape of the breakwaters promote the creation of tidal pool habitat on the protected land-facing side of the breakwater.

Figure 2-13 | Shoreline Conditions and Vulnerabilities at the Berkeley Waterfront

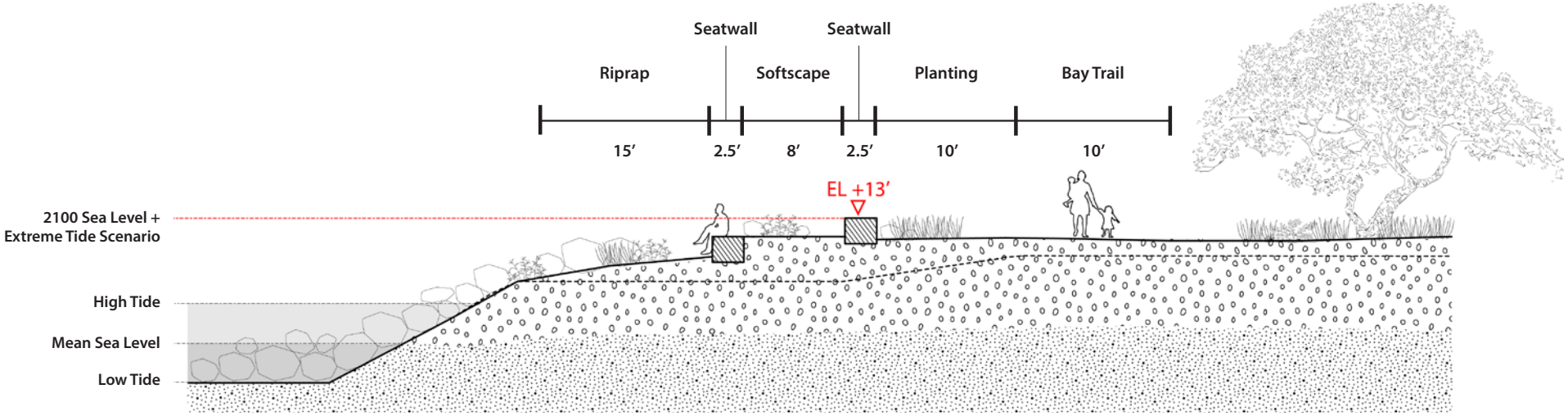
1 | Virginia St Extension - Integrated Seatwalls

1A

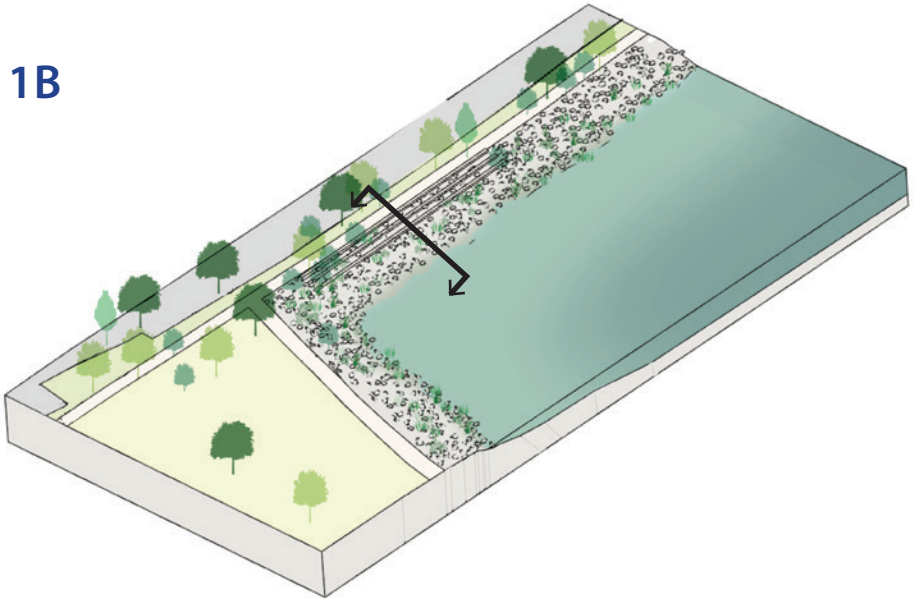


- Staggered seatwalls provide places to sit along the water's edge to enjoy the coastal habitat while still allowing for planting between
- Coastal plantings improve permeability and help prevent erosion
- The shoreline becomes a destination and gathering place

Brooklyn Bridge Park | MVVA

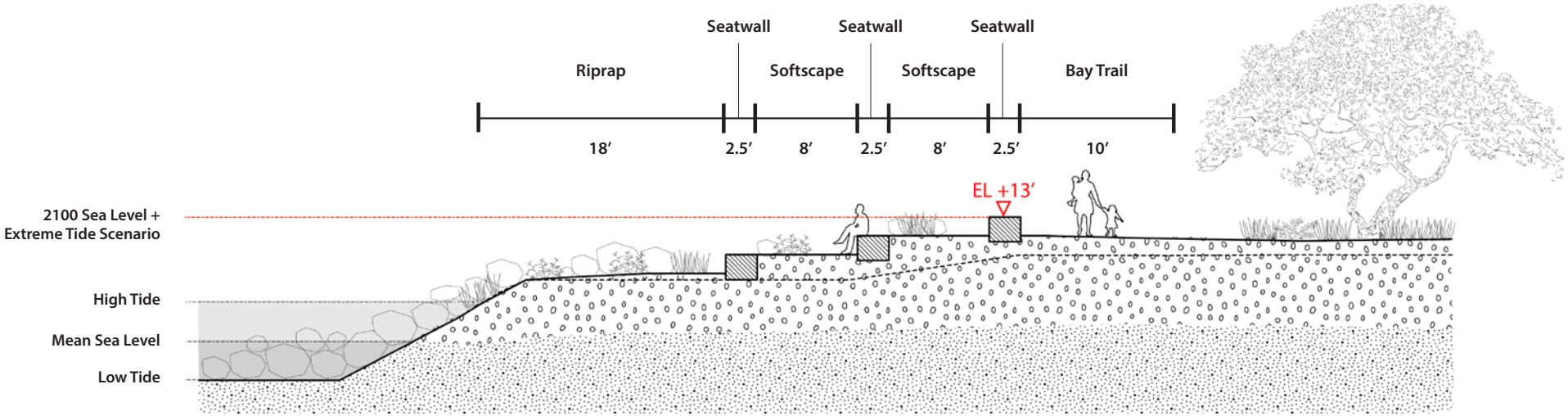


1B



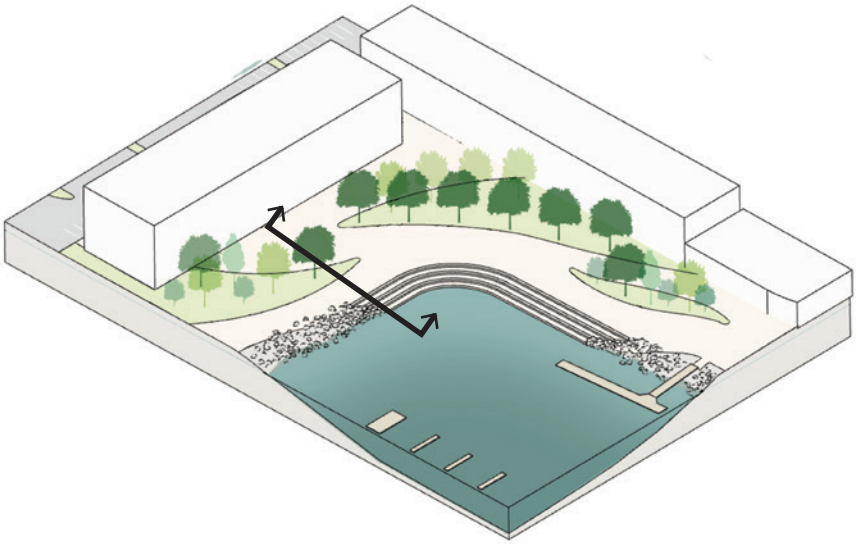
- Stepped seatwalls provide places to sit along the water's edge to enjoy the coastal habitat
- Softscape between each seatwall fades into the riprap on either side

Candlestick Park | Hargreaves Jones



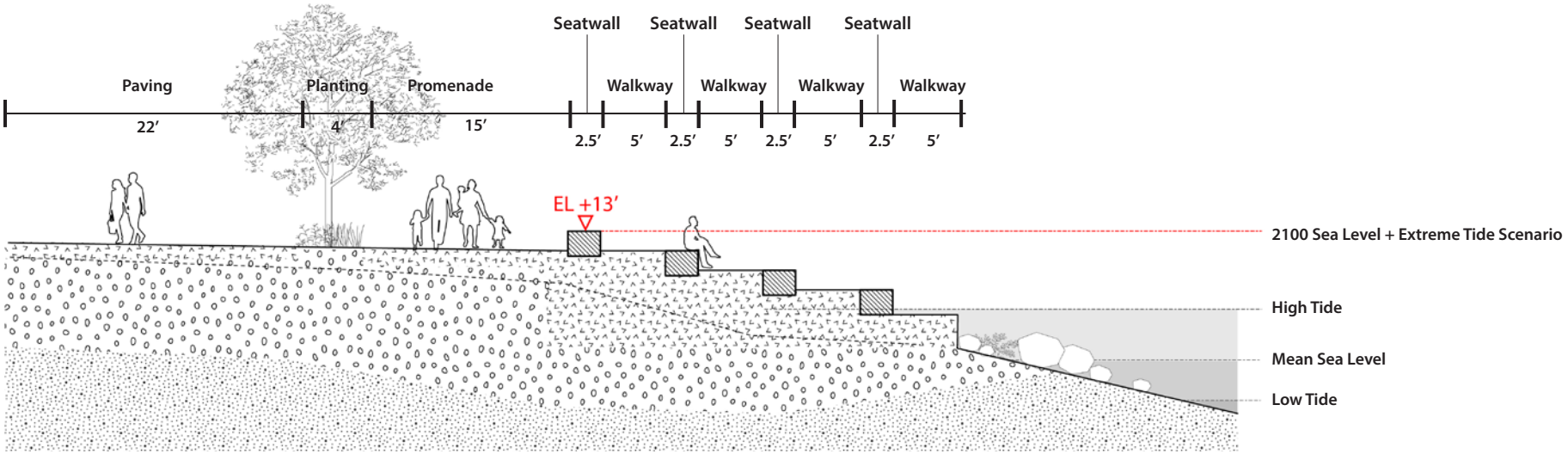
2 | DoubleTree - Seatwalls & Terraces

2A

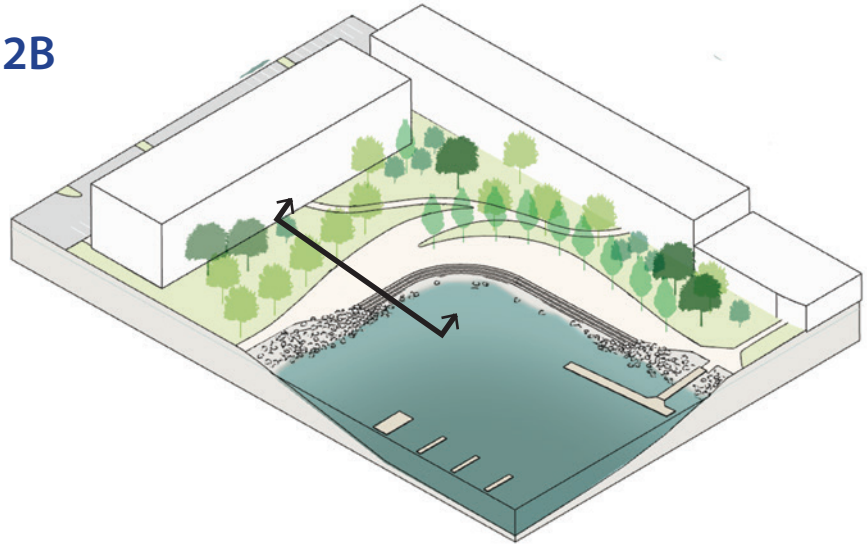


- Terraced seatwalls, with walking paths between each, improve access down to the water's edge
- At higher tides, the terraced seating creates a hard edge at the water
- Paved material allows for large gatherings and increased access from the surrounding DoubleTree

Chattanooga 21st Century Waterfront Park | Hargreaves Jones

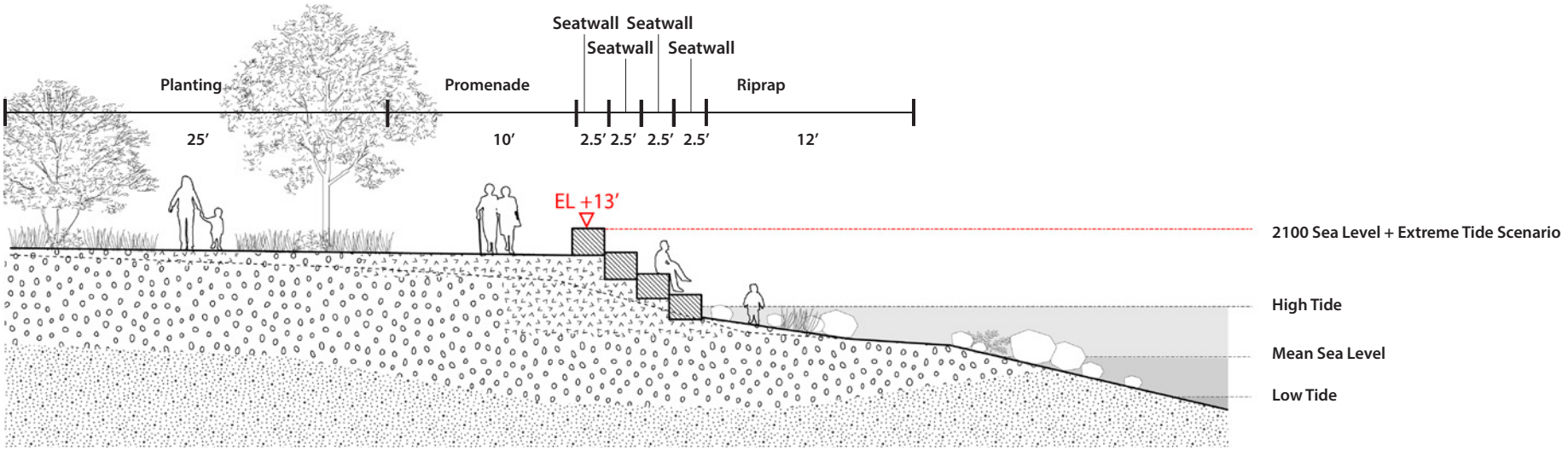


2B



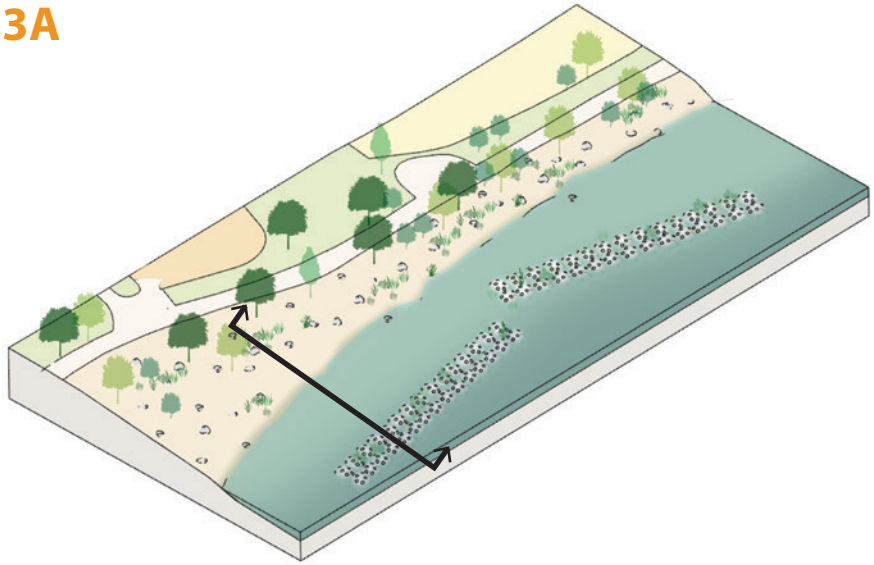
- Stacked seatwalls offer seating near the water
- A softer edge where the space meets the water allows for a small shore at low tides and plantings
- The paved promenade thickens at this corner while also allowing for small pathways to the surrounding buildings situated between large planted areas

Brooklyn Bridge Park | MVVA



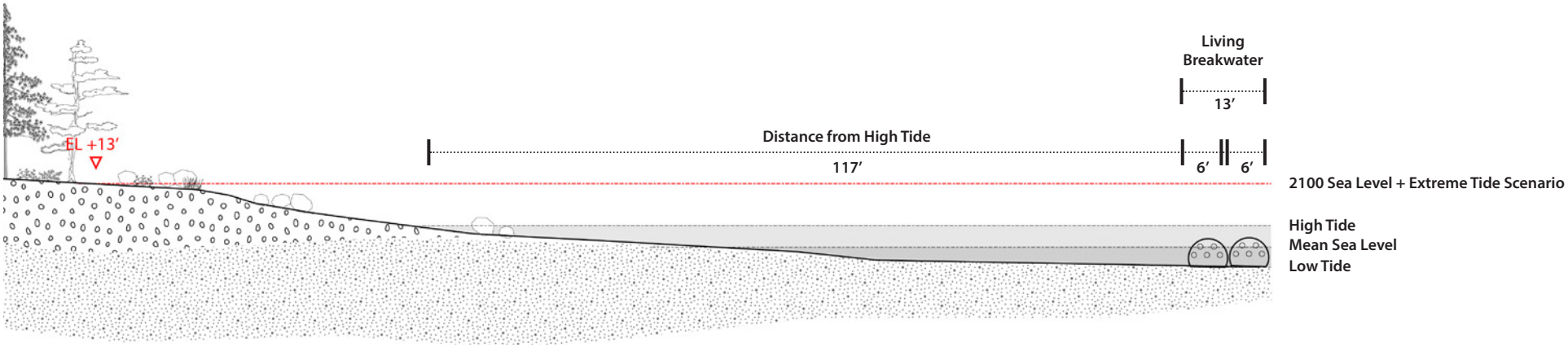
3 | Shorebird Park - Breakwaters

3A

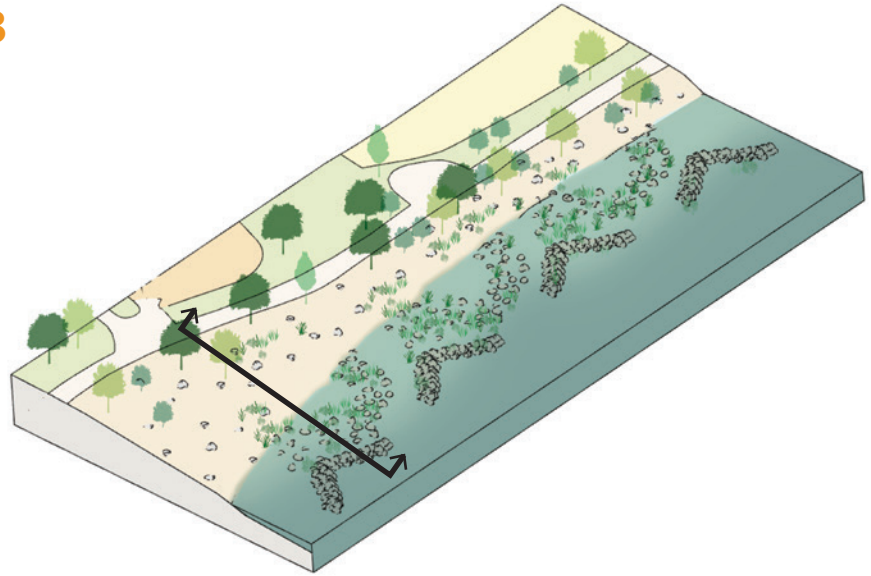


- Living breakwaters help prevent beach erosion while also providing habitat to key marine species with the use of artificial reef balls
- Additional sand can be introduced for beach nourishment of the shoreline

Example of Artificial Reef Ball | Society for Ecological Restoration

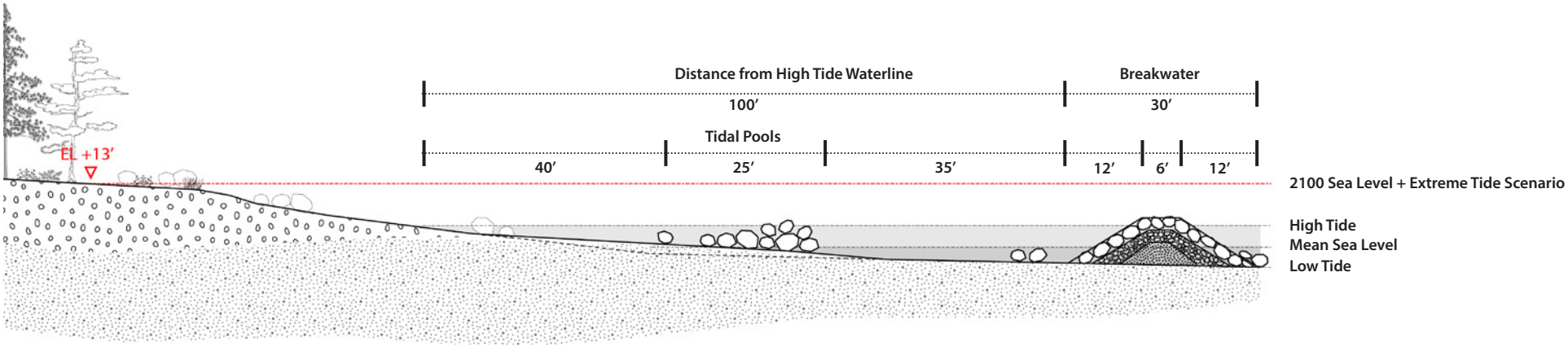


3B



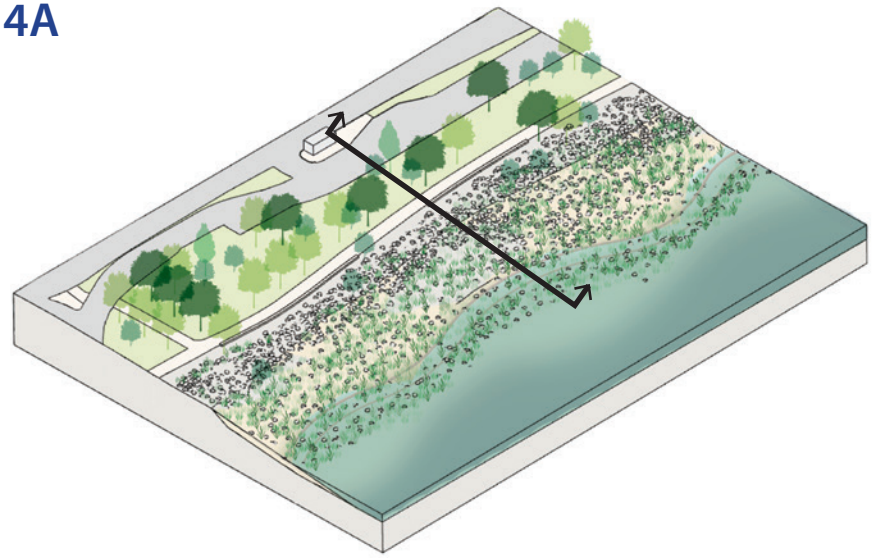
- Living breakwaters help prevent beach erosion while also providing habitat to key marine species with the use of artificial reef balls
- Additional sand can be introduced for beach nourishment of the shoreline
- The breakwaters support tidal pool habitats for plant and marine animal species

Example of Rock Breakwater | National Park Service



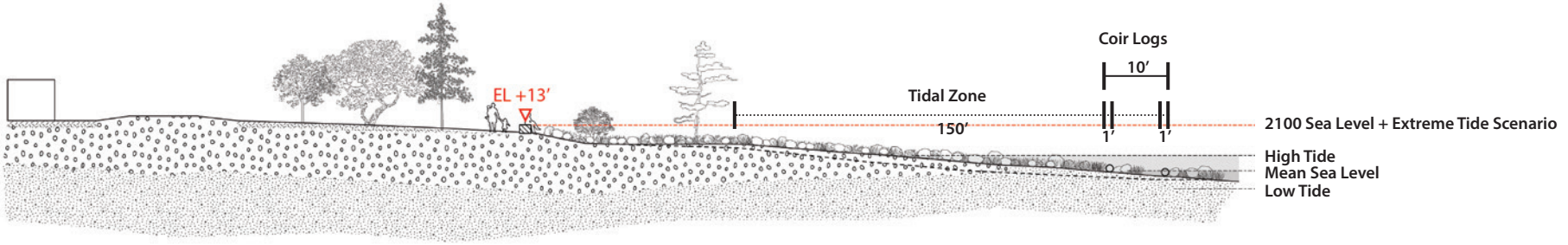
4 | University Ave - Shore Stabilization

4A

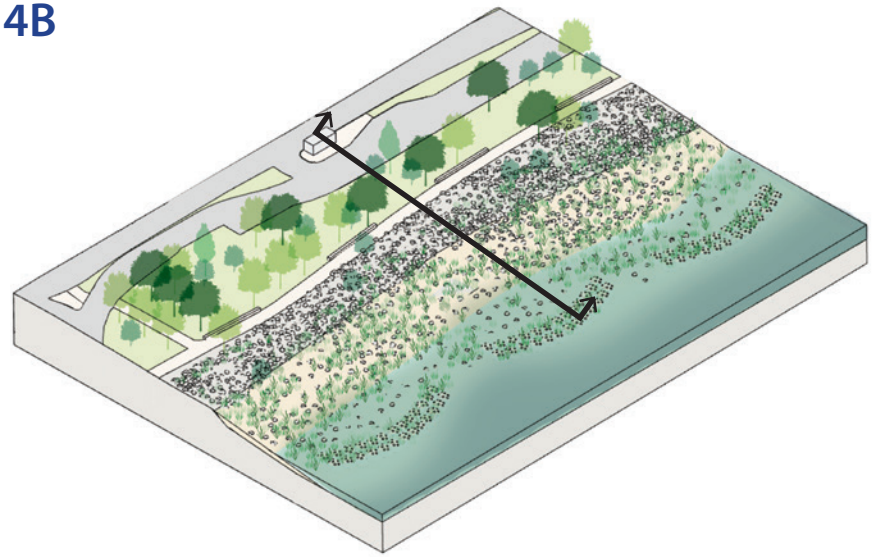


- Living shoreline constructed from coir logs helps to prevent beach erosion while also providing grassy habitat
- Infill helps to mitigate the effects of flooding associated with sea level rise
- Elongated seatwalls provide a place to sit in front of the rip rap or bird watch

Example of Living Shore Coir Logs | Delaware Living Shorelines

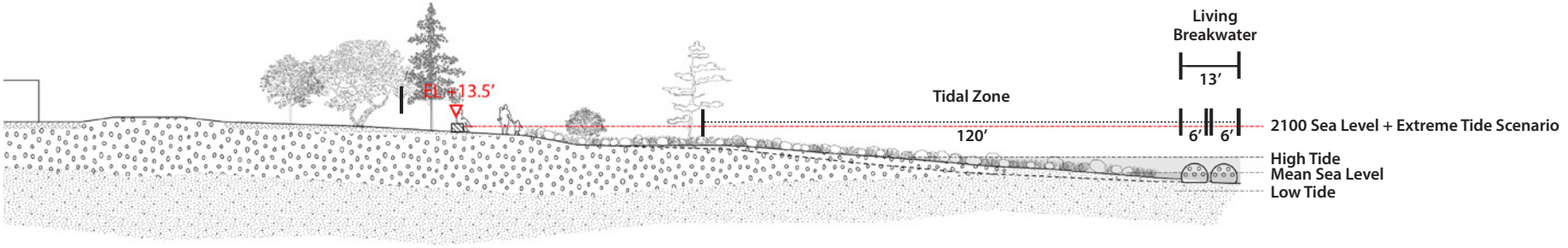


4B



- Living shoreline is constructed using reef balls
- the reef balls act as small breakwaters preventing beach erosion while also providing habitat to both land and marine mammals
- Infill helps to mitigate the effects of flooding associated with sea level rise

Example of Living Shoreline | Florida Living Shorelines




City of Berkeley
South Cove Launch Plaza
Shorebird Beach

Children and adults are often found playing at the water's edge of Shorebird Beach, the only beach at the Berkeley Waterfront.

2.3 Recreation

2.3.1 Recreation: Water Access

Key Goals

1. Support diverse opportunities to experience the San Francisco Bay and water-based recreation.
2. Encourage new visitors to experience passive and active recreation at the Berkeley Waterfront.
3. Support non-profits that share Waterfront recreation and access goals.
4. Promote information about recreation, public events, and options to access the Waterfront via public transit.
5. Enhance the existing inner harbor and outer Waterfront perimeter paths to establish an interconnected Bayfront Promenade as a unifying, connecting, integrated, free, and accessible recreational amenity.

The Berkeley Waterfront offers a diverse range of passive and active recreational activities, whether someone wants to set sail on the water or prefers to stay on dry land. By providing recreational opportunities that are both free and paid, the Waterfront can continue to serve as an accessible public resource, while also benefiting from the revenue generation provided by the commercial services. For those that want to experience the water, the Berkeley Waterfront already offers boating, sailing, swimming, and more. There has been positive support from the community to expand offerings at the Berkeley Waterfront such as the construction of a new aquatic boat center and swimming amenities, improved small craft launches for kayaks, as well as increased ferry services. The City has plans to rebuild the Berkeley Pier for recreation and ferry access in 2028 in partnership with the San Francisco Bay Ferry / Water Emergency Transportation Authority (WETA), (see 2.3.3. below).

The Specific Plan envisions new recreation amenities in the Waterfront South area, including potential "Aquatic Center" boat facilities to support existing organizations and integrate new food and beverage options. The existing Cal Sailing Club offers volunteer-taught lessons in dinghy and keelboat sailing as well as windsurfing. The existing Cal Adventures, run by Cal's Recreational Sports program, also offers classes in dinghy sailing, windsurfing, sea kayaking, and stand up paddleboarding, as well as outstanding summer programs for youth.

Landside visitors take advantage of the trails, parks, and waterfront landscapes for active and passive recreation. Based on recent feedback from the community, the Specific Plan recommends expanding and enhancing water viewing areas, beach nourishment initiatives, and the Berkeley Pier with fishing amenities to increase direct and visual access to the San Francisco Bay. Improved pathways and promenades in the inner harbor and outer perimeter paths will better connect waterfront amenities and businesses, while creating recreation destinations in themselves, with placemaking signage, nodes of interest, and educational information.

Figure 2-14 | Land and Water Recreation at the Berkeley Waterfront

2.3.2 Marina Operations

Key Goals

1. Enhance experience for slip holders and visitors
2. Promote safety and security
3. Increase and sustain marina occupancy >90%
4. Maintain dredge depths for optimal Marina function
5. Provide safe, well-maintained docks and boating infrastructure
6. Promote better connections between Marina, onsite boating organizations and Berkeley community
7. Consider modernization of Marina and boating infrastructure to promote the Marina as a modern harbor.
8. Fund and maintain adequate staffing to maintain baseline operations and enhance service provision.
9. Market the Marina

Priority Projects

1. Dredge Harbor Entrance (North & South) & Harbor Basin
2. Replace J Dock and L/M Docks with 30-40 ft berths
3. Improve fuel dock dispenser and related facilities
4. Integrate ecologically sensitive fuel options, such as electric charging stations and solar docks
5. Improve restrooms on a regular basis to provide fresh amenities for boaters
6. Improve marina and public Wi-Fi
7. Activate the Gateway Platform and the Impound Dock as a public-serving amenity with boat-up service.

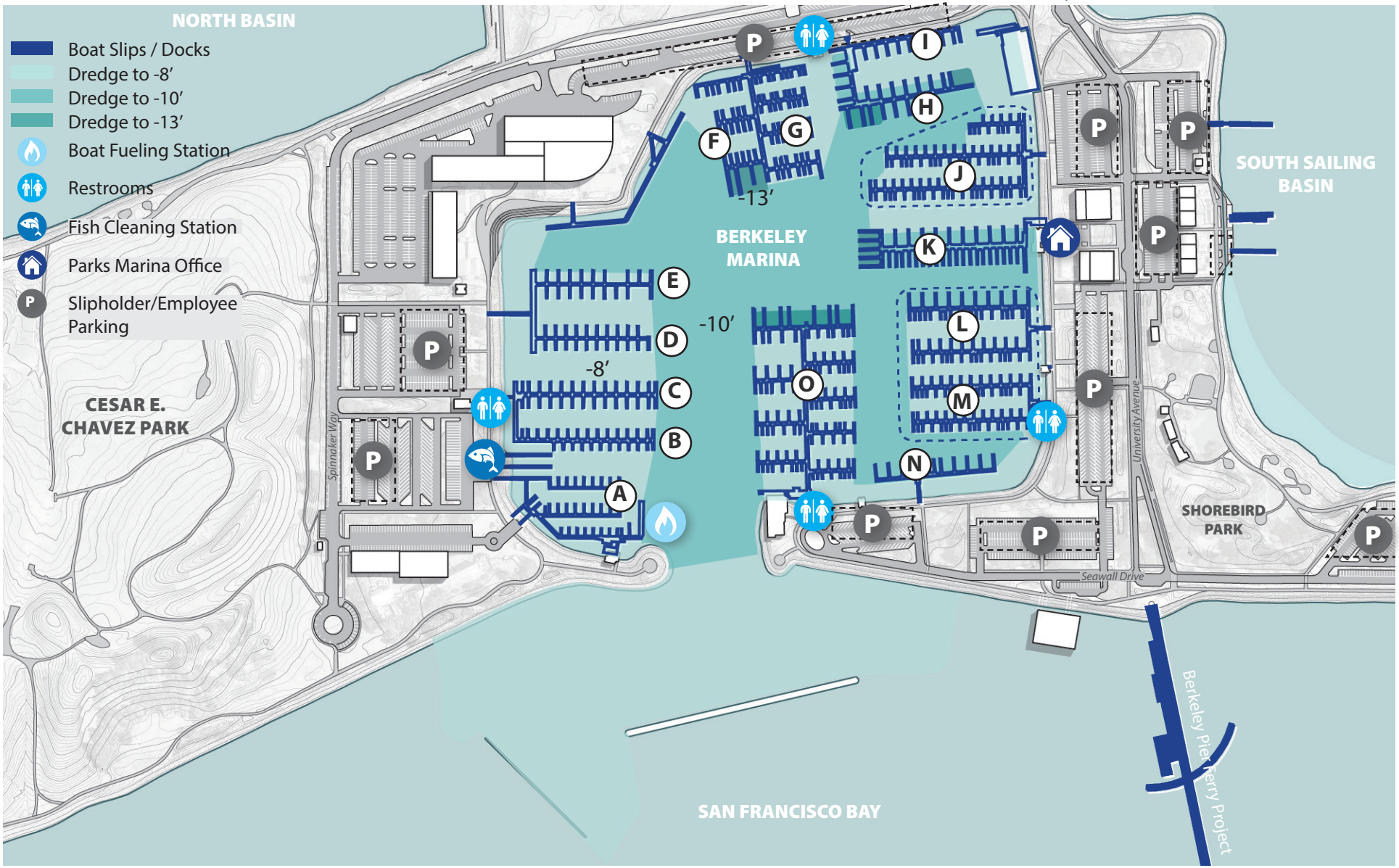
The success of the Berkeley Marina is reliant on proactive and efficient operations, which includes repair and replacement of docks, slips, and supporting infrastructure; regular dredging of the Marina; and on-going maintenance of public facilities. Achieving at least 90% marina occupancy is also essential to adequate revenue generation to support operations and reinforce the Waterfront as a vibrant destination. According to the Berkeley Marina Area 5-year CIP Plan, high priority projects at the Marina include dredging and dock replacement; significant associated priority projects include revetment and seawall improvements to ensure stabilized and resilient marina edges.

The current Berkeley Marina was constructed in the 1960's by enhancing the previous yacht harbor built in 1936. This involved dredging the existing basin and using the soils to create the upland areas surrounding the Marina. Since the construction of the marina in the 60's, there have been occasional instances of minor dredging at the entrance and certain locations within the harbor.
Due to the protected nature of the Berkeley Marina, conditions are ideal for the deposition of sediment by wave and currents, which should be removed by regular maintenance dredging. The average rate of sediment accumulation in the Harbor Basin is approximately 0.05' per year and the rate at the harbor entrance is approximately 0.1' per year. Storm volatility associated with climate change has the possibility of increasing the accumulation at varied rates from year to year. As outlined in the 5-year CIP, maintenance dredging should be performed every 10 years in the harbor entrance and every 20 years within the Harbor Basin.

There are two private docks at the Marina, one associated with the DoubleTree Hotel, which is used for berthing dinner cruise vessels, and another, A-Dock, associated with the Berkeley Marine Center and ModernSailing. The Impound Dock, between I and J docks accessed via the Gateway Platform, is currently locked to access and used by the Marina to store derelict vessels scheduled for lien as well as marine debris awaiting removal. All other docks are public and maintained by the City of Berkeley. The plan at right illustrates the potential for docks D, E, J, L and M to be reconfigured to allow for larger slips. This change reflects market analysis that demonstrates reduced demand in the Bay Area for smaller slips. Adjusting the balance of slips to reflect demand for larger slips is intended to reduce vacancy rates at the Marina and increase berthing revenue.

Dock reconfigurations should also include the addition of ADA access to the docks, improved utility service, and raising of the access pier's finished floor elevation to prevent inundation due to extreme tide and sea level rise.
Lastly, facilities, such as public restrooms, for staff and visitors are recommended to be maintained or rebuilt to improve the experience at the Berkeley Marina for slip holders and visitors.

Figure 2-15 | Marina Operations at the Berkeley Marina



2.3.3 Berkeley Pier with Ferry Access Project

Key Goals

1. Rebuild and reopen the Berkeley Pier for recreation and ferry access.
2. Establish ferry access at the Berkeley Pier.
3. Redevelopment and recreational enhancements that anticipate the future Pier Ferry Access Project.
4. Plan for future visitor demand at the Waterfront brought by the Pier Ferry Access Project.

The Berkeley Municipal Pier is located at the western end of University Avenue at the intersection of Seawall Drive at the Berkeley Waterfront. The Pier was constructed in 1926 and originally extended 3.5 miles into the Bay. It offered two-lane vehicle traffic and access to a trans-bay auto ferry dock at the end of the Pier. From 1959-1961, the first 3,000 feet was renovated with concrete decking, and the Pier has been used for pedestrian recreational activities since that time (sightseeing, fishing, etc.), with occasional access by City maintenance and emergency vehicles.

In July, 2015, the Berkeley Pier was closed for public use due to structural issues. Visual observations found extensive concrete spalling on the underside of the concrete decks that exposed the bottom reinforcing bars to salt water.

The City engaged in a public process to figure out how best to rebuild the pier with ferry transportation access. After extensive studies and assessments of the feasibility of rebuilding the Berkeley Municipal Pier, the City of Berkeley secured funding in 2023 to move forward with the design planning and implementation of the Berkeley Pier Ferry Access project. The scope of the project will include the rebuilding of approximately 1,480 feet of the currently closed Berkeley Pier, as well as the addition of ferry boarding floats, with ferry operation beginning in 2028.

The rebuilding of the iconic Berkeley Pier will breathe new life into a cherished community asset, the iconic Berkeley Pier. This project will increase visitation to the Waterfront, restore a space for fishing on the pier, and provide a unique Waterfront destination that extends out into the San Francisco Bay, offering unparalleled views of the Bay Area and the City of Berkeley. The Pier Ferry Access Project will introduce a significant public transit option for visitors to reach the Berkeley Waterfront, providing an alternative to arriving at the Waterfront by single-occupancy vehicle and commuting options for Bay Area workers.

The South Cove, shown here, is the ultimate destination for water recreation.


Rooftop Food &
Beverage
Cal Sailing Club & Cal
Adventures & Aquatic Center

2.3.4 Special Events & Programming

Key Goals

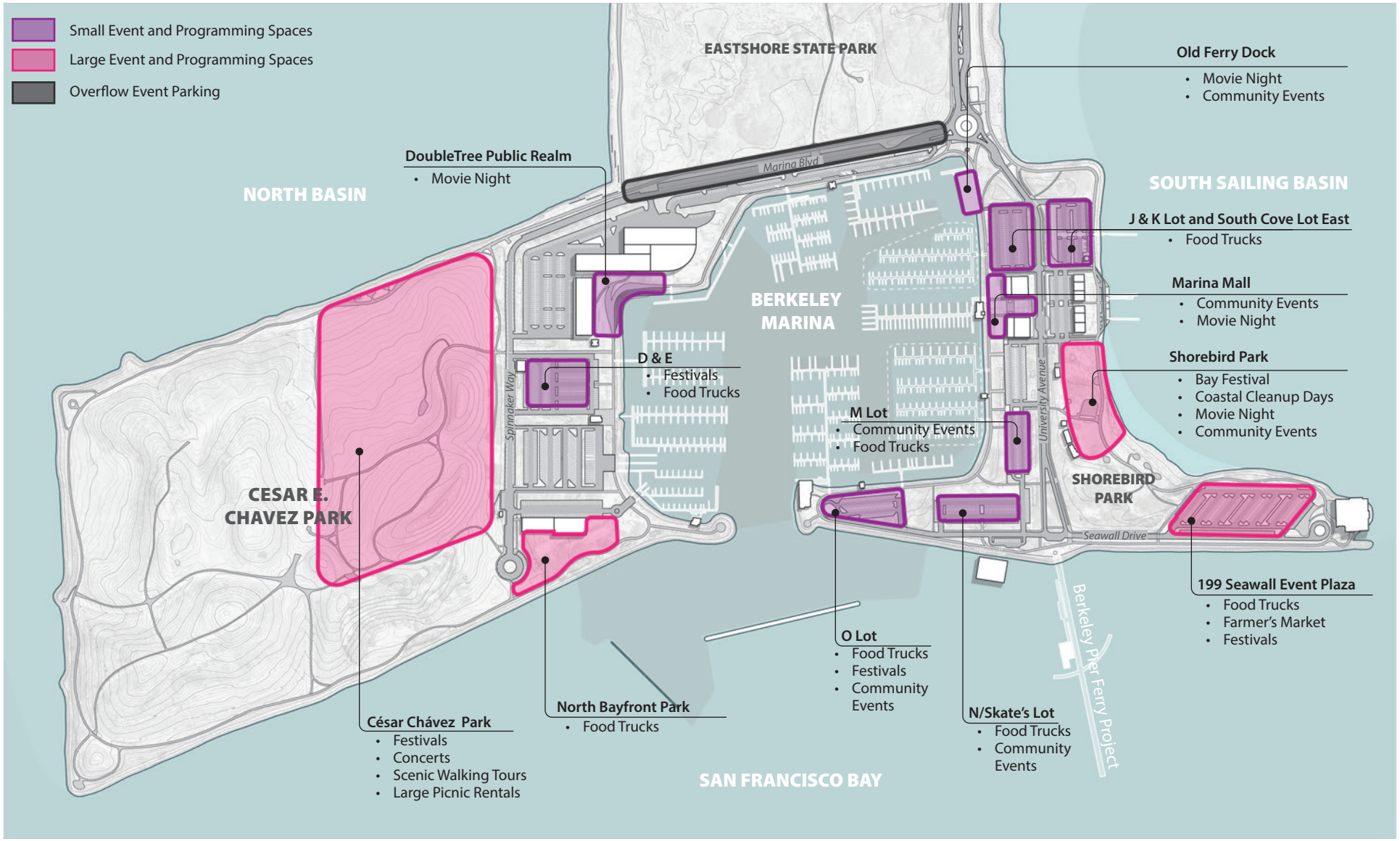
1. Support the current schedule of events that occur at the Berkeley Waterfront, both large and small
2. Increase the number of events at the Berkeley Waterfront
3. Increase the diversity of event types offered in order to cater to a diverse audience and attract more visitors, local and otherwise, to the Berkeley Waterfront

Events and programming at the Berkeley Waterfront expand opportunities to share this unique resource with a larger and more diverse Berkeley audience. Current and past events held at the Waterfront such as the Bay Festival, Kite Festival and 4th of July celebrations attract high demand, in addition to smaller events that run on a monthly basis.

Not only do events offer a venue for bringing more people to the Waterfront, but they also present an opportunity to generate revenue. Special events in the Waterfront directly benefit the Marina Fund through the collection of associated fees. Events can also benefit hotels and restaurants in the Waterfront and beyond to commercial areas like the 4th Street district and other areas of the City. Large events can continue to be held at locations such as César Chávez Park and Shorebird Park, as well as at the reconfigured 199 Seawall Dr parking lot and expanded public realm at the Marine Center Area. Small to medium events and gatherings can be held in select parking lots across the Waterfront or proposed expanded public realm zones such as the DoubleTree waterfront and the Old Ferry Dock. These potential zones of event activation are illustrated in Figure 2-19.

By activating small and large areas across the Berkeley Waterfront, the Waterfront becomes a destination vibrant with activity and social gatherings while still offering spaces of peaceful retreat.

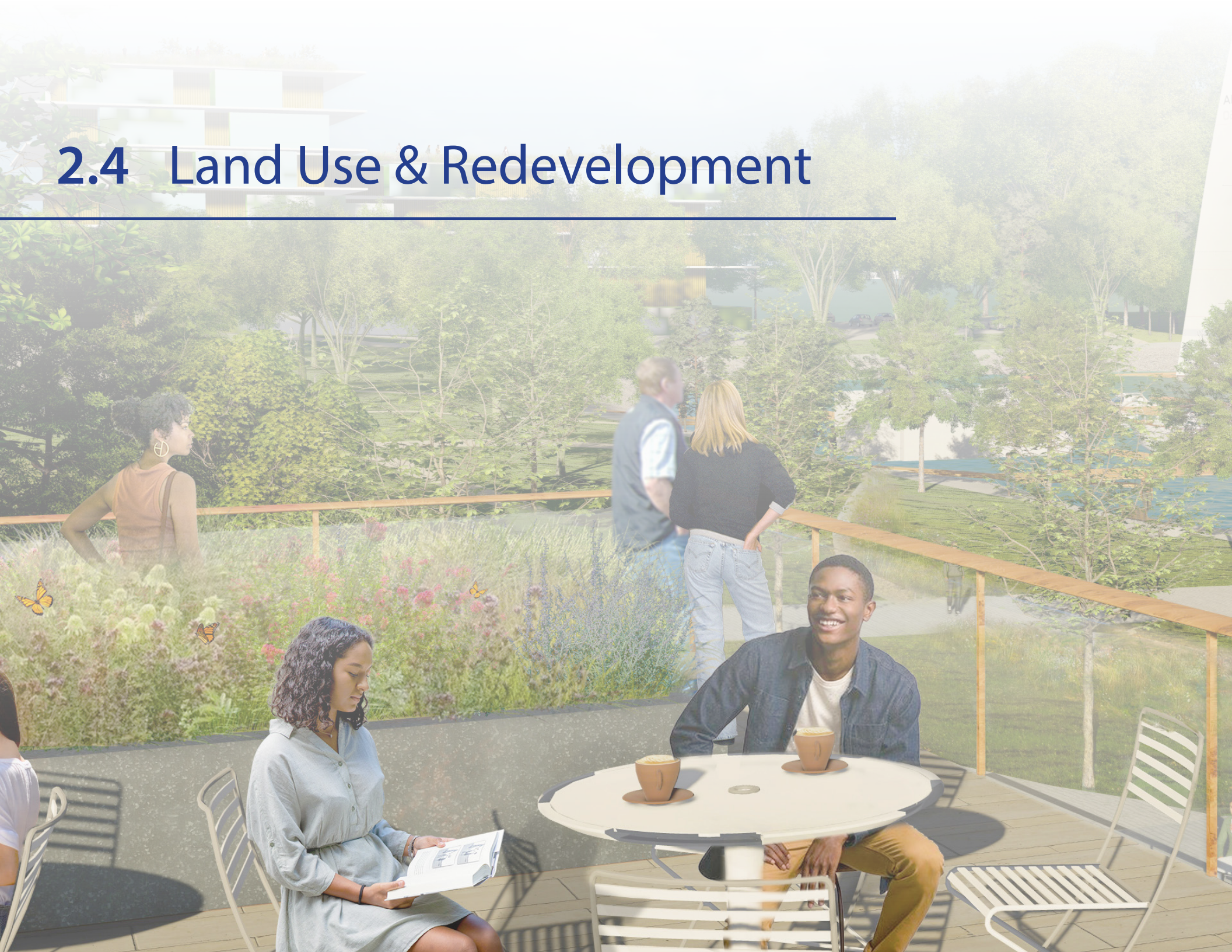
Figure 2-16 | Event and Programming Spaces at the Berkeley Waterfront



Shown here is a sunset event taking place along the shoreline of the Berkeley Waterfront South in front of Horseshoe Park and O Lot.


Event & Programming
Horseshoe Park

2.4 Land Use & Redevelopment



Land Use & Redevelopment

Key Goals

1. Enhance visitor experience while generating revenue for the Waterfront.
2. Facilitate appropriate and sensitive redevelopment within select areas, while preserving and enhancing existing open space.
3. Establish an efficient zoning approval process and coordinated leasing process to encourage private investment.
4. Redevelop currently leased areas that are in poor condition and previously leased areas that are not operational.

The Waterfront Specific Plan is a comprehensive vision to more fully realize the recreational, environmental, tourism, and economic development potential for Berkeley and East Bay communities. The Berkeley Waterfront contains approximately 32 acres of developed land used for public and private buildings, fee-based boating services such as dry boat storage, and surface parking lots (excluding parking reserved for slip holders). Nearly 60 percent of the 32 acres of developed land in the Berkeley Waterfront is currently leased or marketed for lease to private tenants. Another 10 percent of developed land consists of nonexclusive surface parking that is required to meet the estimated peak parking demand of current and prospective private tenants. The remaining 30 percent of developed land consists of surface parking that serves the broader public as well as publicly operated uses such as dry boat storage.

Currently developed land at the Berkeley Waterfront – comprising leased land and surface parking lots - is the designated location for future redevelopment at the Waterfront. Without encroaching on parkland and open space, selective redevelopment at the Berkeley Waterfront will bring in more amenities and visitors as well as increased revenue generation to help create a sustainable funding source for the Berkeley Waterfront. In addition, redevelopment within a strengthened landscape framework at the Waterfront will create opportunities to connect currently stand-alone 'nodes' of activity and development at the Waterfront. Enhanced connectivity and synergy between existing and new development will support many of the Specific Plan's overarching goals for Waterfront circulation, activation, and equitable access.

Figure 2-17 | Potential Redevelopment and Recreation Opportunities at the Berkeley Waterfront

2.4.1 Berkeley Waterfront North

Key Opportunity Areas

- DoubleTree Hotel
- Marine Center Area
- Perimeter Path / Promenade

Proposed redevelopment at Berkeley Waterfront North is comprised of a mix of the existing, but redeveloped and densified, DoubleTree and accompanying food and beverage, new food and beverage opportunities, an improved Marine Center, and new public restroom all connected by the major connector, Spinnaker Way, and pedestrian-oriented connections of the Bay Trail and Bayfront Promenade.

While the lease for the DoubleTree doesn't end until 2080, there are opportunities to densify the hotel that would provide increased hotel room occupation as well as expansion of green space on the property. This would serve not only the guests of the hotel but the expanded public realm could bring in more customers to the restaurant associated with the DoubleTree.

Similarly, the redevelopment opportunities for the Marine Center to include the addition of a proposed beer garden would create a new visitor destination where there currently is none. Due to its close proximity to the Bay Trail and major connector, Spinnaker Way, this would attract visitors of the Waterfront to stop and stay, who may otherwise just be passing through.
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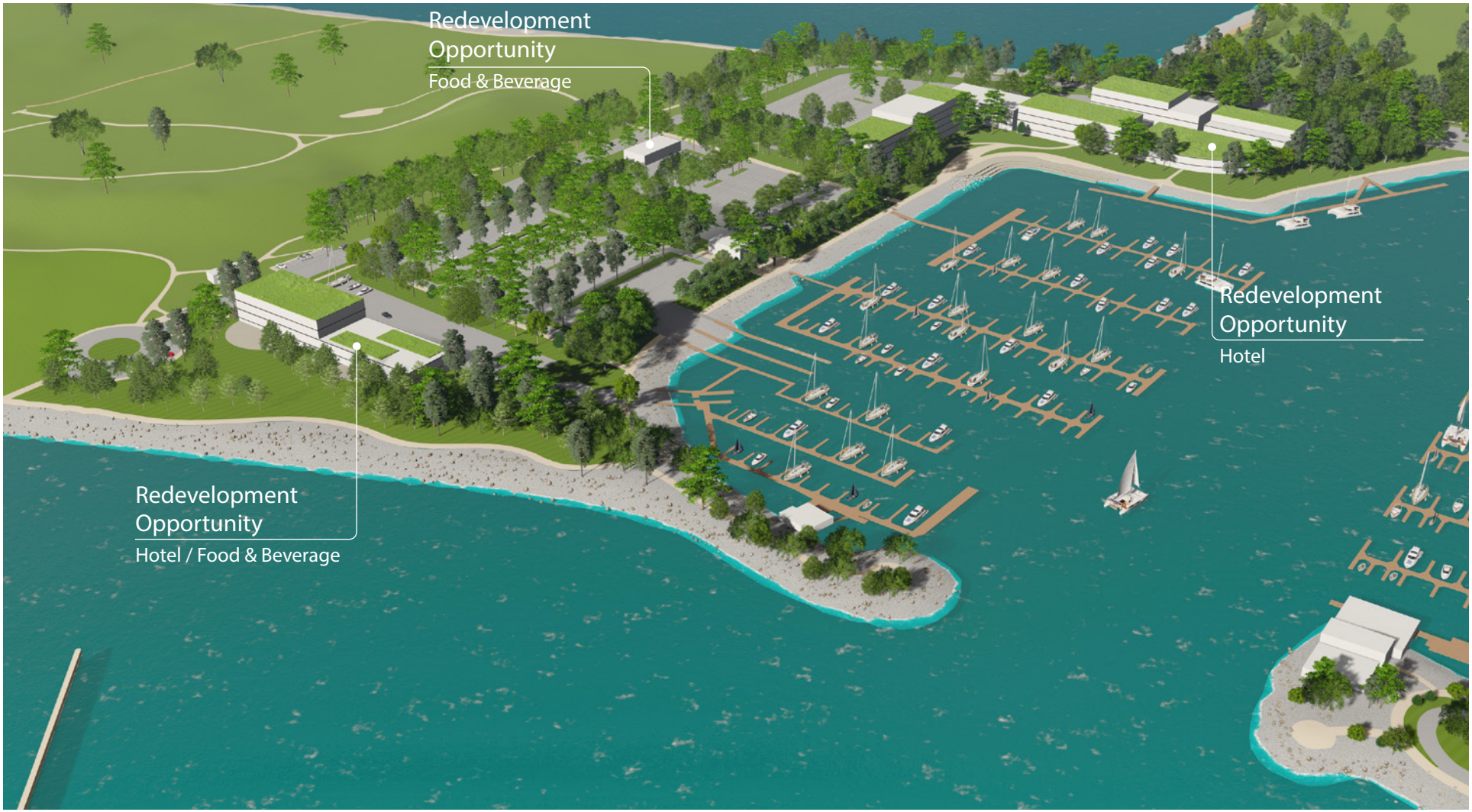
Berkeley Marina Vintage Postcard, Published by R. and C. Hakanson

Figure 2-18 | Maximum Development Scenario at the Berkeley Waterfront North



2.4.2 Berkeley Waterfront South

Key Opportunity Areas

- Southern Core
- 199 Seawall Drive
- N Dock & Skate's on the Bay Parking Lot
- Perimeter Path with Promenade Nodes

Proposed redevelopment at Berkeley Waterfront South includes changes to the existing Southern Core, where Hana Japan and Cal Sailing reside, connected by University Avenue and Seawall Drive to various Marina and Recreation buildings, existing and proposed Food and Beverage, and public restrooms. These commercial and recreational development sites are deeply integrated with established parks and water-based recreational amenities, including Shorebird Park and Beach, Horseshoe Park, and the South Cove docks.

The City of Berkeley occupies nearly 13,000 square feet of floor area in several Berkeley Waterfront buildings for administrative offices and equipment storage. Public facilities in the planning area include the waterfront office, corporation yard, soil corral (landscape yard), and the ground floor of 125-127 University Avenue, which is occupied by the Berkeley Police Department as a substation to help improve safety and surveillance at the Waterfront.

The second floor of the two-story, City-owned building at 125-127 University Avenue contains 6,000 square feet of rentable floor area leased to several office tenants, including two small financial services firms and a nonprofit advocacy organization. Given the challenges with office uses on State tidelands, the Specific Plan could explore options to replace existing office space with active, trust-compliant uses that align with community priorities.

Figure 2-19 | Maximum Development Scenario at the Berkeley Waterfront South

2.4.3 Hotel / Tourism Opportunities

Key Goals

1. Reinforce the Berkeley Waterfront as a leisure destination with compelling commercial and recreational uses
2. Contribute to sustainable revenue generation
3. Densify redevelopment where appropriate to maximize public green space at the Berkeley Waterfront

Consistent with the success of the DoubleTree and a market analysis conducted as part of the Specific Plan process, the Berkeley Waterfront is a compelling location for additional hotel development, with strong potential to attract a new hotel.

A range of development scenarios are presented to illustrate potential hotel development opportunities, including associated parking requirements for each site. Opportunities for recreational redevelopment and enhancements are also presented within these scenarios, emphasizing the importance of promoting hotel development that reinforces nature and recreation at the waterfront as an essential draw for tourists and visitors to potential Waterfront hotels. These scenarios reflect the land use regulations, development standards, and design guidelines presented in Section 3, but are not actual design proposals. Any future development will depend on the private market in coordination with project-specific lease negotiations, design development and engineering, and permitting.

Figure 2-20 | Potential Hotel Developments Opportunities at the Berkeley Waterfront

Example A

Densify & Rebuild DoubleTree Hotel

Development Metrics

- +/- 375,000 GSF
- 578 Hotel Rooms
- 400 Parking Spaces
- No more than 0.7 parking spaces per room (no net new parking)

Opportunities

- Limit new building development at the Waterfront
- Expand public realm
- Utilize rooftops for gathering and green roof
- Opportunity for more efficient parking
- New source of revenue at the Waterfront

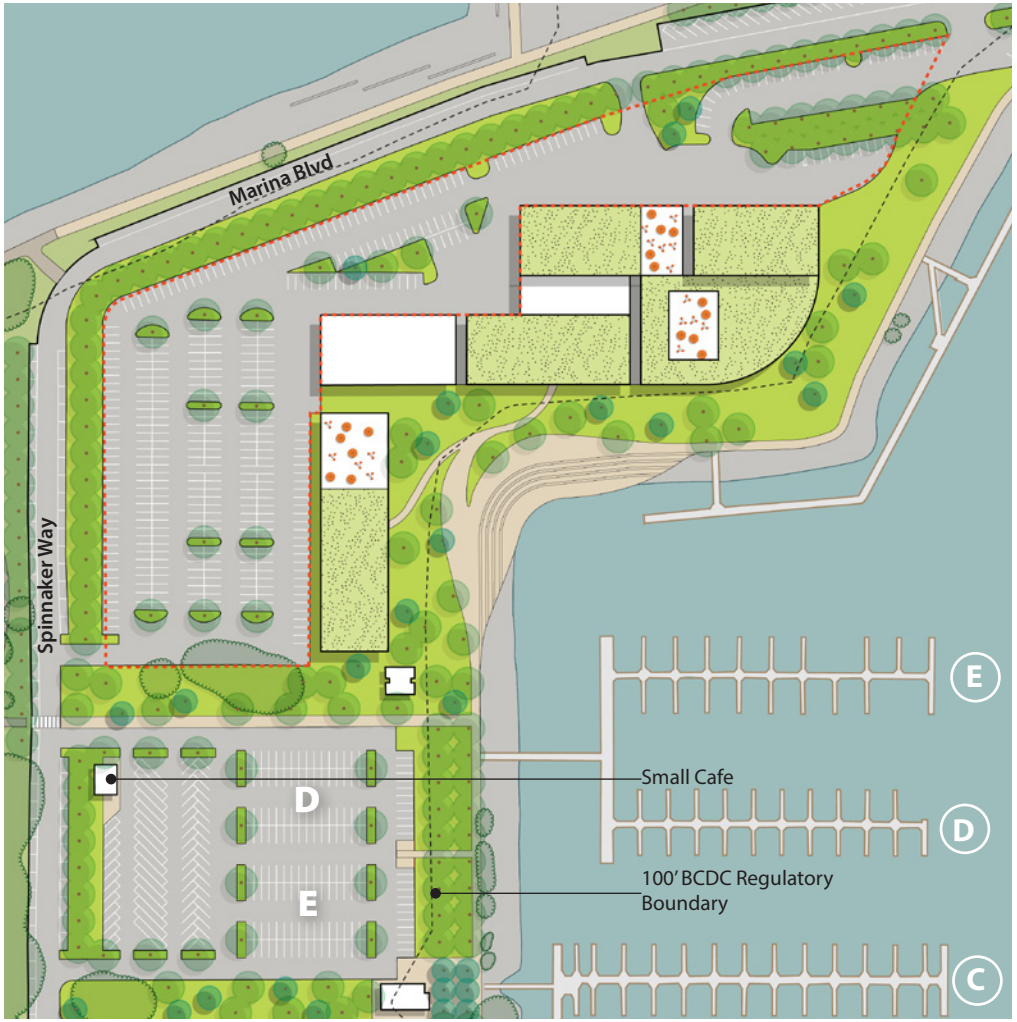
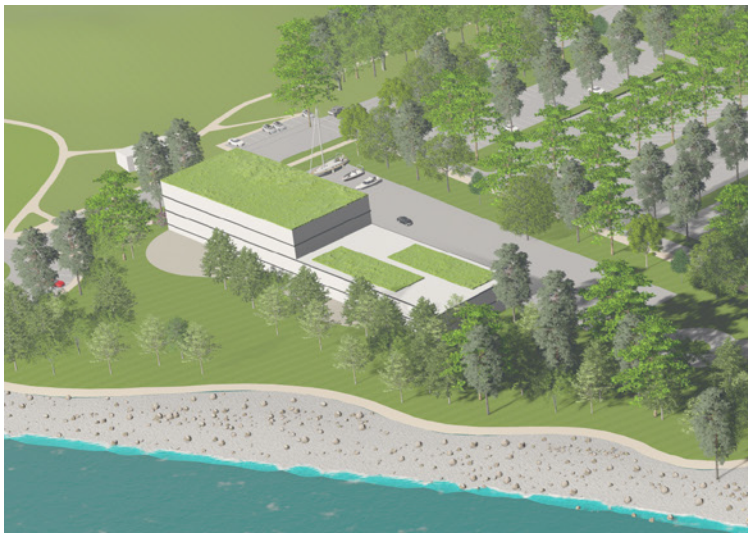


Figure 2-21 | Potential DoubleTree Densification



Example B

North Bayfront Hotel

Development Metrics

- +/-70,000 GSF
- 120 Hotel Rooms
- 60 Parking Spaces
- No more than 0.5 parking spaces per room

Opportunities

- Maximize scenic views of the Bay
- New source of revenue at the Waterfront
- Expanded public open space on the water
- Utilize rooftops for gathering and green roof

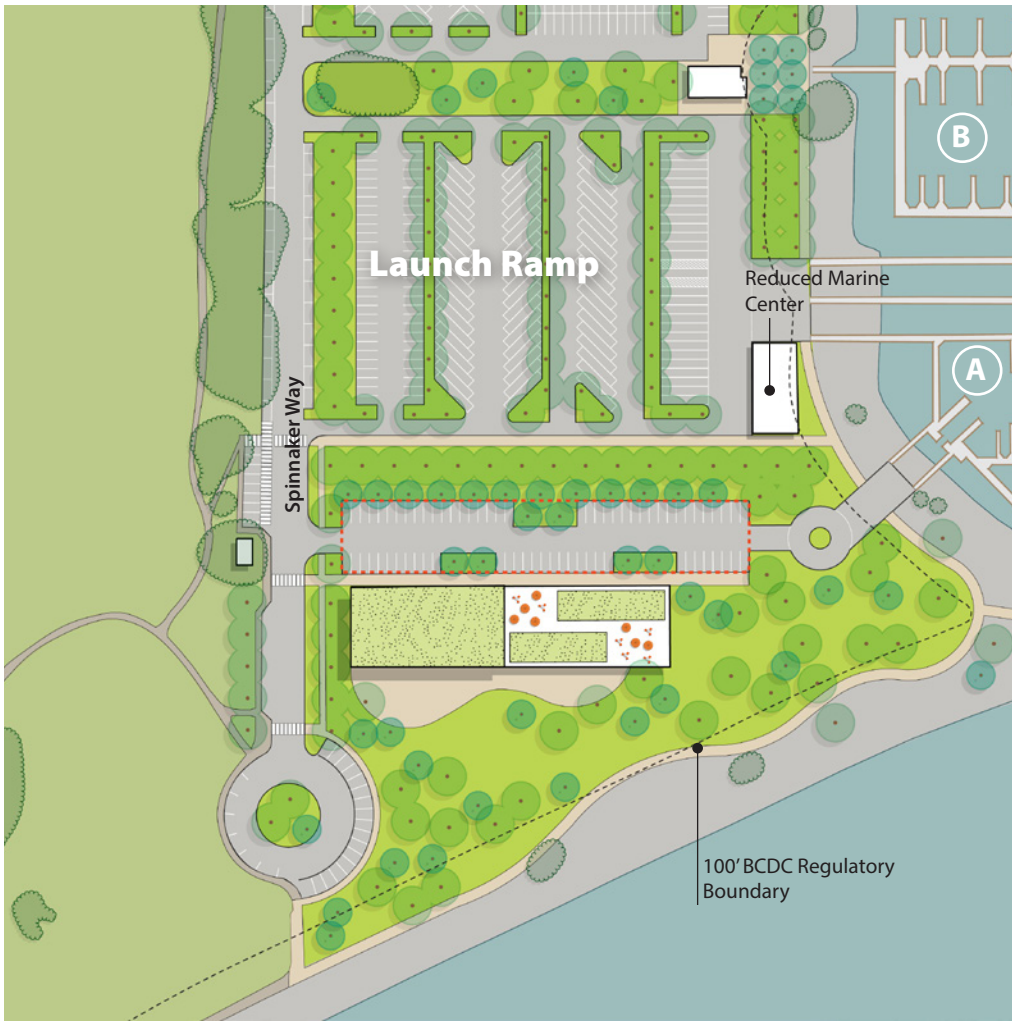


Figure 2-22 | Potential North Bayfront Hotel and F&B Development

Depicted here is a vision for a potential Hotel and Food & Beverage development at the Marine Center.

Opportunity C

South Bayfront Hotel

Development Metrics

- +/-115,000 GSF
- 170 Hotel Rooms
- 85 Parking Spaces
- No more than 0.5 parking spaces per room
- Parking strategies to include, but not limited to, valet options

Opportunities

- Maximize scenic views of the Bay
- New source of revenue at the Waterfront
- Utilize rooftops for gathering and green roof

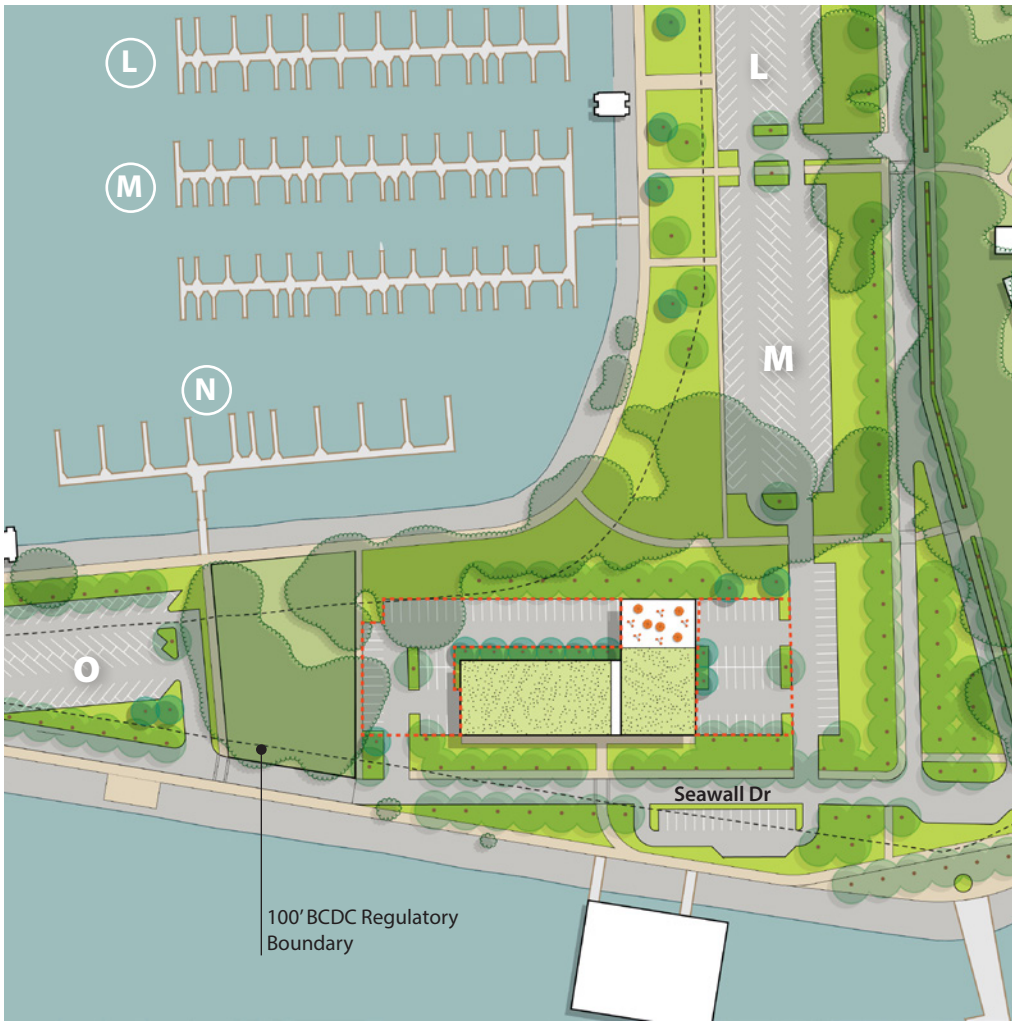


Figure 2-23 | Potential South Bayfront Hotel Development

2.4.4 Food & Beverage Opportunities

Key Goals

1. Create a fish or farmer's market at the Berkeley Waterfront which promotes revenue generation as well as fostering a sense of community and local connection
2. Develop areas devoted to casual indoor and outdoor dining experiences such as the establishment of a waterfront beer garden as a gathering place for locals and visitors
3. Activate the public realm with temporary events and food truck hotspots

In addition to hotel development, food and beverage opportunities offer a sustainable, year-round stream of revenue, while also meeting local community demand for more places to eat and drink at the Berkeley Waterfront. In fact, in a recent study it was found that local spending in Berkeley and nearby commercial districts has increasingly focused on experiences, benefitting food and beverage sales, which outpaced other retail categories in Berkeley from 2015 to 2019.

The Berkeley Waterfront currently includes three active restaurants—Skates on the Bay, Hana Japan, and the Berkeley Boathouse at the DoubleTree—which occupy more than 20,000 square feet of total building area. All are upscale, fine dining restaurants with table service. In addition to full-service restaurants, the bait shop offers light food and coffee, as does a small market/snack stand inside of the DoubleTree Hotel. However, restaurant trends in more recent years have shown that there is a huge uptick in the demand for more casual and less expensive food options, which has been broadly confirmed through the community engagement process.

At the Berkeley Waterfront, this could include the expansion of existing food and beverage offerings to include casual restaurants with both indoor and outdoor seating, a designated area or parking lot for food trucks on higher traffic days and events at the Waterfront, as well as farmer's markets and food-oriented festivals such as a seafood festival.

Figure 2-24 | Broad Range of Food & Beverage Options for all Visitors

FOOD TRUCKS / KIOSKS
600-900 SF
(truck / kiosk only)

CAFÉ
1,000 SF (indoor space)
2,000 SF (outdoor space)

BEER GARDEN
1,500 SF (indoor space)
3,500 SF (outdoor space)

FAST / CASUAL DINING
3,000 SF

SIT-DOWN UPSCALE RESTAURANT
4,000 SF

2.5 Supporting Infrastructure

2.5.1 Infrastructure

Key Goals

1. Keep Waterfront infrastructure well-maintained and in good condition to support existing and future needs.
2. Prioritize and fund infrastructure projects to address existing needs, extends the useful life, replaces before failure, and supports future needs Identify additional and sustainable ways to pay for infrastructure upgrades over time.
3. Reinforce or rebuild the perimeter of the waterfront where needed for increased resilience against Sea Level Rise and extreme storm events associated with climate change.
4. Incorporate renewable energy infrastructure.

**Note: The needs totaling $128M include existing Waterfront infrastructure in need of replacement/ major maintenance. The following list is of projects that include new infrastructure or a mix of new and existing infrastructure.*

There is an estimated $128 million in unfunded capital needs at the Waterfront (see Table 2-2 below and Appendix 5.2); $2 million to $3 million in annual set-aside needed to cover end-of-life replacement costs (see Table 2-3 below and Appendix 5.2); and an unknown amount of cost to cover future infrastructure needs envisioned in the WSP like expanding EV charging, building solar canopies, or making micro mobility improvements.

Which projects get funded will be a function of their priority and funding availability (e.g. are grants funds available, and can local funds be leveraged?)
To help with prioritization, the following charts group infrastructure needs by category like paving, docks, parks, etc. This provides a way to get community feedback on priorities - not just across categories, but within them.

NOTE: this fall/winter, we will take feedback on how to prioritize these infrastructure needs: are the groupings appropriate and which projects are priorities within each group? These priority projects will be integrated into each of the sections in this chapter.

Table 2-2 | WSP Unfunded Capital & Major Maintenance Needs (September 2023)*

Waterfront Specific Plan - Unfunded Capital & Major Maintenance Needs (as of September 2023)

Amenities/Projects	Rough Order of Magnitude Estimate (in 2023 value)
Existing Infrastructure in Need of Replacement/Major Maintenance	
Inner Harbor (Revenue Generating Assets)	
Finger Dock Replacements	$1,600,000
Timber Pile Replacement (on L, M, N, O&K)	$4,400,000
Inner Harbor Basin Dredging	$8,500,000
J-Dock Replacement including piling	$11,500,000
L-Dock Major Maintenance (Floats, Decking, Waler)	$370,000
M-Dock Major Maintenance (Floats, Decking, Waler)	$457,000
N-Dock Major Maintenance (Floats, Decking, Waler)	$265,000
O-Dock Major Maintenance (Floats, Decking, Waler)	$530,000
K-Dock Major Maintenance (Floats, Decking, Waler)	$370,000
Inner Harbor Subtotal:	**$27,992,000**
César Chávez Park	
Perimeter Pathway Improvements (Trail Surface, Trail Furniture & Signs) - Phase 1B	$530,000
Interior Pathways Improvements and Amenities - Phase 2	$2,650,000
Master Plan	$1,000,000
César Chávez Park Pathways Subtotal:	**$4,180,000**
Parking Lots	
F & G Lot Reconstruction	$950,000
O Lot Reconstruction	$1,010,000
J & K Lot Reconstruction	$1,060,000
Launch Ramp Lots Reconstruction	$2,030,000
L & M Lot Reconstruction	$1,320,000
Marina Blvd On-Street Parking (South of Virginia Street Extension)	$2,100,000
199 Seawall Parking Lot	$4,000,000
Parking Lots Subtotal:	**$12,470,000**
Streets	
Seawall Drive Reconstruction - North of University Avenue Segment	$790,000
Waterfront Entrance Kiosk Building on University Avenue	$527,000
Seawall Drive Improvements (South of University Ave Segment)	$3,400,000
Streets Subtotal:	**$4,717,000**

(Table 2-2 continuatuion)

Shorelines/Pathways/Pier	
Marina Blvd Resilient Shoreline & Public Access Improvements (Trail from CCP to Roundabout)	$4,000,000
University Ave Shoreline and Habitat Resiliency Project	$4,040,000
Inner Harbor Basin Northeast Sea Level Rise Improvement	$3,220,000
199 Seawall Lot Eastern Shoreline Failure Repair	$1,000,000
Bay Trail Improvements (Adventure Playground to Pier Plaza)	$1,800,000
Berkeley Pier Renovation (including restroom)	$37,381,500
Shorelines Subtotal:	**$51,441,500**
South Cove Area	
South Cove Sailing Basin Boating Access Dredging	$14,500,000
South Cove Seawall Replacement	$5,500,000
South Cove Area Subtotal:	**$20,000,000**
Buildings (Not in Lease Agreements)	
Shorebird Nature Center-classroom (K)	$105,000
125-127 University Improvements	$1,300,000
O, LM, FGHI, DE Restrooms Structural Improvements	$2,100,000
199 Seawall Building Priority Structural Repair	$1,750,000
Buildings Subtotal:	**$5,255,000**
Emergency Response Supporting Infrastructure	
Secondary Fire Water Loop	$1,953,000
Emergency Response Subtotal:	**$1,953,000**
Total Unfunded Projects Needs:	**$128,008,500**

New Capital Projects in Planning/Design (not all existing infrastructure)	
Preferred Plan - Berkeley Pier with Ferry Access Project	
Non-Motorized Watercraft Access Point	$1.5M
Restroom Plaza & Pier Entrance Facility	$1.2M
*Bay Trail Improvements (Adventure Playground to Pier Plaza)**	$1.8M
*Seawall Drive Improvements (South of University Ave Segment)**	$3.4M
Public Transit and Active Transportation Improvements on University Ave (Roundabout to Pier)	$1.1M
199 Seawall Parking Lot - Amphitheater/Event Stage	$1M
*199 Seawall Parking Lot**	$4M
*Dual-Purpose Pier with Ferry Access***	$5M to $69.5M
Recently Funded by State Coastal Conservancy and ACTC grants, and WETA Contribution	($11.1M)
Berkeley Pier with Ferry Access Project Subtotal*:	**$19M to $72.4M**
Bike Park at University Ave.	**$2M**

**Existing infrastructure, also included in list above.*
***Actual City cost to be determined by future grants and WETA contribution*

Figure 2-25 | Infrastructure Network at the Berkeley Waterfront

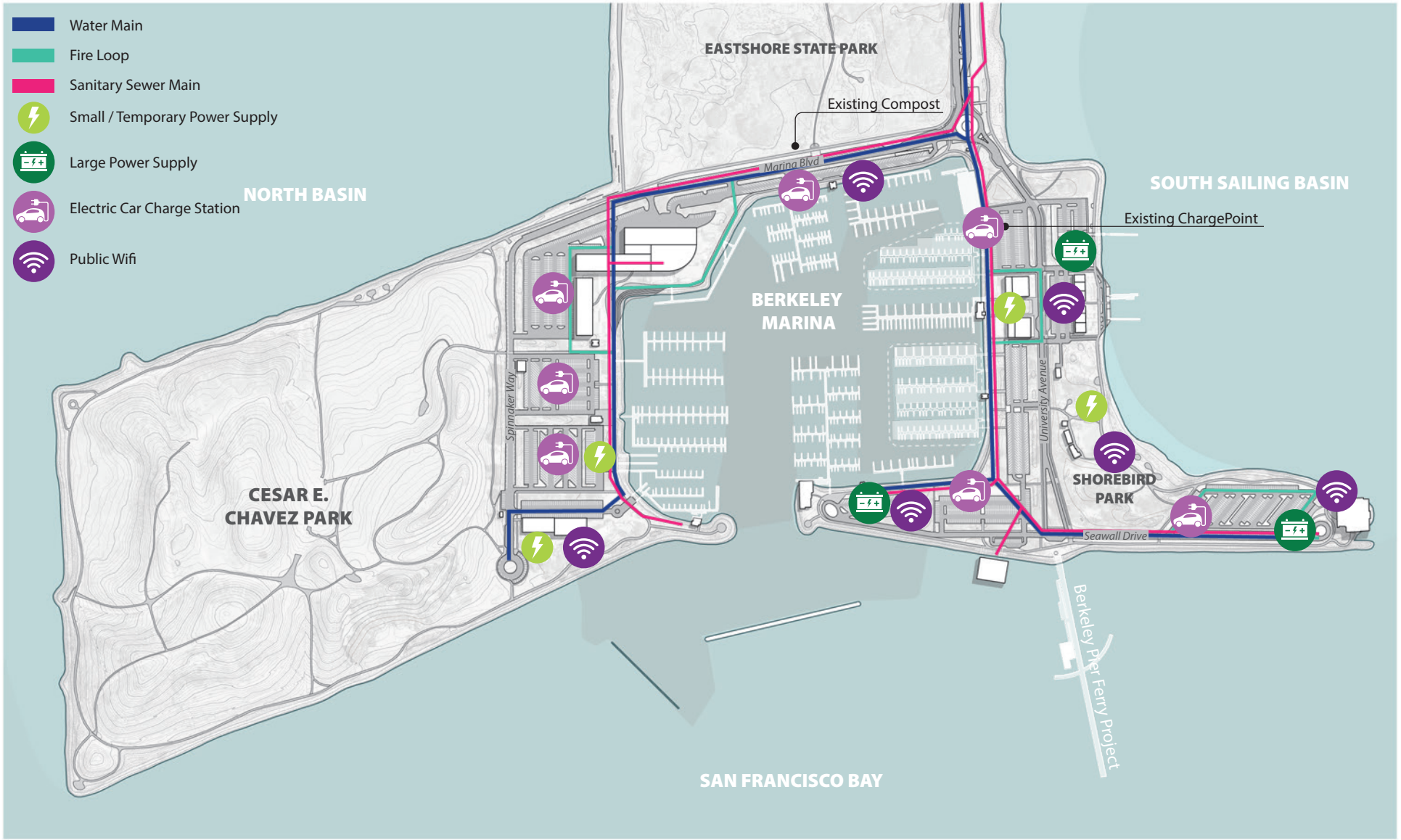


Table 2-3 | Replacement Costs at the Berkeley Waterfront (2023)*

	Completed Projects	Year Completed	Value of Replacement Elements at Completion	Intended Replacement Elements	Adjustment factor for Replacement Elements (Not all elements of a project needs replacement at end-of-life)	Adjusted Value of Replacement Elements
Inner Harbor	H&I Dock Replacement	2008	$ 4,300,000.00	Entire System	NA	$ 4,300,000.00
	B&C Dock Replacement	2010	$ 3,650,000.00	Entire System	NA	$ 3,650,000.00
	Finger Dock Replacement	2010	$ 407,000.00	Entire System	NA	$ 407,000.00
	Boat Pump-Out Station	2011	$ 75,000.00	Entire System	NA	$ 75,000.00
	O&K Dock Electrical	2024	$ 1,753,000.00	Entire System	NA	$ 1,753,000.00
	Dredging: Main Entrance and Inner Channel	2024	$ 7,700,000.00	Entire System	NA	$ 7,700,000.00
	D&E Dock Replacement	2024	$ 8,260,000.00	Entire System	NA	$ 8,260,000.00
Marina Facilities	Bike Lockers	2021	$ 125,000.00	Entire System	NA	$ 125,000.00
	Marina Corporation Yard Electrical Upgrade	2021	$ 410,000.00	Entire System	NA	$ 410,000.00
	Slip Holder Restrooms (4) Renovation	2021	$ 350,000.00	Entire System	NA	$ 350,000.00
	Dock Gates Key Fob Replacement	2023	$ 100,000.00	Entire System	NA	$ 100,000.00
	125-127 University Ave Improvements	2023	$ 300,000.00	Entire System	NA	$ 300,000.00
	K-Dock Public Restroom Renovation	2025	$ 400,000.00	Entire System	NA	$ 400,000.00
South Cove	South Cove Middle Dock Replacement	2010	$ 100,000.00	Entire System	NA	$ 100,000.00
	South Cove West Parking Lot	2018	$ 2,410,000.00	Asphalt	30%	$ 723,000.00
	South Cove Bay Trail Phase 3, Docks, ADA Gangway	2020	$ 1,122,000.00	Asphalt & Docks	50%	$ 561,000.00
	South Cove East Parking Lot	2025	$ 1,236,000.00	Asphalt	50%	$ 618,000.00
Streets	University Ave (West Frontage to Marina Blvd)	2022	$ 3,480,000.00	Asphalt	30%	$ 1,044,000.00
	Marina Blvd	2022	$ 395,000.00	Asphalt	100%	$ 395,000.00
	Spinnaker Way	2022	$ 1,500,000.00	Asphalt	30%	$ 450,000.00
	Bay Trail Phase 1 & 2	2014	$ 2,400,000.00	Asphalt	100%	$ 2,400,000.00
Cesar Chavez Park	Cesar Chavez Main Path Replacement	2025	$ 2,113,000.00	Entire System	NA	$ 2,113,000.00

Life Expectancy	Year for Replacement	Future Value Cost at Time of Replacement [at 3% yearly inflation]	Present Value converted to Annunity at 3% inflation	Uniform	Annual Set Aside
					$200,000 pegged to inflation (3%
50	2058	12,099,608.55	200,118.95	345,703.10	annual increase)
50	2060	10,896,077.37	164,657.43	294,488.58	
50	2060	1,214,987.26	18,360.43	32,837.49	
30	2041	127,682.48	5,453.15	7,093.47	
30	2054	4,382,640.85	87,648.12	141,375.51	
40	2064	25,871,221.73	328,885.55	631,005.41	
50	2074	37,297,395.63	318,289.38	731,321.48	
30	2051	285,990.96	6,661.65	10,213.96	
30	2051	938,050.35	21,850.23	33,501.80	
20	2041	595,851.57	25,448.04	33,102.87	
20	2043	180,611.12	6,721.57	9,030.56	
30	2053	728,178.74	15,305.78	24,272.62	
30	2055	1,030,033.10	19,618.65	32,188.53	
20	2030	122,987.39	16,050.64	17,569.63	
20	2038	1,126,410.44	60,563.24	75,094.03	
30	2050	1,246,143.13	30,610.52	46,153.45	
20	2045	1,184,151.91	38,777.89	53,825.09	
20	2042	1,830,660.32	72,885.69	96,350.54	
20	2042	692,634.89	27,576.48	36,454.47	
20	2042	789,077.72	31,416.25	41,530.41	
20	2034	3,322,161.29	259,385.87	302,014.66	
20	2045	4,048,726.50	132,585.25	184,033.02	
		Total Annual Setaside:	**1,888,870.76**	**3,179,160.68**	

**Note: This table illustrates how to approach life cycle cost analysis and planning. This only includes projects completed over the last 15 years. As Waterfront capital projects are completed, they will move from the unfunded list (Table 2-2) to the replacement cost table.*

Green Stormwater Infrastructure

Key Goals

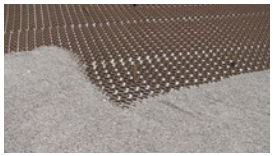
1. Provide green infrastructure alternatives for managing stormwater onsite as larger extreme events occur on a more regular basis.

2. Capture stormwater for reuse

As climate change continues to bring with it an increase in extreme storm events, measures to reduce and capture stormwater run-off at the Berkeley Waterfront are as important as ever. In accordance with the 2019 City of Berkeley Green Infrastructure, it is recommended that the Berkeley Waterfront consider a combination of Stormwater management tools including but not limited to permeable pavement applications, bioswale retrofits, complete street applications of bioswales, flow-through planters and green roofs.

Below, are a series of suggested materials and implementations that would be well-suited to the Berkeley Waterfront. This includes various permeable paving options, green infrastructure tools, and green roof types for both occupiable and non-occupiable roofs.

Stormwater Infrastructure Opportunities



Gravel Pave

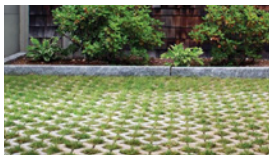
Porous Asphalt

Parking Median Bioswale

Stormwater Planter Box

Extensive Green Roof

Permeable Pavers



Turfstone Pavers

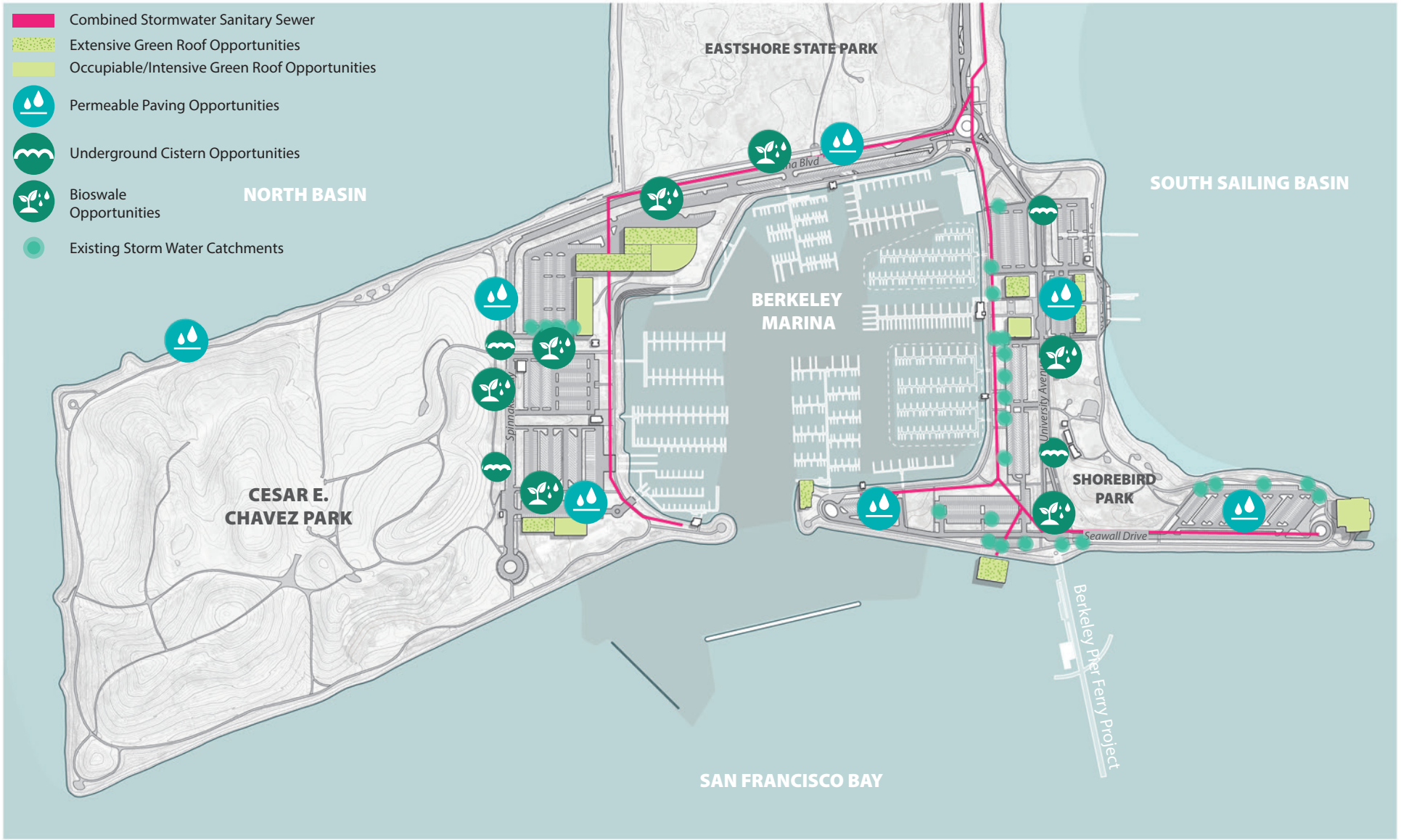
Underground Catchment

Bioswale Ditch

Intensive Green Roof

Paving Types | Green Infrastructure | Green Roof

Figure 2-26 | Stormwater Management at the Berkeley Waterfront



2.5.2 Pedestrian & Bicycle Circulation

Key Goals

1. Reinforce a continuous shared-used pedestrian and bicycle trail around entire perimeter of the Berkeley Waterfront
2. Create streetscape and pathway improvements for interior connectivity
3. Reinforce connections to the Waterfront from other parts of the City, and connections between destinations within the Waterfront

Connectivity and circulation within the Waterfront should be improved to effectively link the Waterfront's diverse destinations and nodes of activity together, encourage non-vehicular modes of mobility, and encourage longer visits. All areas of the Waterfront should be connected with easy-to-navigate and accessible pedestrian and bicycle pathways, including a continuous shoreline trail with connection to Aquatic Park. These trails and pathways should be activated with amenities and appropriate uses to link nodes of activity.

The Waterfront Specific Plan reinforces the Waterfront as a pedestrian-oriented environment, where alternatives to driving are encouraged. Improvements to pedestrian and bicycle circulation are significant tools to reinforce multi-modal access to and around the Waterfront. Enhancements recommended in the Waterfront Specific Plan focus on physical improvements that will encourage visitors to reach the Waterfront by foot or wheel, and move around the Waterfront by foot or wheel once they are there. Streetscape improvements presented in the following pages emphasize "complete streets" design strategies, illustrating pedestrian paths and bikeways that prioritize pedestrian and cyclist experience and safety, slow vehicles, and integrate with the Waterfront's green spaces and natural resources for ease of circulation between destinations.

As the most affordable form of transportation, walking lies at the core of an equitable network of mobility and contributes to creating a healthy city, as identified in the City of Berkeley 2020 Pedestrian Plan. The Specific Plan's proposed pedestrian network is consistent with Berkeley's vision to be a model for walkable cities where traveling on foot or with an assistive device is safe, comfortable, and convenient for people of all races, ethnicities, incomes, ages and abilities. This includes proposed changes to paving types where appropriate, improvements to crosswalks and lighting, and additional seating along walking paths.

As noted in the City of Berkeley 2017 Bicycle Plan, nearly one out of every 10 residents ride a bike to work as their primary mode of transportation in addition to biking as a source of exercise and recreation. In alignment with the goals of the Bicycle Plan, the proposed bicycle circulation network at the Berkeley Waterfront seeks to improve its network by ensuring that its bikeways are "Low Stress". Low Stress Bikeways can be defined as bikeways that offer a continuous and connected system of safe and comfortable bike paths that serve all types of riders in Berkeley. To achieve this, special attention should be paid to maintenance, including repaving where needed, as well as safety measures such as separation of use between cars, bikes, and pedestrians on potentially high-traffic roads.

Completing the perimeter trail around the entire Waterfront edge will be transformative for local residents and regional visitors. The Waterfront Specific Plan prioritizes continuity of this trail through construction of missing links (i.e. Marina Boulevard and the South Cove Peninsula), reconstruction of sections that require replacement to prioritize pedestrians and cyclists (i.e. Seawall Drive), and repair of sections that are degrading (i.e. César Chávez Park Perimeter Trail). The character of this waterfront trail is designed for continuity as well as variety based on context – a recreational shared-use and accessible trail around the southern Bay edge, a walking and slow-biking trail around César Chávez Park, and a more urban pedestrian promenade around the Marina.

In addition to trails, short-term bike storage facilities should be distributed across the Waterfront and included in all new development projects. Bicycle rental facilities could be developed with connection to the East Bay Shoreline regional bike trail. Bike share and e-scooters pickup/ drop-off locations should also be established near activity centers.

Figure 2-27 | Pedestrian and Bicycle Circulation with Walking Radius

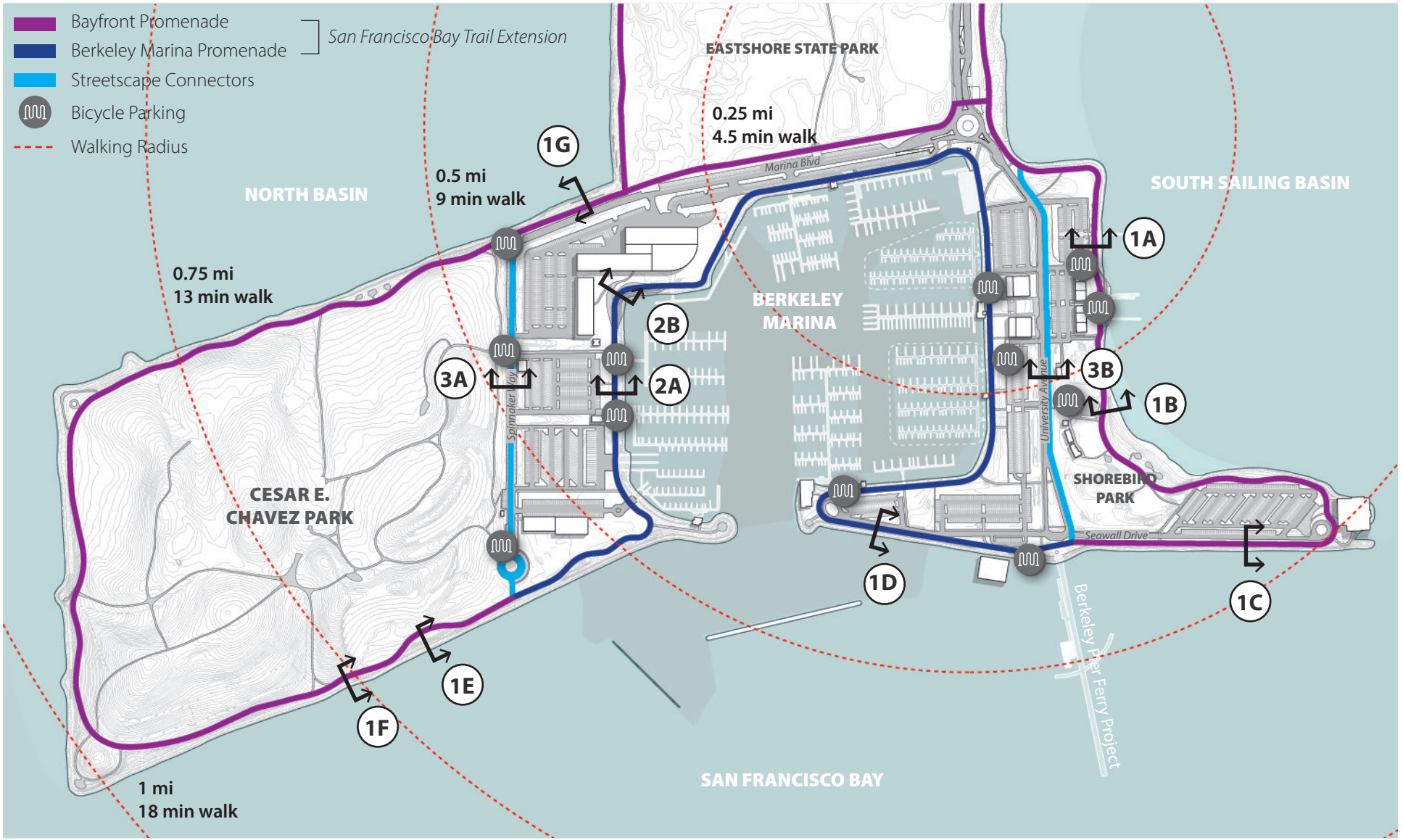
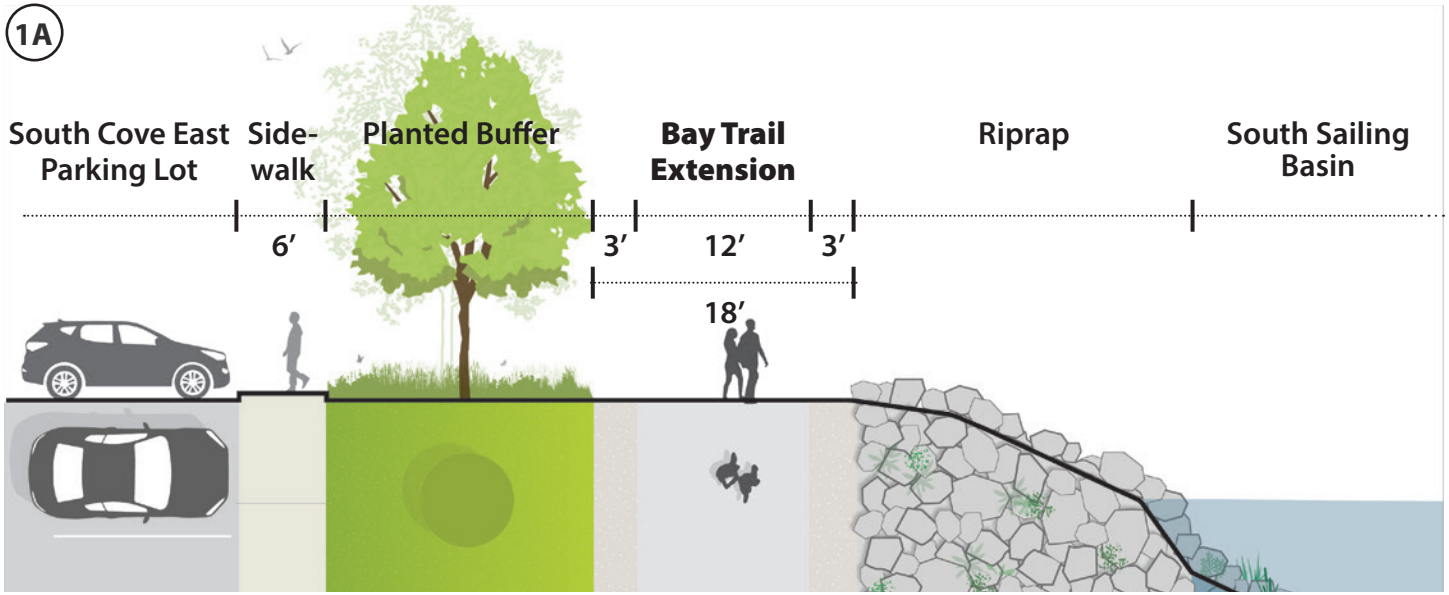
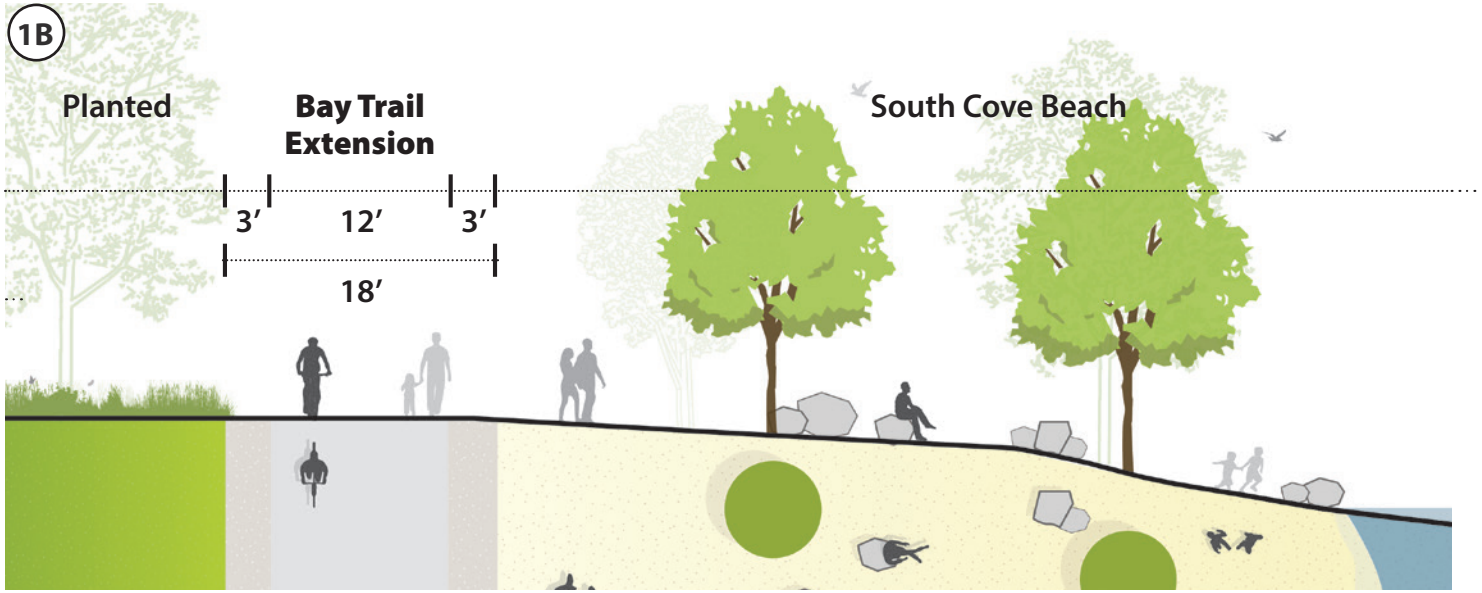


Figure 2-28 | South Cove Public Realm - Bayfront Promenade Section Cut



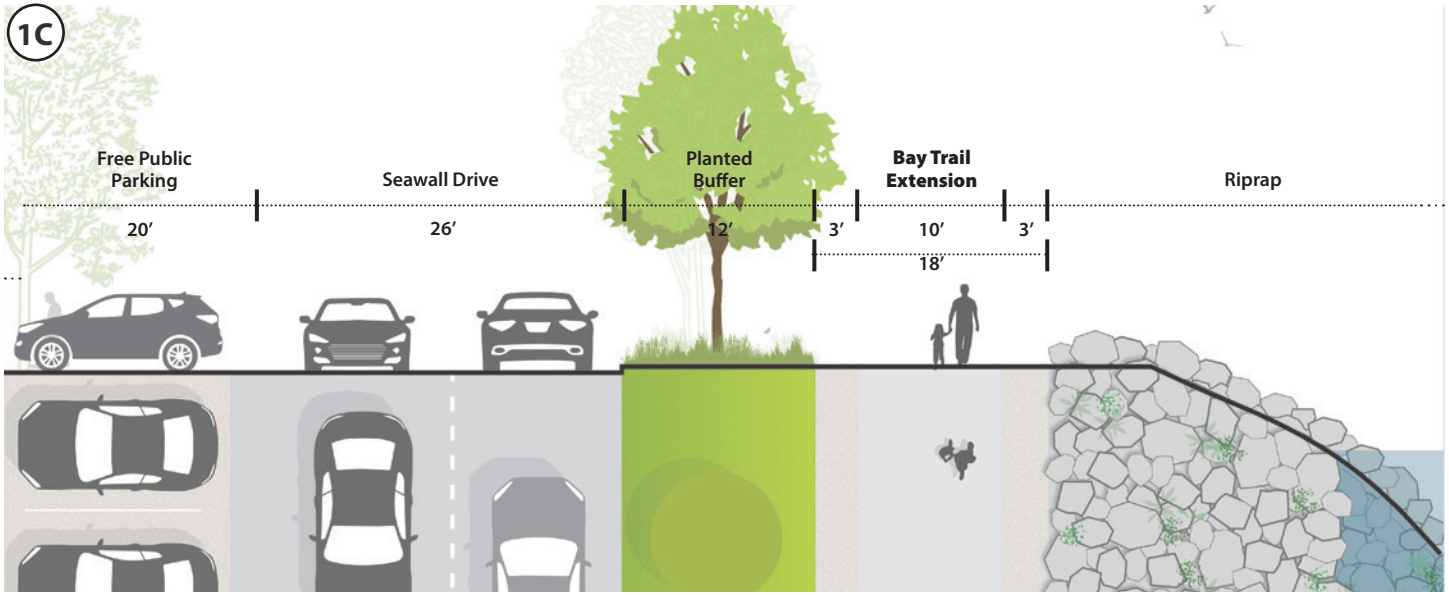
- Improved Bay Trail Extension to accomodate walkers and bikers
- Pavement transitions to gravel and riprap at the water's edge
- Planted buffers offer shade as well as increased permeability

Figure 2-29 | Shorebird Beach - Bayfront Promenade Section Cut



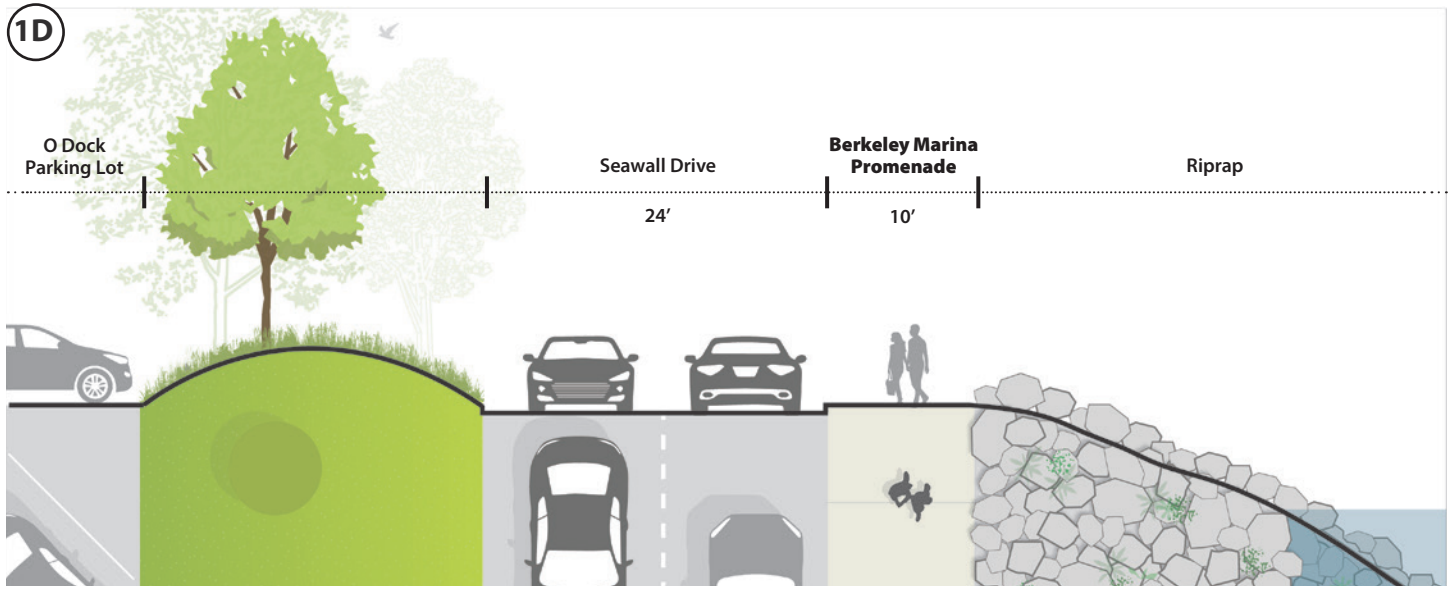
- Large expanse of improved beach open space
- Planting offers shade and increased protection from erosion
- Improved Bay Trail Extension

Figure 2-30 | Seawall Dr - Bayfront Promenade Section Cut 1C



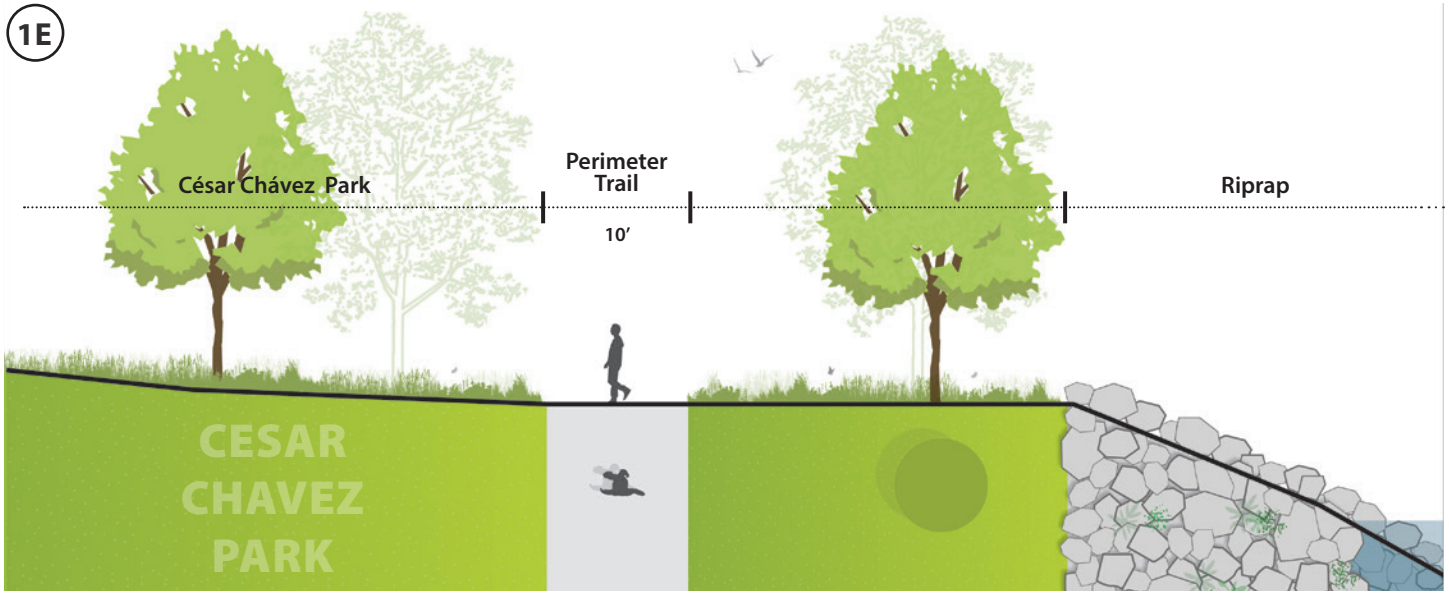
- Improved Bay Trail Extension
- Parallel parking along water's edge removed in favor of additional green space and tree planting
- Free public parking utilizes gravel material for increased permeability and reduced pavement

Figure 2-31 | Seawall Dr - Bayfront Promenade Section Cut 1D



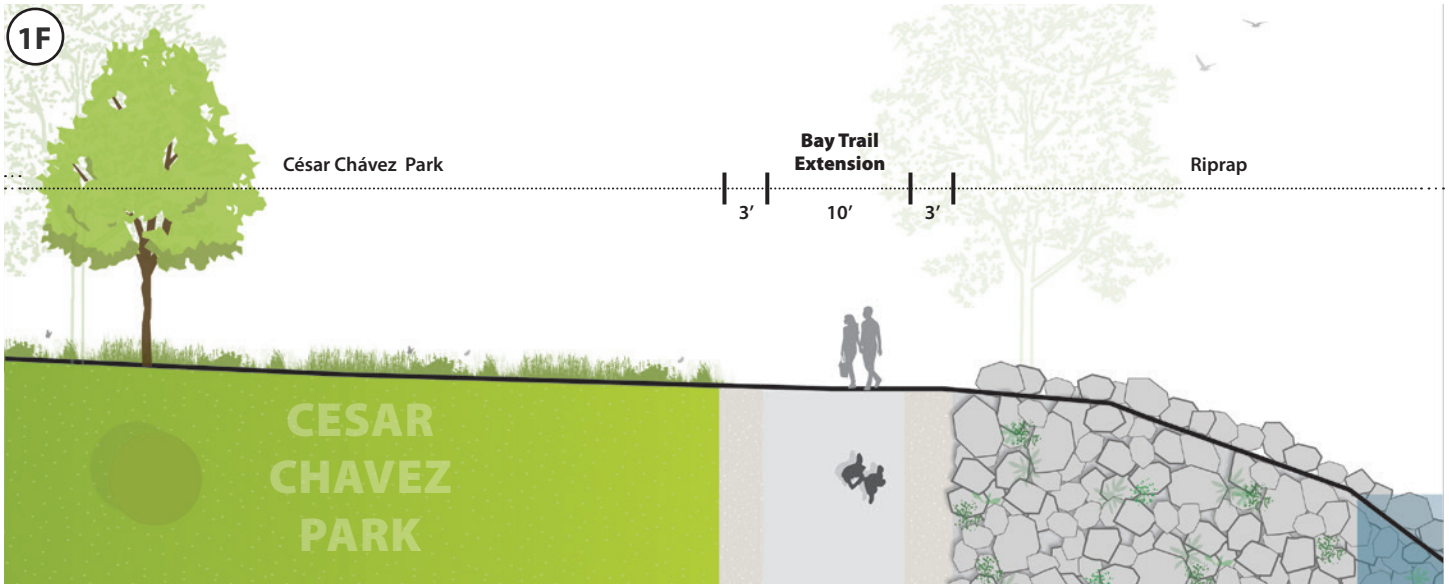
- Berkeley Marina Promenade for increased pedestrain access to marina perimeter
- Rip-rap and coastal planting near water's edge
- Planted berm between Seawall Drive and O Dock Parking Lot

Figure 2-32 | César Chávez Park - Bayfront Promenade Section Cut 1E



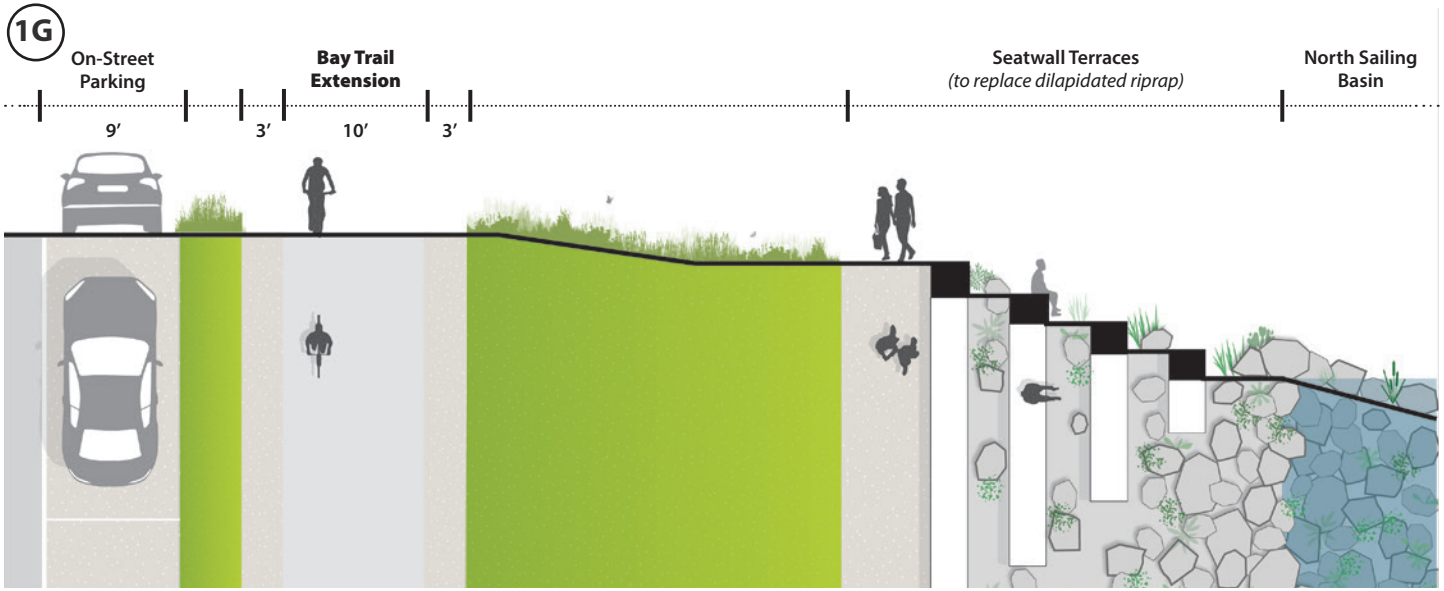
- Thickened water's edge with planting and rip rap
- Improvements to Perimeter Trail within César Chávez Park

Figure 2-33 | César Chávez Park - Bayfront Promenade Section Cut 1F



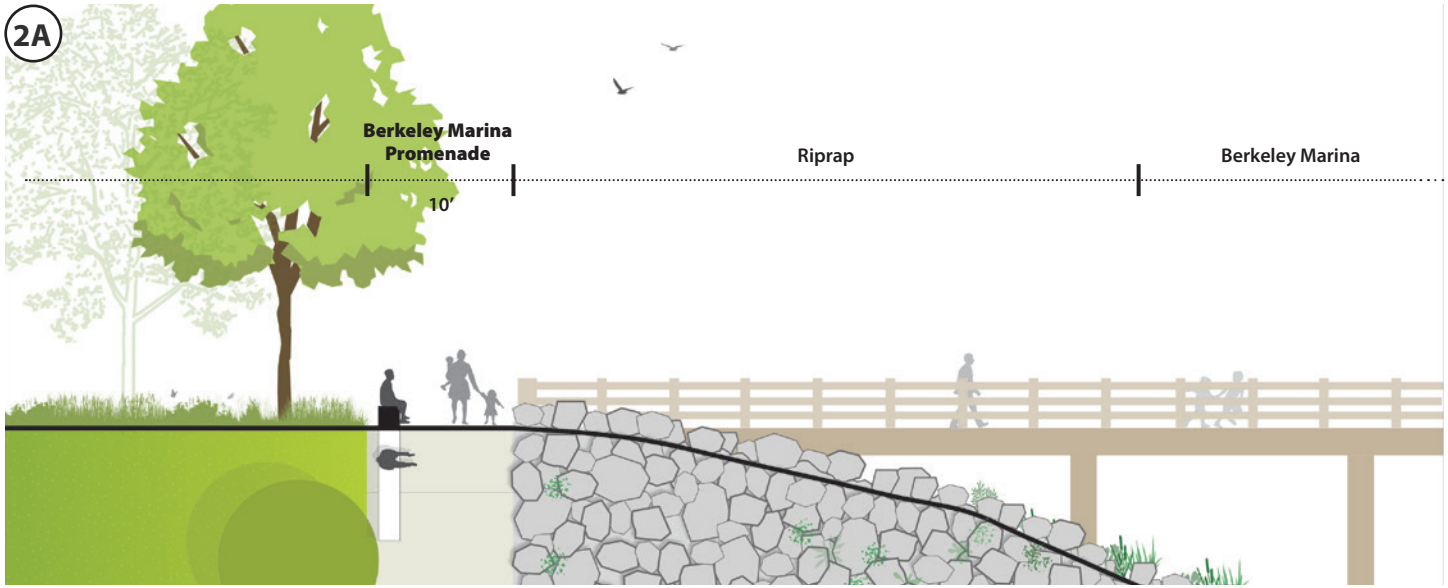
- Improved Bay Trail Extension for walkers and bikers
- Management of planting at César Chávez Park

Figure 2-34 | Marina Blvd - Bayfront Promenade Section Cut



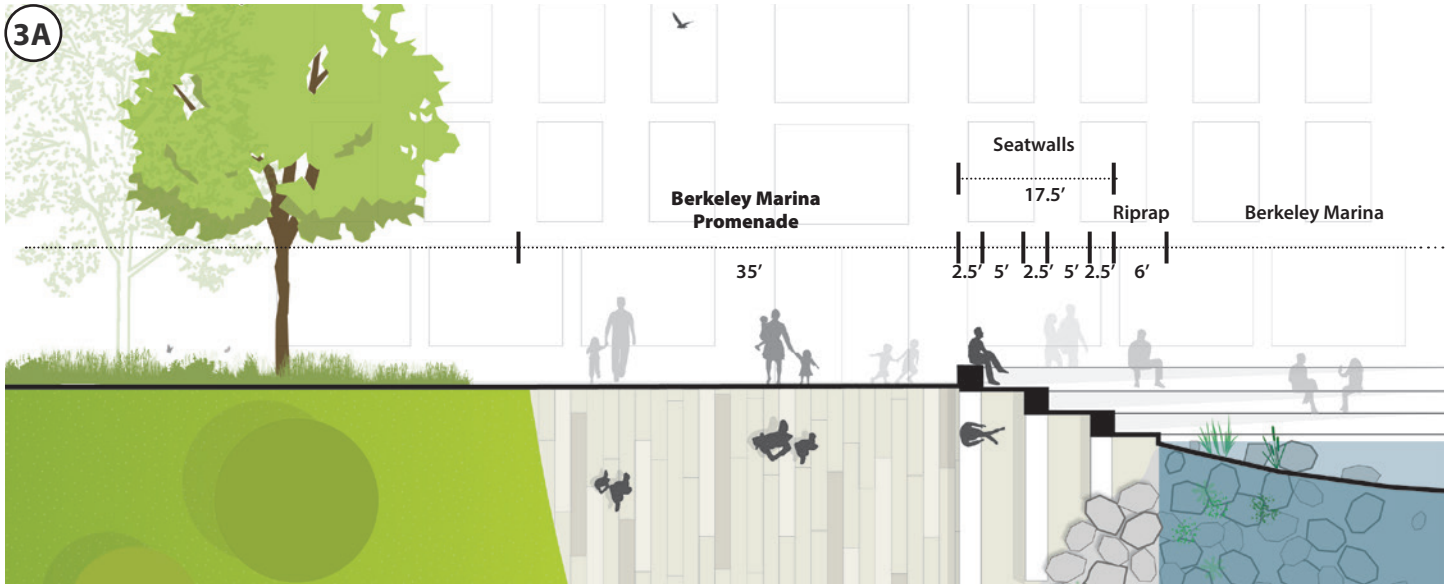
- Improvements to Bay Trail Extension
- Seatwall terraces are integrated into the rip-rap to increase access of the water's edge
- On-street parking utilizes gravel to increase permeability and reduce paved area

Figure 2-35 | Inner Harbor Pier - Berkeley Marina Promenade Section Cut



- Seatwalls along Berkeley Marina Promenade improve public seating at the Marina
- Improvements to Pier access
- Fostering plant growth within the urban marina environment

Figure 2-36 | Urban Waterfront - Berkeley Marina Promenade Section Cut



- Widened public space in front of the DoubleTree
- Curving stepped seatwalls allow for gathering and direct access to water
- Paving to provide a sense of place in the new public plaza area

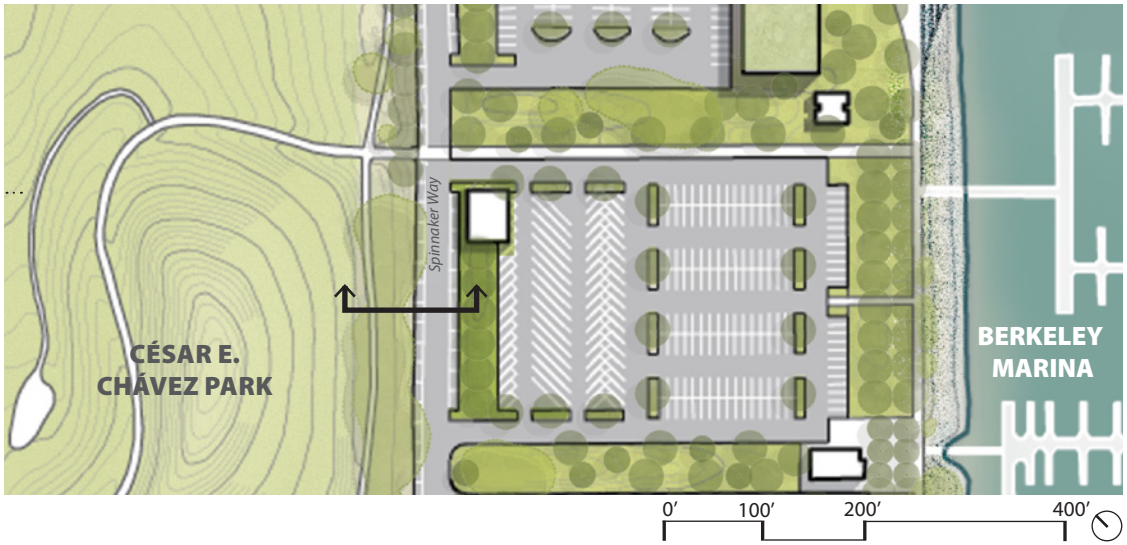
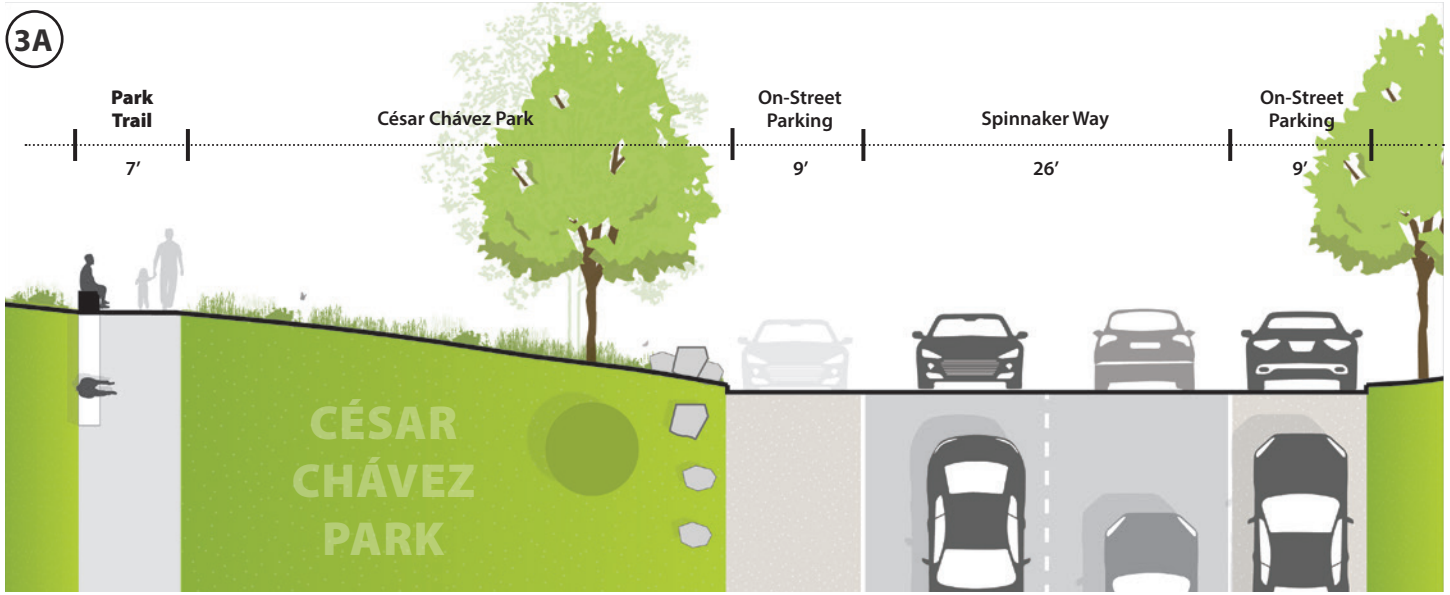


Figure 2-37 | Spinnaker Way - Streetscape Connector Section Cut



- Improved seating along the Park Trail
- On-street parking utilizing gravel material for increased permeability
- Fostering of plant growth and tree planting along Spinnaker Way

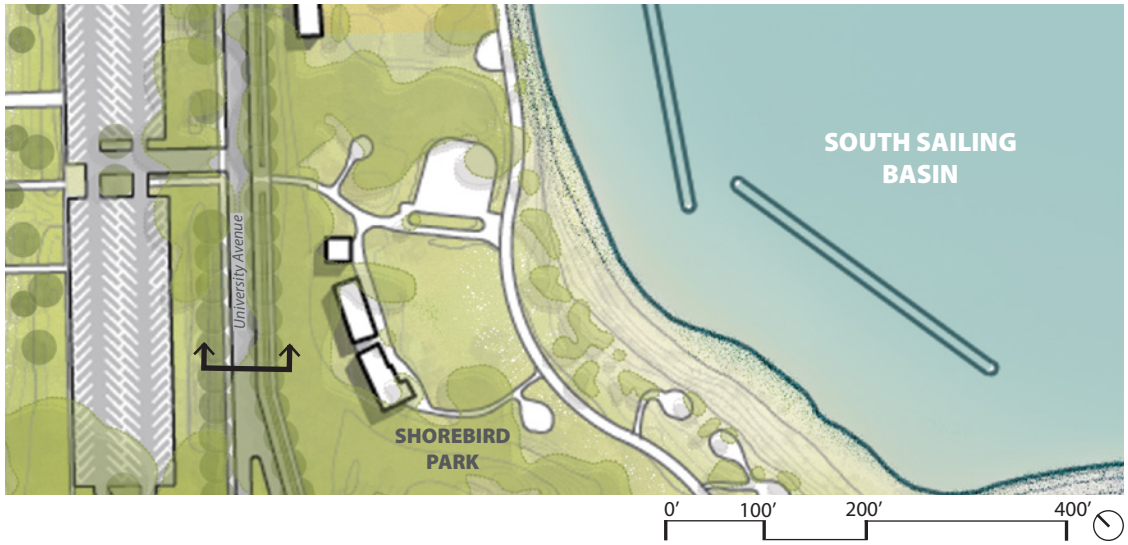
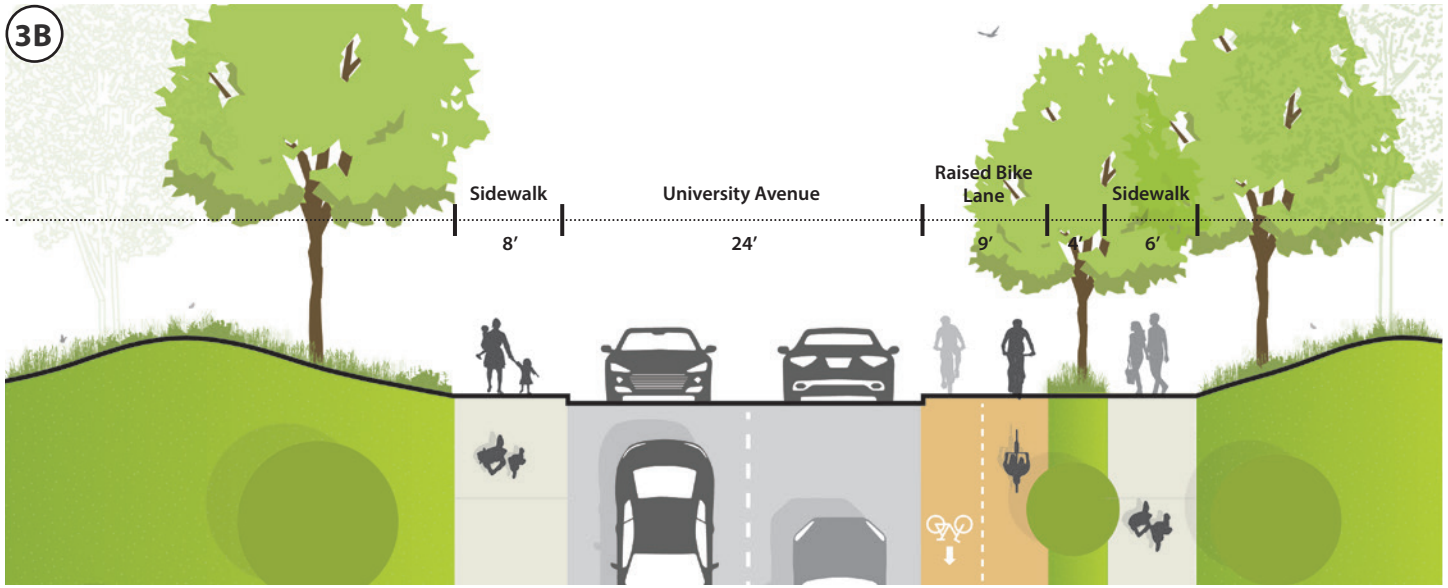


Figure 2-38 | University Ave - Streetscape Connector Section Cut



- Tree buffer offers safe separation of uses between pedestrians and bikers
- Raised bike lane improves safety of bikers from vehicles
- Planted berms offer shade and increased permeability

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2.5.3 Transportation & Parking

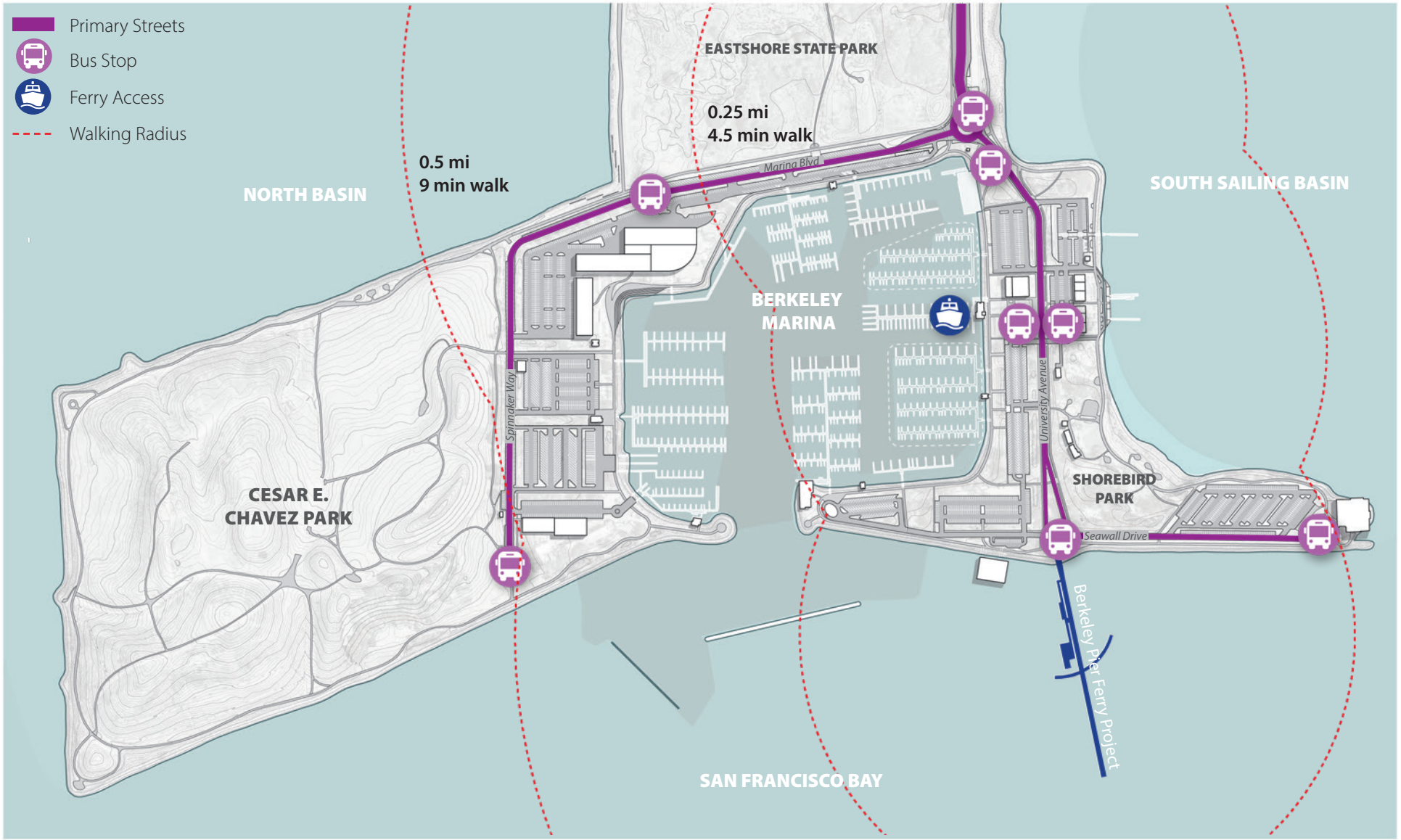
Key Goals

1. Promote public transit for all users to access and experience the Waterfront
2. Enhance site connectivity amongst Waterfront destinations, including integration of pedestrian and bicycle pathways to and from transit stops, scooter infrastructure, valet options and other alternatives to single occupancy vehicles
3. Integrate complete streets design strategies to enhance pedestrian / cyclist experience and safety

Transportation at the Berkeley Waterfront currently includes public bus transit, cars, and occasional shared scooters and bikes. Bus stops are located along University Ave offering public transit access to Berkeley Waterfront South, connecting seamlessly to pedestrian and bike circulation illustrated in Section 2.3 and reducing reliance on car travel. The Berkeley Waterfront offered small-scale ferry service in 2016-2023, with plans for the future WETA Electric ferry beginning operations in 2028.

With the introduction of the new amenities envisioned in the WSP, from the pier/ferry to potential hotel, food and beverage, there will be a need for improved transportation connections and parking management. Over the next several months, we will be preparing a Transportation, Mobility and Parking Management study and plan to develop strategies to accommodate these new needs.

Figure 2-39 | Transportation Network at the Berkeley Waterfront



Waterfront Parking Ecosystem

Key Goals

1. Support a shared approach to Waterfront parking that efficiently utilizes lots for multiple uses at the Waterfront, creating a coordinated parking "ecosystem"

2. Accommodate the parking needs of all visitors to the Waterfront, while integrating targeted on-site improvements to address the parking needs associated with specific user groups

3. Implement parking strategies that encourage non-motorized connectivity between destinations at the Waterfront, reducing the need for driving and re-parking during a single trip

The majority of visitors to the Berkeley Waterfront arrive by car. The Waterfront Specific Plan incorporates planning to more effectively serve existing parking demands and accommodate future parking demands at the Waterfront. Parking lots reflect a trade off for the public good, including high maintenance costs per space per year, using up limited Waterfront land and funds, contributing to traffic congestion, and incentivizing single occupancy vehicles. Ample parking also generally disincentivizes alternative transportation like rideshare, bikes, scooters, and public transit.

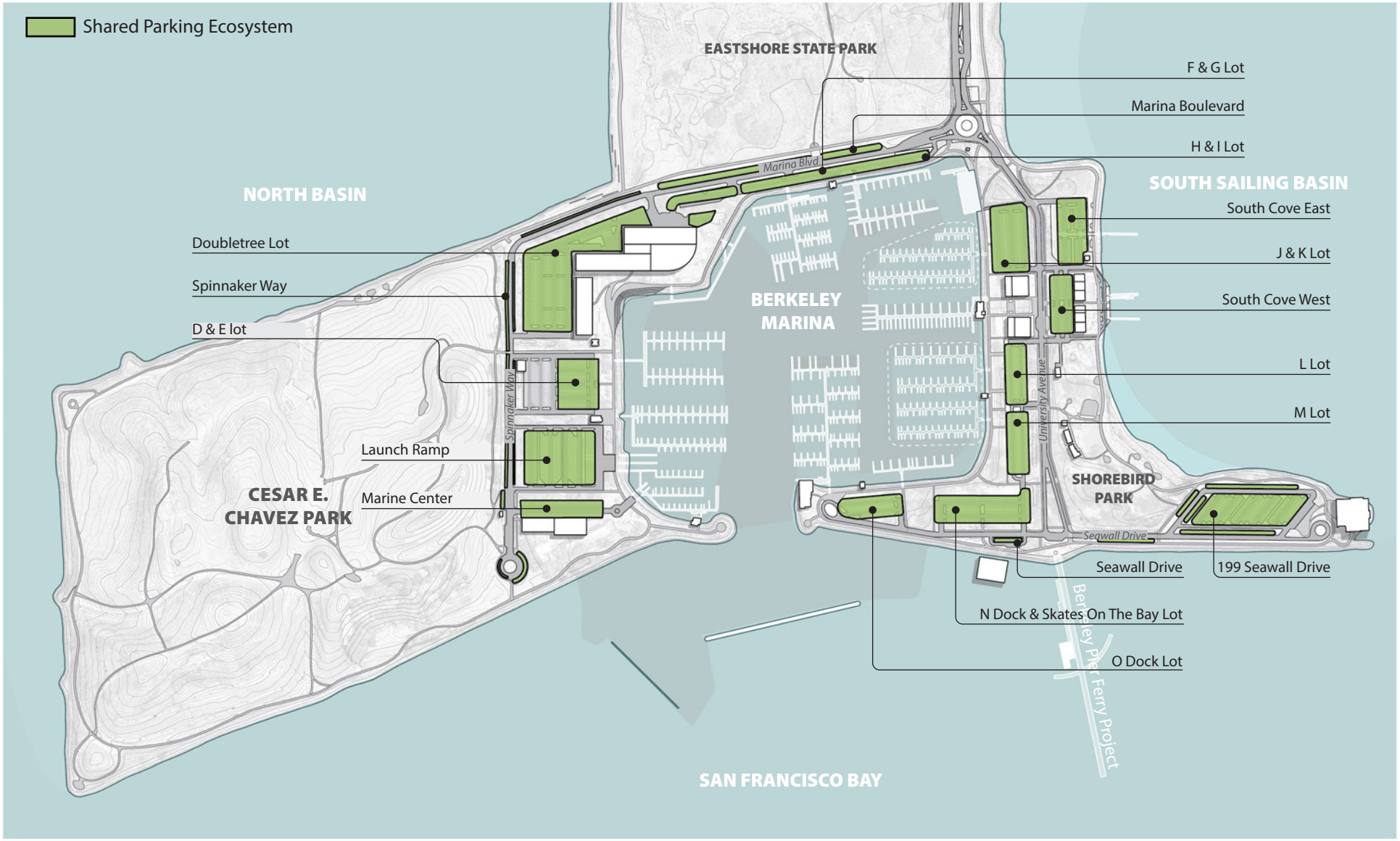
There are currently 2,033 parking spaces at the Waterfront, spread across 11 lots that are equivalent to about 20 acres or 15 football fields and comprising close to 20% of Waterfront land. While some Waterfront lots are full or near capacity at peak hours (i.e. weekends), others consistently have available spaces. For example, during peak hours, the South Cove lots may be 100% full, while neighboring lots and the Waterfront average was 60% full. The Specific Plan recommends a "Waterfront Parking Ecosystem" approach that encourages multi-use parking lots instead of single-use lots, parking management strategies, and enhanced non-motorized connectivity between Waterfront destinations.

Potential parking management strategies that are feasible at the Berkeley Waterfront include:

- Permits, time limits and other restrictions
- Demand-based pricing/paid parking strategies and increased enforcement
- Valet options
- Loading & Drop Off Zones
- Waterfront wayfinding and information strategies
- Transportation Demand Management (TDM) strategies that support bicycle,
- pedestrian, and transit access, including shuttle bus system

Many Waterfront parking lots are in poor condition and could be better maintained. At the Waterfront, there are no "backsides" to development, so parking lot reconstruction projects should also aim to improve the visitor experience by designing these lots as safe and welcoming public landscapes, with adequate canopy cover and circulation for pedestrians and bicyclists. In addition, the Waterfront Specific Plan recommends efficient parking layouts for lots as they are replaced or redeveloped to minimize land coverage and heat island effect. During special events, these parking lots may also be transformed into public plazas for food trucks, festivals, concerts, or community gatherings, requiring integrated power and water infrastructure. More specific guidelines associated with parking lot design can be found in Section 3.5 Design Guidelines.

Figure 2-40 | Shared Parking Ecosystem at the Berkeley Waterfront



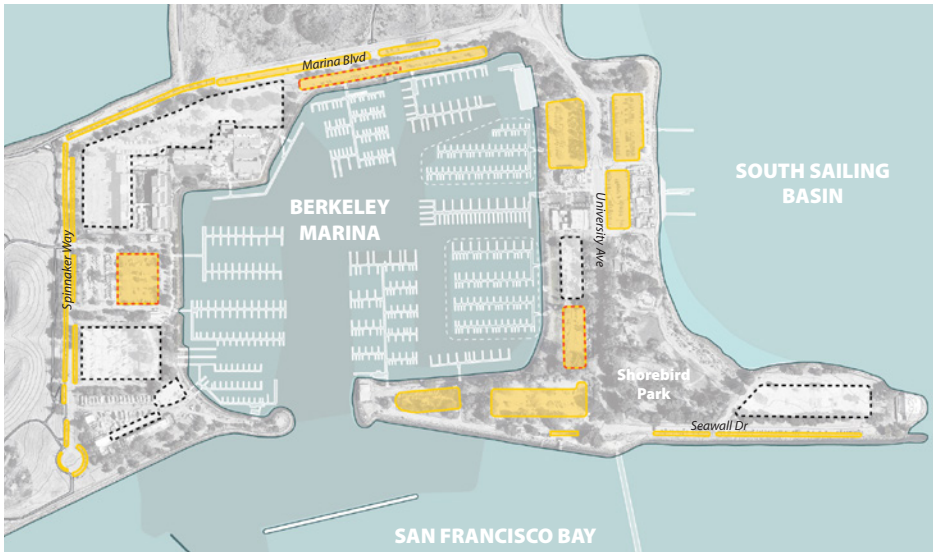
Pier Ferry Project

Parking at the Waterfront must successfully accommodate local community members, visitors and tourists, slip holders, and employees of Waterfront restaurants and businesses. Any new project proposed at the Waterfront will require a comprehensive review and permitting process, including approval of the approach to successfully accommodate project parking needs in coordination with broader Waterfront parking demand. Every project will be a part of the holistic Waterfront parking "ecosystem."

The Waterfront Specific Plan recognizes the increased parking demand that the Pier Ferry Access Project will bring to the Waterfront. The development of that project will include a thoughtful approach to parking for ferry users, to ensure ongoing Waterfront access for recreational and commercial users. In particular, the redevelopment of the 199 Seawall Drive peninsula will include transportation and parking enhancements, to support Ferry users and all Waterfront visitors.

In anticipation of the Pier Ferry Access Project and other potential Waterfront redevelopment projects with parking impacts, the Waterfront Specific Plan encourages proactive development of parking demand management strategies at the Waterfront. The Waterfront Specific Plan will include a focused report on this important issue: Berkeley Waterfront: Transportation, Mobility & Parking Management Plan (Coming soon).

Figure 2-41 | 2022-23 Average Weekday Parking Demand at the Waterfront



Low Utilization *(less than 80%)*
Anecdotal High Utilization *(more than 90% observed)*
Ideal Utilization *(80%- 90%)*
Over Utilization *(more than 90%)*
No data
Slipholder only

Figure 2-42 | 2022-23 Average Weekend Parking Demand at the Waterfront

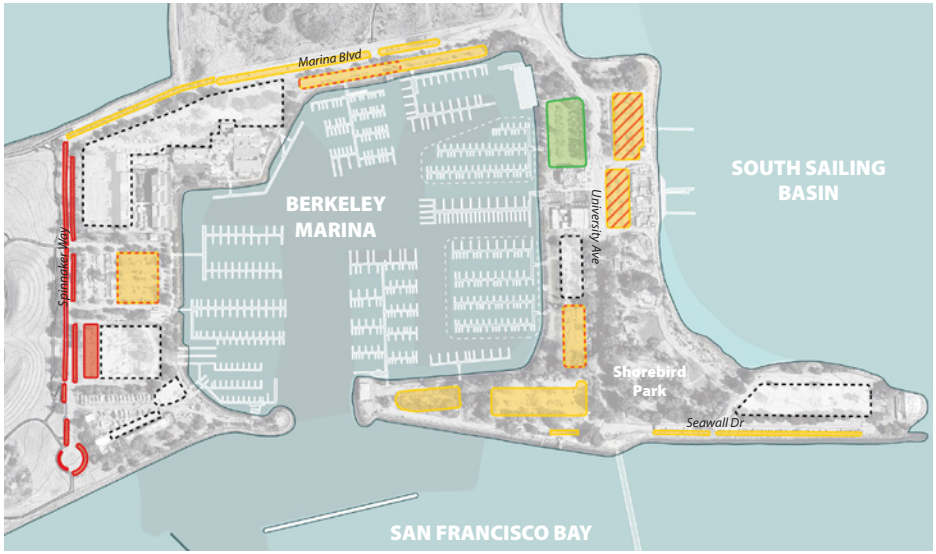
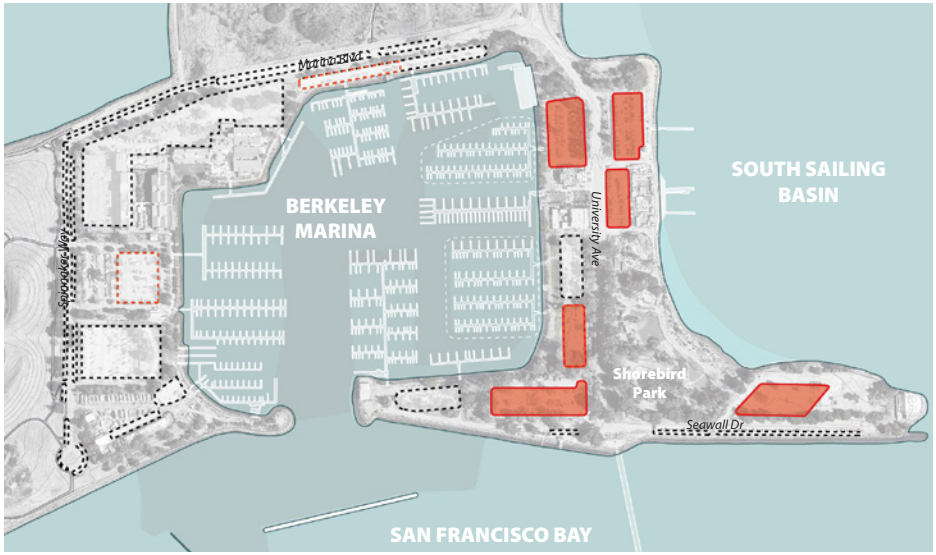


Figure 2-43 | 2023 Special Event Parking Demand at the Waterfront



Parking Studies at the Waterfront

In 2022-2023, an analysis of parking data was conducted for parking utilization at the Berkeley Waterfront. Figures 2-35, 2-36 and 2-37 show three scenarios for parking at the Waterfront, illustrating relatively low utilization on the average weekday; high or ideal utilization on the weekends; and peak or over utilization during special events.

Additional analysis will be conducted in the coming months to develop strategies to accommodate ferry service and other potential redevelopment at the Waterfront. The results from these studies, in conjunction with public outreach efforts, will be used to craft strategies for parking management at the Waterfront as part of this Specific Plan.

Proposed Mobility and Urban Connectivity at Berkeley Waterfront North

IN PROGRESS

Proposed Mobility and Urban Connectivity at Berkeley Waterfront South

IN PROGRESS

Proposed Parking Management Strategies

Permits, time limits and other **restrictions**

Demand-based pricing/paid parking strategy & increased enforcement

Valet options that can be implemented across the Waterfront

Waterfront-wide **wayfinding** and information strategy

Transportation Demand Management (TDM) strategies that support bicycle, pedestrian, and transit access, including shuttle bus system

Figure 2-44 | Proposed Parking Strategy for Berkeley Waterfront South

IN PROGRESS

2.5.5 Placemaking & Wayfinding

Key Goals

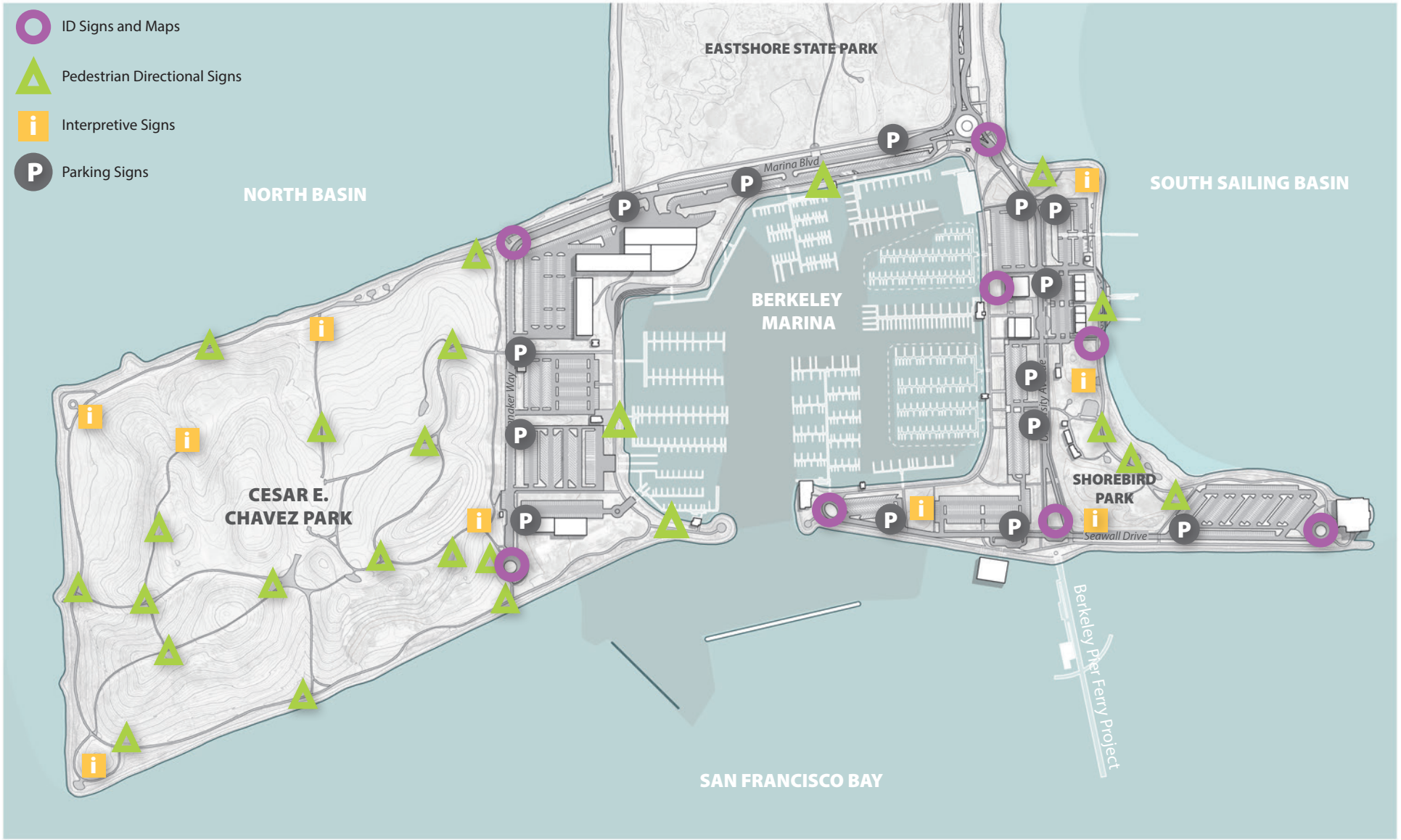
1. Highlight unique water access, recreation, and nature-focused open space as core to visitor experience of the Berkeley Waterfront
2. Reinforce cohesive identity to Berkeley Waterfront, while accommodating and celebrating unique character of individual destinations
3. Establish clear wayfinding to and within the Waterfront for all visitors
4. Incorporate educational/informational signage as a part of placemaking efforts.
5. Establish the Perimeter Promenade as a key focal point and amenity, and as a connector between destinations, interest points, and educational information within the Waterfront.

Figure 2-45 | Wayfinding and Signage Palette

Wayfinding at the Berkeley Waterfront should include a comprehensive set of signage for pedestrians, bikers and cars. The iconic park entrance signs will remain, while parking, directional and interpretive signs will be part of a unified set of signage. These signs are meant to be discreet enough to not detract from the beauty of the Waterfront and its natural surroundings while also providing important information to the users of the Berkeley Waterfront.

In addition to signage, placemaking at the Berkeley Waterfront can be improved through updated site furniture and lighting elements. Site furniture should be cohesive in style and blend seamlessly with the natural identity of the Berkeley Waterfront. A comprehensive lighting strategy will include modern street lights as well as downlighting and ground lighting to enhance the pedestrian experience at night and increase safety. Both of these elements will contribute to a Waterfront that is conducive to activity at all times of day as well as catering to small gatherings and large events.

Figure 2-46 | Wayfinding and Signage at the Berkeley Waterfront



Furnishing Palette

Bench

Seatwall

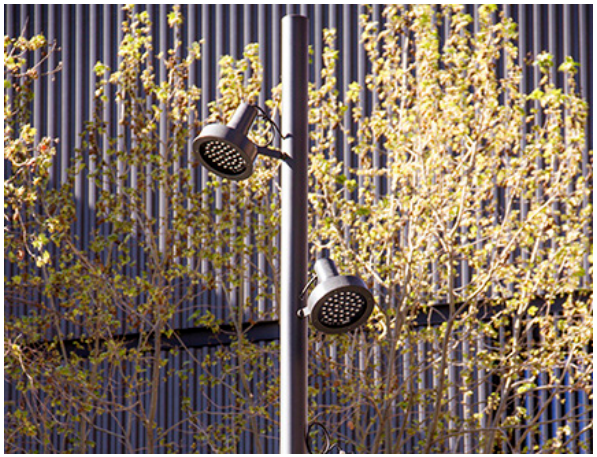
Bike Rack

Log Play

Boulder Play

Receptacle

Lighting Palette

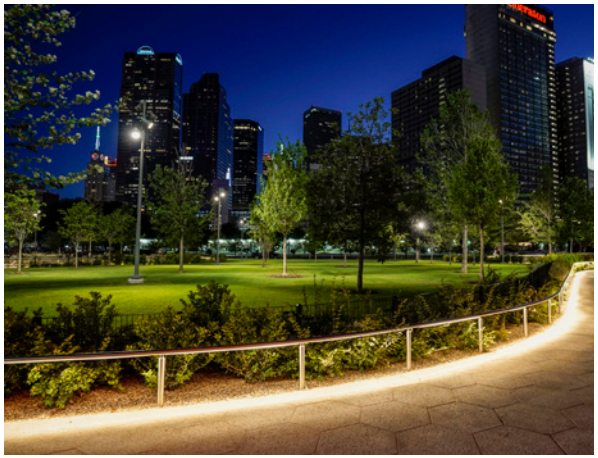


Ground-Mounted Light
25' Multi-Head Pole

Ground-Mounted Light
14' Pedestrian Pole

Ground-Mounted Light
3' Pedestrian Bollard

Accent Light
Down Lights



Accent Light
Linear Walkways

Accent Light
Linear Seatwall

Pedestrian Public Realm Materials Palette

Hardscape


Asphalt


Cast in Place Concrete

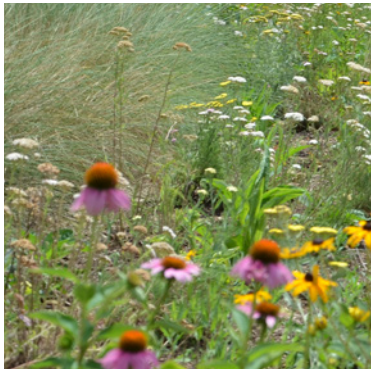

Concrete Unit Paving


Stone Unit Paving


Crushed Stone

Softscape


Living Shoreline


Pollinator Garden


Meadow


Lawn


Groundcover

Public Art

Examples of Public Art from North Carolina Musuem of Art, Art Park

2.6 Fiscal Sustainability

2.6.1 Introduction

An assumption at the start of this Specific Plan process was that the Waterfront could be financially self-sustainable. Given what we now know about 1) the limits of potential commercial development, from a market demand perspective and from a community interest perspective; and 2) the extent of the costs to address the capital and operations of the Waterfront, we know that it is not possible to generate all the revenue needed at the Waterfront. Even with projected revenue improvements, there is an estimated $200k annual structural deficit to cover operations; much more is needed to address capital infrastructure needs. To address even a quarter of the unfunded capital needs at the Waterfront would require more than $2M in annual capital investment.

New amenities at the Waterfront will be part of the solution. New hotel, food & beverage revenue could raise an estimated $860,000 in annual lease revenue. A rebuilt Berkeley Pier with ferry access would attract more people to the Waterfront, and give a boost to Waterfront businesses - many of which pay the City a percentage of their gross receipts as part of their lease agreements. Additional programming, park and nature enhancements, recreational opportunities, wayfinding, and placemaking, as envisioned in this Plan, will similarly bring more people to the Waterfront, and give this boost to existing businesses. Still, additional funding sources will be needed to ensure the Waterfront is sustainable into the future. These could include, but are not limited to:

- **CIP Fund (General Fund):** there could be a designated annual allocation to Waterfront infrastructure.
- **Parks Tax increase:** maintenance of any park or landscaped area in the Waterfront is eligible for Parks Tax. An estimated $1.5M in costs could be shifted from the Marina Fund to the Parks Tax. While the current Parks Tax revenue could not sustain this, a tax measure to increase the Parks Tax approved by voters could unburden the Marina Fund and close the structural deficit.
- **New City or regional tax:** A citywide tax or Waterfront Mello-Roos special tax district could be established to raise annual funds for Waterfront services and capital. Pillar Point Marina in Half Moon Bay receives 2/3 of their revenue from a special harbor district property tax.
- **Bond measure:** A general obligation infrastructure bond targeted toward the Waterfront could raise one-time funds for continued capital investment.
- **Loans or private financing:** Loans from the State Division of Boating & Waterways have been the financing mechanism for nearly all Berkeley dock replacement projects for the last 50 years. However, debt service has historically been paid from the Marina Fund, and until a more stable fiscal position is established, it will be difficult to secure additional loans.
- **Local funds, grants and external funding:** Over the past 20 years, the City has raised more than $55 million for Waterfront capital projects. This includes, most recently, the $15 million state earmark authorized for Berkeley Marina and pier projects. While this could be a central strategy for raising capital funds, grant programs are highly competitive and quite variable in terms of timeframes.
- **Use fees:** These would be fees paid by people who use the Waterfront, and could include, for example, parking fees, a Waterfront entry fee, or special event fees. In the world of parking management, parking fees are used as effective tools to manage parking rather than true revenue generators. As discussed during Council exploration of recent parking districts at the Waterfront and elsewhere, there needs to be significantly more traffic and turnover at the Waterfront for parking fees to be revenue-generating, which may be possible in future years but would not be the case now. A Waterfront entry fee, for example, could be implemented, but received certain criticism during community and focus group meetings. It should be noted that special event fees for the Waterfront are already contained in the City's fee schedule.

SECTION 3

LAND USE & DEVELOPMENT

3.1 Jurisdictional Context

The "Berkeley Waterfront" refers to all State Public Tidelands to the west of Eastshore State Park, bounded by the western end of the current 3,000' Berkeley Pier. The California Legislature gave the California State Lands Commission authority over California's ungranted public trust lands (tidelands, submerged lands, and navigable waters) in 1938 and authority over California's granted public trust lands in 1941.

In 1913, the California Legislature, by statute, conveyed these public trust lands (granted lands), in trust, to the City of Berkeley, for the establishment and operation of a harbor. In 1961, it expanded this grant to include a variety of other uses including public recreation. As a local tidelands grantee, the City of Berkeley is an administrator of these public trust lands, and is required to manage tidelands in accordance with both statutory requirements and the public trust doctrine (the common law principle that governs the use of these lands).

At present, the following entities have regulatory authority over the Berkeley Waterfront:

State Lands Commission (grant of State Public Tidelands to Berkeley in trust in 1913 and expanded in 1961 to include a variety of other uses such as public recreation).

Bay Conservation and Development Commission (BCDC) (all waters and land within the grant of state tidelands).

U.S. Army Corps of Engineers (all waters within the grant of state tidelands).

Regional Water Quality Control Board (Cesar Chavez Park Landfill and stormwater discharges to the Bay from all Marina uplands)

Bay Area Air Quality Management District (Cesar Chavez Park Landfill Methane Pipe System and Flare Station only).

The Berkeley Waterfront is also subject to policies, programs, laws, and regulations" since ordinances are legislation.

Land and Water Conservation Fund (LWCF) grant program (Cesar Chavez Park southern section (Phases I through IV) and Shorebird Park).

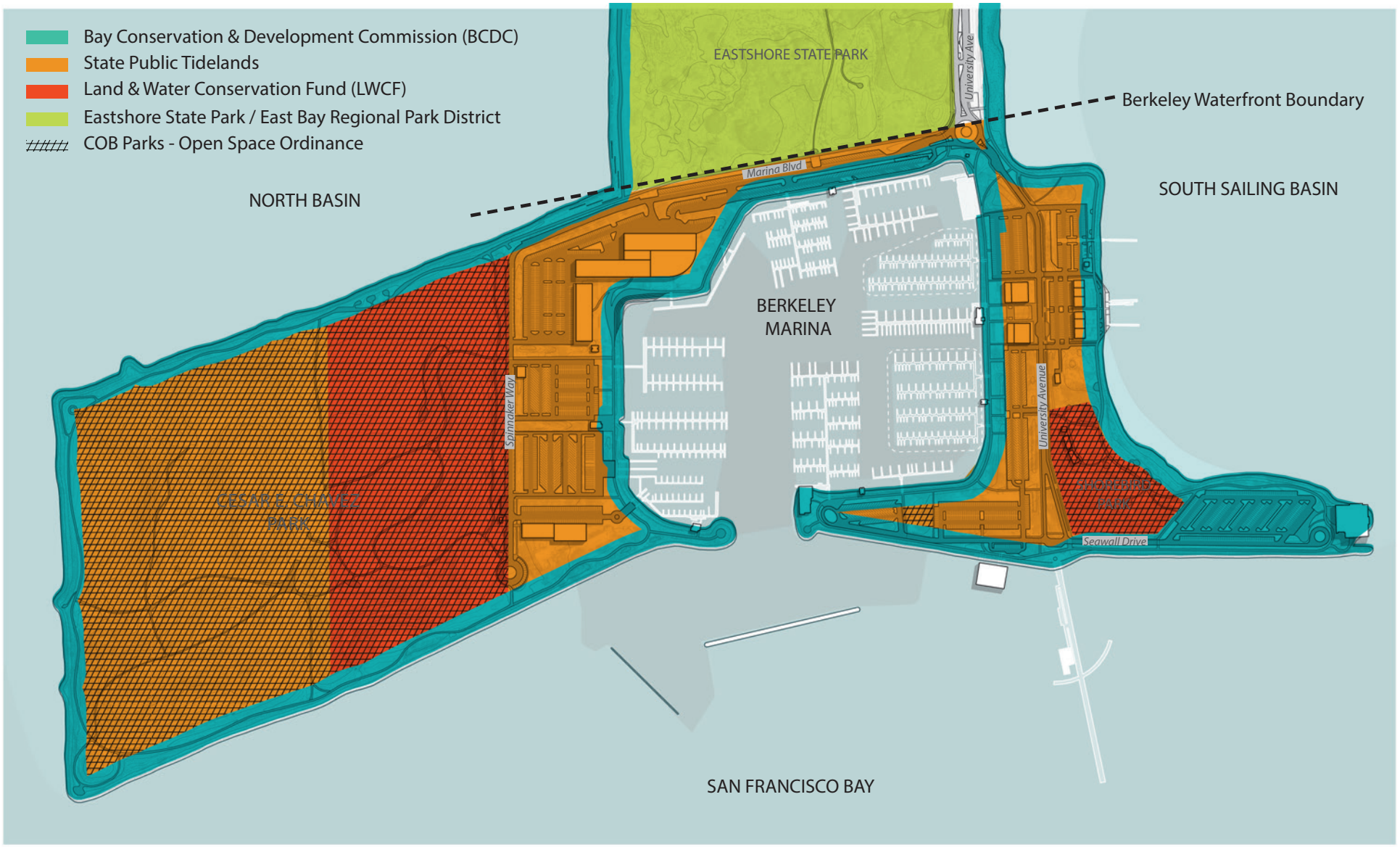
City of Berkeley Open Space Ordinance (Measure L) (applicable to three formally designated parks at the Marina: Cesar Chavez Park, Shorebird Park, and Horseshoe Park).

City of Berkeley Use Permit No. 5567 to construct the Berkeley Marina (as required by the "Unclassified" zoning restriction at the Berkeley Marina).

2003 Marina Master Plan (mainly a capital plan, does not exert additional legal requirements).

Waterfront Use Permit (discretionary permit for the use of land or land development that is issued by the Zoning Office)

Figure 3-1 | Waterfront Jurisdictional Context



Project Development Process

The Waterfront Specific Plan is a comprehensive planning and zoning tool. It establishes an overall vision and guiding principles for the Waterfront, and information to support future development. This document is separate from, but consistent with, the City of Berkeley's adopted General Plan. Detailed land use regulations and development standards within this document are not binding, and will be integrated into the Berkeley Municipal Code, which should be referenced for current regulatory requirements at the time of project development.

The Berkeley Waterfront is located in an Unclassified (U) zoning district (BMC 23.208.020). Unclassified districts are districts that are not classified for a particular use and provide a district designation until such an area can be classified into a specific zoning district. New projects must undergo a lengthy process to obtain approvals for individual lease areas and propose project-specific development standards to proceed with any project. Every project requires a "Use Permit" application, which must be reviewed by City staff, and submitted to the Planning Commission, who then report to the Zoning Adjustment Board (ZAB). The ZAB approves, conditionally approves, or denies each application. This decision is then sent along with Planning Commission comments to the City Council for final determination of allowable uses and development standards for individual lease areas.

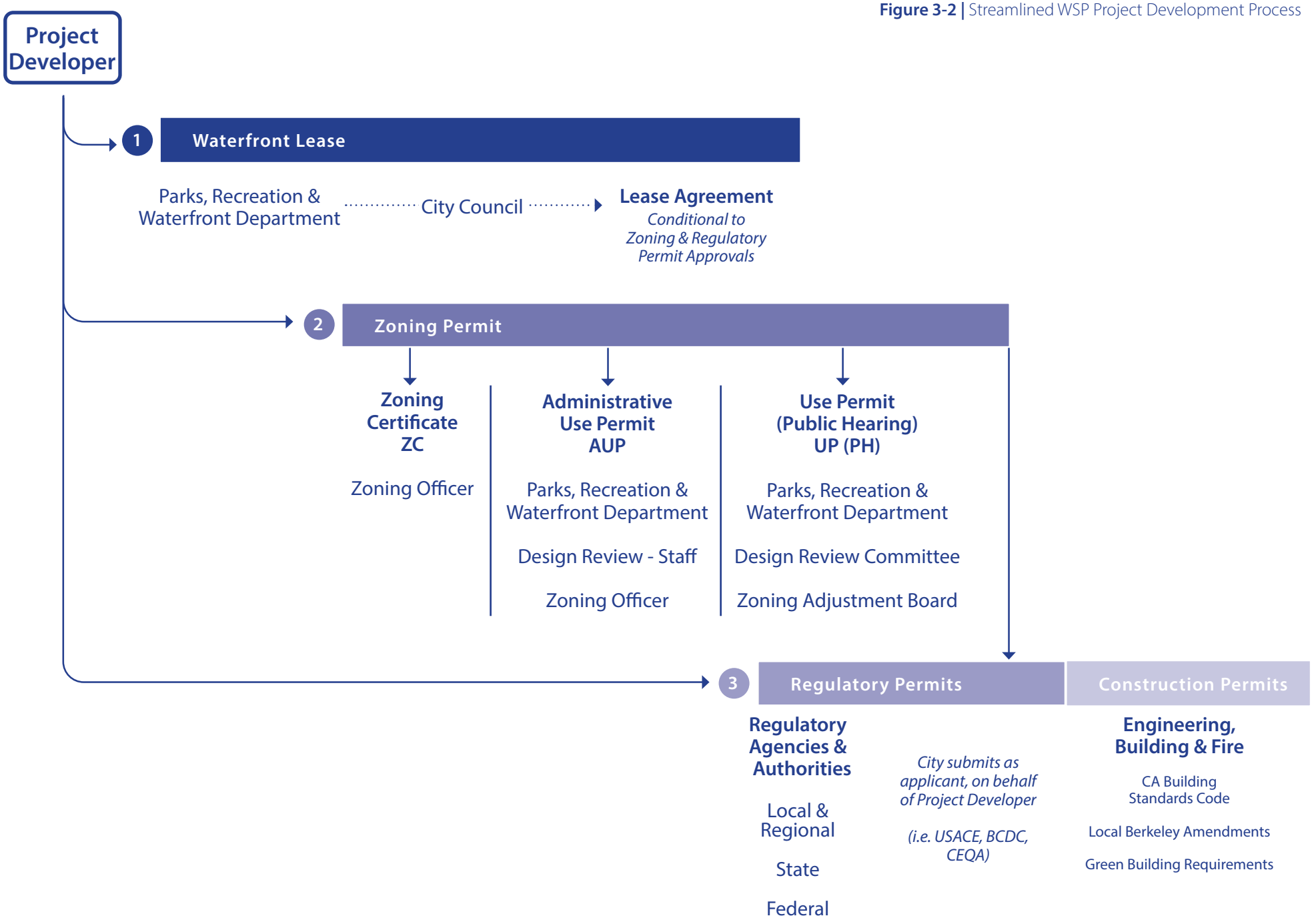
The Waterfront Specific Plan establishes a streamlined process to attract investment in the Berkeley Waterfront, facilitating redevelopment opportunities that are cohesively integrated with the identity and character of the Berkeley Waterfront. Appropriate development projects will enhance community and visitor experiences at the Berkeley Waterfront while contributing revenue that is essential to long-term operations and maintenance of a resilient Berkeley Waterfront, including its abundant public parks, open spaces, and recreational amenities.

It is recommended that the Berkeley Waterfront be re-classified as a Specific Plan (SP) zoning district (BMC 23.208.010), requiring compliance with allowed uses, permit requirements, developments standards and design guidelines outlined in this document.

Required Permits

Before approving a permit application in a SP district, the City must approve a Master Development Plan Permit consistent with the Waterfront Specific Plan. Applications for a Master Development Plan Permit and subsequent required permits shall be submitted and processed in accordance with Section 23.404--Common Permit Requirements and 23.406--Specific Permit Requirements. (Ord. 7787-NS § 2 (Exh. A), 2021)

Figure 3-2 | Streamlined WSP Project Development Process



Relevant Regulations, Codes, and Plans

In Berkeley, the City holds these lands in trust, although the lands are subject to the public trust and remain subject to the oversight authority of the state/State Lands Commission. All relevant City of Berkeley plans, regulations, and codes associated with land use, urban development, transportation, and environmental planning should be referenced alongside the Waterfront Specific Plan for all site development projects. Relevant documents that should be referenced include, but are not limited to the following:

Public Trust Doctrine

In California, tidelands, submerged lands, and the beds of navigable waterways are held in trust for the benefit of the public. Under the public trust doctrine, these public trust lands must be used for commerce, navigation, fisheries, and other publicly beneficial uses that connect the public to the water. Long ago, the state granted the former tidelands and submerged lands upon which the Berkeley Waterfront was built to the City of Berkeley. Therefore, it is City's duty to manage these lands in a manner consistent with the public trust doctrine. Laws governing the use and administration of public trust lands can be found in the California Constitution, the Public Resources Code, and elsewhere.

City of Berkeley General Plan

The City of Berkeley's General Plan is a comprehensive, and long-range statement of community priorities and values developed to guide public decision-making in future years. The General Plan's goals, objectives, and policies serve as a guide day-to-day decisions that are essential for responsive government. Decisions made by the Berkeley City Council and its advisory boards and commissions about the physical development of the City should be consistent with the goals, objectives, and policies of this General Plan. The City Council and Planning Commission will use the General Plan when evaluating land use changes and making funding and budget decisions. It will be used by the Zoning Adjustments Board and City staff to guide review of development proposals and make decisions on projects. The policies of the General Plan apply to all property, both public and private, within Berkeley city limits.

Berkeley Municipal Code (BMC)

The Berkeley Municipal Code (BMC) is a compilation of the City of Berkeley's laws, including its zoning regulations, permitting requirements, and other provisions governing land use and development. All general ordinances are codified in the BMC. While the BMC can be accessed online, please note that the City Clerk's Office holds the most current official version of the BMC.

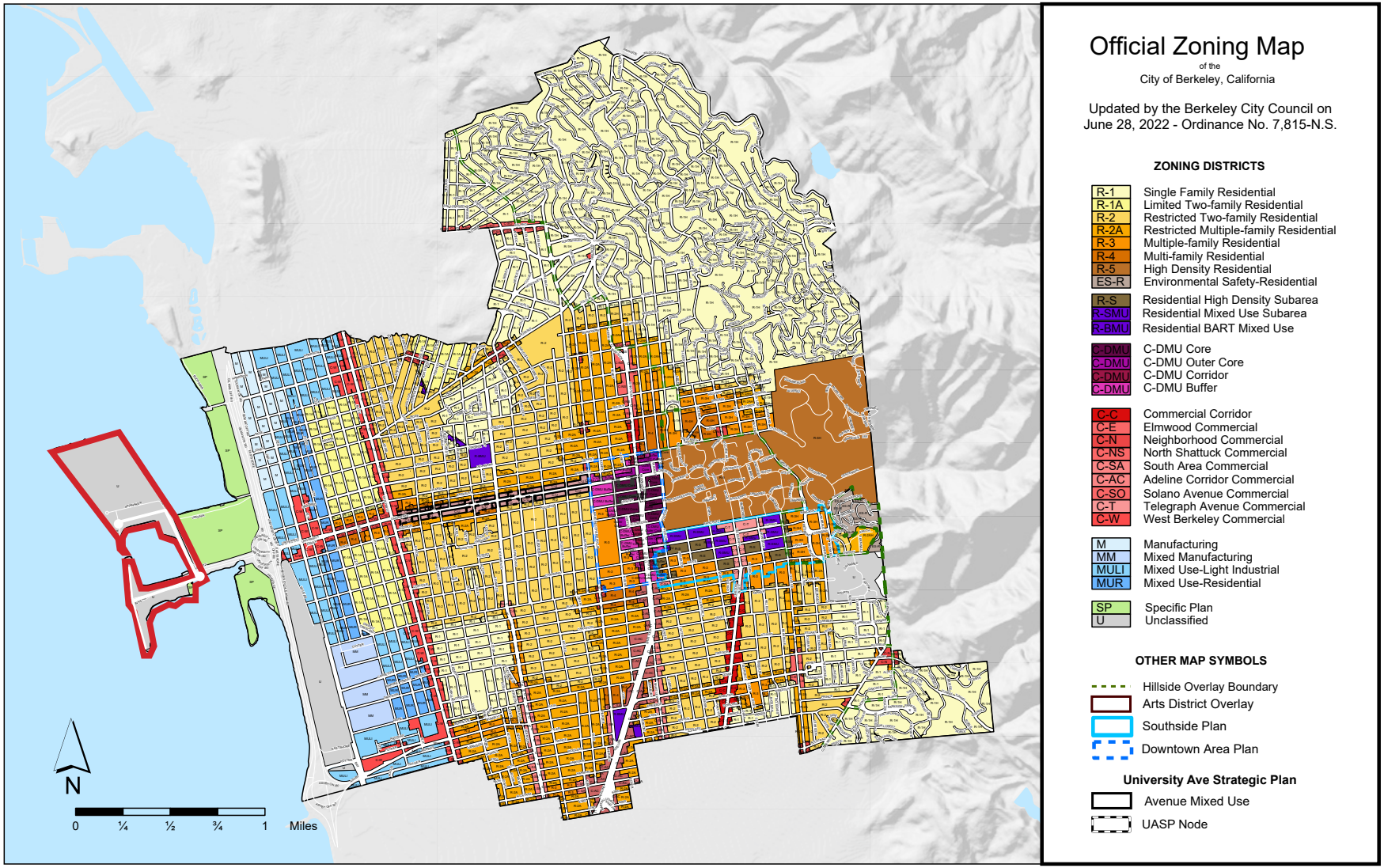
Berkeley Climate Action Plan

Berkeley's Climate Action Plan is a vision for a more sustainable, livable, equitable, and economically vibrant community. By using energy more efficiently, harnessing sustainable electricity to power buildings, enhancing access to sustainable transportation, reducing waste, and building local food systems, Berkeley can keep dollars in our local economy, create new green jobs, and improve our quality of life.

Berkeley Design Parameters

The Berkeley Design Parameters include Berkeley-specific amendments to the California Building Code, as well as regulations for certain protected areas, can be found in the BMC. These supplement State requirements for building and construction. Local requirements must be accounted for in project plans before permit applications are submitted, including but not limited to a number of green building measures, such as water-efficient landscaping and solar power requirements and a prohibition on natural gas, for example.

Figure 3-3 | Official Zoning Map City of Berkeley *(prior to Waterfront Specific Plan Adoption)*



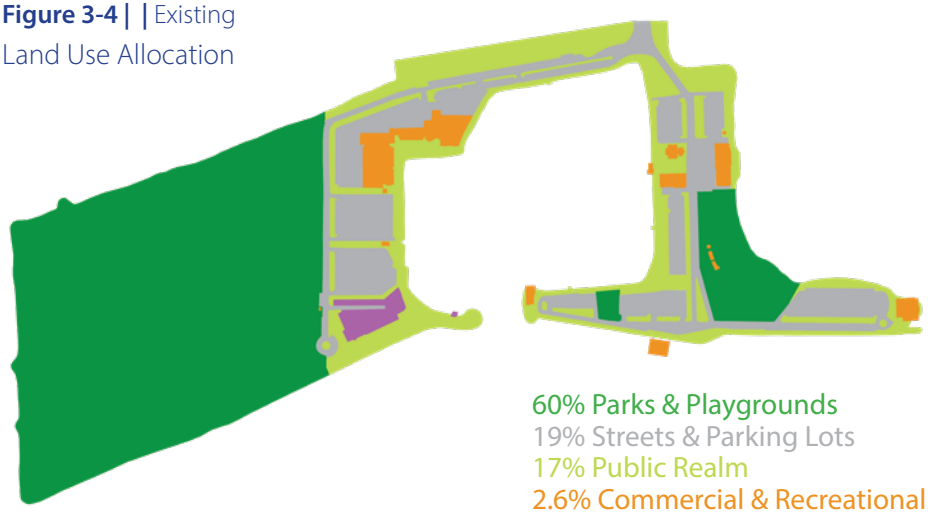
Available at: https://berkeley.municipal.codes/BMC/OfficialZoningMap

3.2 Land Use Allocation

Current land use at the Berkeley Waterfront is overwhelmingly dedicated to open space, comprising 77% of land area in the form of significant waterfront parks, natural areas, and trails. Access to these public landscape amenities as well as the Berkeley Marina and other water-based recreation is supported by streets and parking lots, which cover 19% of the remaining area. Commercial and Recreational buildings cover 2.6% of land area, while Marine Services and Fuel uses (Marine Center's building and boat yard) account for the remaining 1.4%.

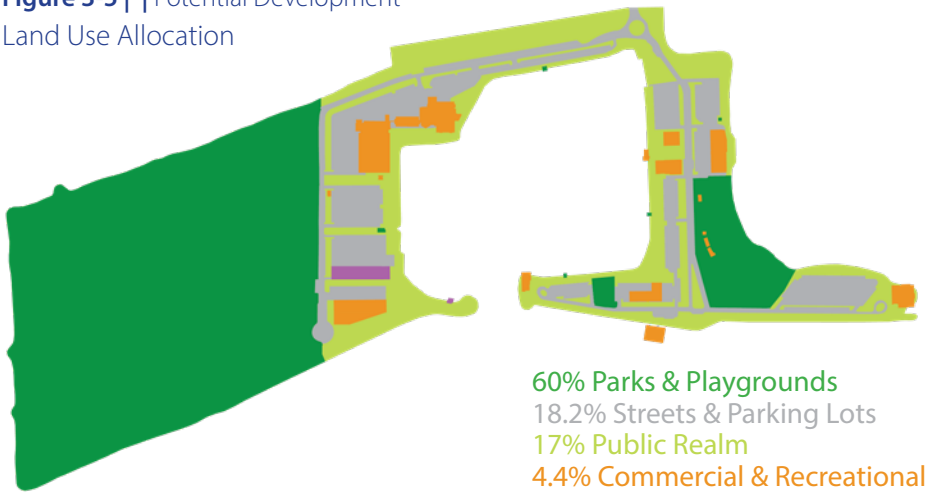
Potential changes to future land use allocation seek to maintain the existing land area coverage dedicated to open space, including municipal parks, trail systems, and public realm landscape. The area allocated to Marine Services and Fuel will be reduced by more than half of its current area to 0.4%. Commercial facilities will increase to 4.4%, reflecting development of additional visitor-facing uses at the Berkeley Waterfront such as hotel and food service to support public access to recreation and nature. This increase will be balanced by potential reductions to parking land coverage, as the result of parking redesign and demand management. Collectively, this potential redevelopment approach will enhance opportunities for residents and visitors to experience the Berkeley Waterfront's natural and recreational resources, while simultaneously protecting and strengthening those essential resources and potentially increasing revenue from expanded commercial enterprises.

Figure 3-4 | | Existing Land Use Allocation



60% Parks & Playgrounds
19% Streets & Parking Lots
17% Public Realm
2.6% Commercial & Recreational
1.4% Marine Services & Fuel

Figure 3-5 | | Potential Development Land Use Allocation



60% Parks & Playgrounds
18.2% Streets & Parking Lots
17% Public Realm
4.4% Commercial & Recreational
0.4% Marine Services & Fuel

Table 3-1 | Waterfront Land Use Allocation

	Existing Land Use Allocation		High Development Land Use Allocation		Max Development Land Use Allocation	
	Acres	%	Acres	%	Acres	%
Public & Quasi-Public Uses						
Club / Lodge, Environmental Center, Community, Recreational	0.5	0.3%	0.5	0.3%	0.5	0.3%
Parks & Playgrounds	102	60%	102	60%	102	60%
Public Landscape & Trails	29	17%	29	17%	23	13%
Subtotal	132	**77%**	132	**77%**	126	**74%**
Food & Alcohol Service, Lodging, Entertainment & Assembly Uses						
Hotel, Food & Beverage, Commercial Recreation	4.8	2.8%	7.5	4.4%	13.5	7.9%
Subtotal	4.8	**2.8%**	7.5	**4.4%**	13.5	**7.9%**
Maritime Uses						
Boat Repair & Service	1.99	1.2%	0.73	0.4%	0.73	0.4%
Ferry Access Point	N/A	N/A	TBD	TBD	TBD	TBD
Fuel Station, Gasoline	0.03	0.02%	0.03	0.02%	0.03	0.02%
Marina (Land-side elements)	0.34	0.2%	0.34	0.20%	0.34	0.20%
Maritime Office	0.11	0.07%	0.11	0.07%	0.11	0.07%
Subtotal	2.37	**1.38%**	1.1	**0.6%**	1.1	**0.6%**
Other Miscellaneous Uses						
Parking Lot / Parking Structure	22.26	13.0%	20.84	12.19%	19.2	11.2%
Subtotal	22.26	**13.0%**	20.8	**12.2%**	19.2	**11.2%**
Transportation Uses						
Vehicular Roads & Sidewalks	9.9	5.8%	9.9	5.8%	9.9	5.8%
Subtotal	9.9	**5.8%**	9.9	**5.8%**	9.9	**5.8%**

3.3 Land Use Regulations

Land use regulations, development standards, and design guidelines for the Berkeley Waterfront are intended to reflect and implement the community's vision for this significant civic resource as outlined in Section 2. The Waterfront Specifc Plan will also further the overarching goals and policies of the City's General Plan – including but not limited to promoting community health and wellness, equitable access to recreation, and preservation/enhancement of Berkeley Waterfront ecological resources.

The Berkeley Waterfront

The "Berkeley Waterfront" is the entire area shown below in blue in Figure 3-6, containing all public tidelands to the west of Eastshore State Park, bounded by the western end of the current 3,000 foot Berkeley Pier. The "Berkeley Marina" refers to a subarea of the Berkeley Waterfront: the main harbor with 1,000 boat slips. All of the private tidelands west of Interstate 80 are now part of McLaughlin Eastshore State Park. Public and Private Tidelands are generally all subject to the Public Trust Doctrine.

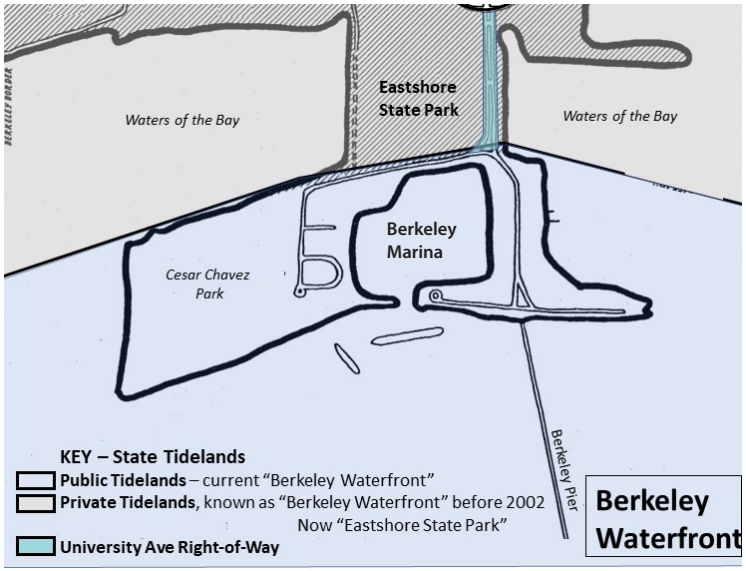


Figure 3-6 | | Diagram of The Tidelands

Uses on California public trust lands must serve statewide, as opposed to purely local, public purposes. Public trust uses are generally limited to water-dependent or related uses, and include commerce, fisheries, navigation, ecological preservation, and recreation. Examples of current uses at the Berkeley Waterfront that reflect these public purposes include: marinas, docks, piers, sportfishing, swimming, boating, habitat, open space, and visitor-serving facilities such as hotels, restaurants, shops, parking lots, and restrooms. Uses not permitted on public trust lands are those that do not serve a public purpose, and can be located on non-waterfront property, such as residential, non-maritime related commercial, and certain office uses.

WSP Land Use Regulations

Land use regulations are intended to enhance the Berkeley Waterfront experience for all users, respect the unique waterfront setting, and support water-related businesses and activities. Table 3-2 identifies allowed land uses and required permits for development in the Berkeley Waterfront. All land uses are consistent with definitions included in BMC Chapter 23.502 (Glossary), except as noted. Permit requirements are described in BMC Chapter 23.406 (Specific Permit Requirements). Permits required for land uses shown in Table 3-2 apply to both:

1. The initial establishment of a land use in a Berkeley Waterfront area or new building

2. The change of use in an existing Berkeley Waterfront area, building, or portion of a building

Land uses that are not specifically identified in Table 3-2 are not permitted in any part of the Berkeley Waterfront. The areas listed in Table 3-2 correspond to the areas shown in Figure 3-7.

Figure 3-7 | Waterfront Land Use Areas

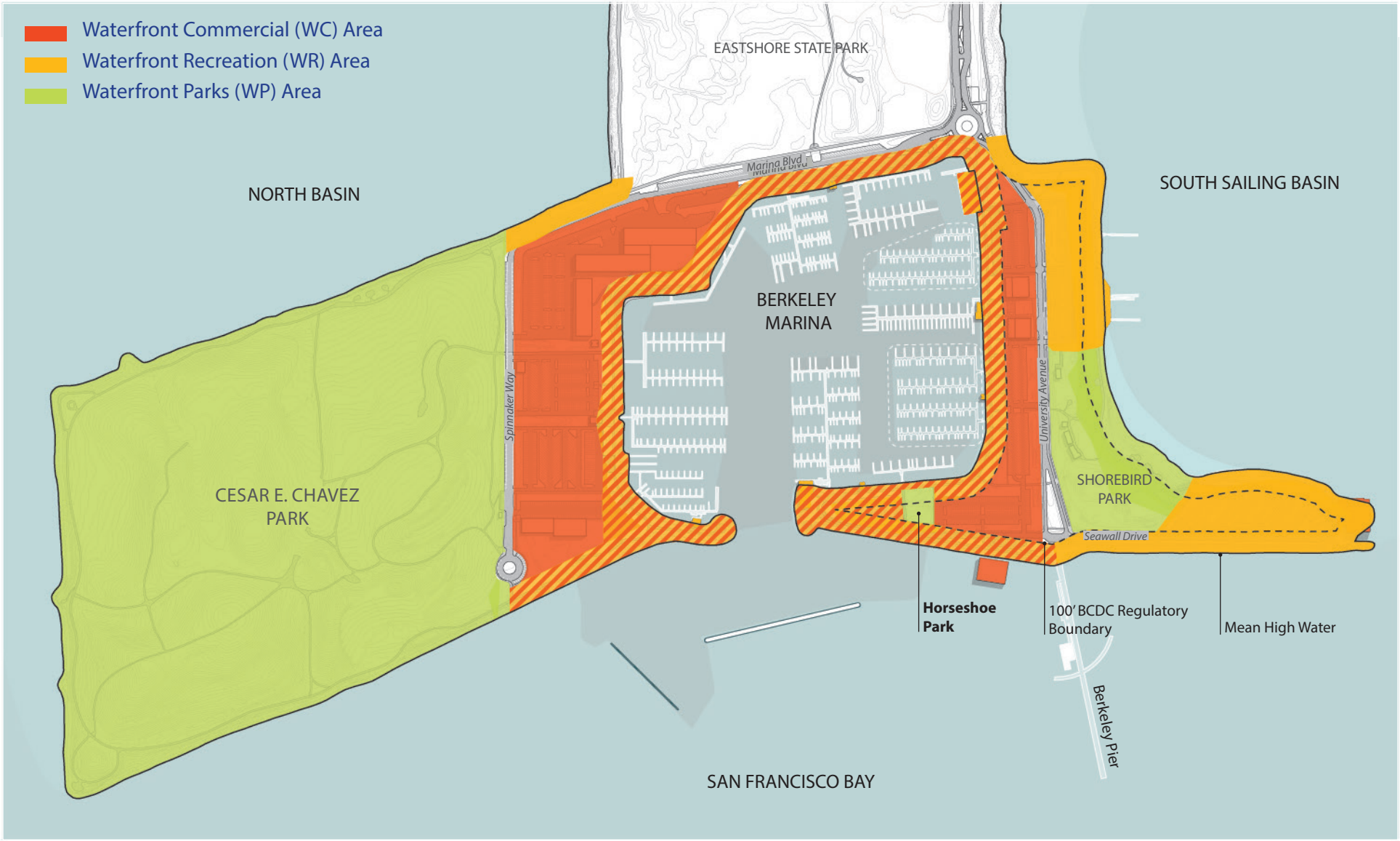


Table 3-2 | Allowable Land Uses in the Waterfront

LAND USE	Area WC Waterfront Commercial	Area WR Waterfront Recreational	Area WP Waterfront Park	Use-Specific Regulations Guidelines
Residential Uses				
No Allowable Uses				
Public & Quasi-Public Uses				
Club / Lodge	UP(PH)	UP(PH)	NP	consistent with the Public Trust
Community Center	AUP	AUP	AUP (Shorebird & Horseshoe) NP (Cesar Chavez)	consistent with the Public Trust
Museum / Cultural Center*	AUP	AUP	NP	consistent with the Public Trust
Park / Playground	ZC	ZC	ZC	
Retail Uses				
Retail, waterfront-related*	ZC	ZC	NP	consistent with the Public Trust
Personal and Household Service Uses				
No Allowable Uses				
Office Uses				
Maritime Uses only, related to Tideland Trust uses (see below)				
Food and Alcohol Service, Lodging, Entertainment & Assembly Uses				
Commercial Recreation Center, waterfront-related*	AUP	AUP	NP	consistent with the Public Trust
Food Service Establishment	AUP	AUP	NP	limited to first two floors or usable open space on upper levels; direct entries from ground level
Group Class Instruction, waterfront-relate	ZC	ZC	NP	consistent with the Public Trust
Hotels, Tourist	UP(PH)	UP(PH)	NP	permitted in subarea WR-2 only, where adjacent to WC subarea

ZC = Zoning Certificate
AUP = Administrative Use Permit
UP(PH) = Use Permit (Public Hearing)
NP = Not Permitted
***** *Denotes land uses not currently included in the Berkeley Municipal Code / BMC Glossary*

LAND USE	Area WC Waterfront Commercial	Area WR Waterfront Recreational	Area WP Waterfront Park	Use-Specific Regulations Guidelines
Maritime Uses (Land)*				
Boat Repair & Service*	UP(PH)	NP	NP	
Boat Sales & Rentals*	ZC	ZC	NP	
Boat Fuel Station, Gasoline & Alternative Fuel*	UP(PH)	NP	NP	
Ferry Access Point*	UP(PH)	UP(PH)	NP	
Marina*	ZC	ZC	NP	dry land portion
Maritime Office*	ZC	ZC	NP	accessory to & supportive waterfront recreation / Tidelands Trust
Recreational Boating & Water Use*	ZC	ZC	NP	
Visitor Services*	ZC	ZC	ZC	
Maritime Uses (Water)*				
Maritime uses over water (revetment crest) are subject to compliance with allowable uses as regulated by State Lands Commission, BCDC, and USACE.				
See Section 2.5 Berkeley Marina Operations for further information.				
Industrial & Heavy Commercial Uses				
No Allowable Uses				
Incidental Uses				
Alcoholic Beverage Service	ZC (beer&wine) AUP (spirits)	ZC (beer&wine) AUP (spirits)	NP	23.310 Alchoholic Beverage Sales and Service
Live Entertainment	ZC (unamplified) AUP (amplified)	ZC (unamplified) AUP (amplified)	NP	
Outdoor Cafe Seating	ZC	ZC	NP	
Other Miscellaneous Uses				
Maintenance Facility & Yard	ZC	ZC	ZC	City-owned only, accessory to & supportive of open space & waterfront recreation
Parking Lot	UP(PH)	UP(PH)	NP	23.322 Parking & Loading
Parking Structure	UP(PH)	NP	NP	23.322 Parking & Loading
Public Market, Open Air	AUP	AUP	NP	
Transportation Services*	ZC	ZC	ZC	
Temporary Uses & Events				
Special events (including but not limited to concerts, festivals, parades, sporting and community events) are subject to "Discretionary Use Permits" issued by City Berkeley Parks, Recreation & Waterfront Department. Special events do not require Zoning Permits. No permanent structures or infrastructure.				
See Section 2.10 Waterfront Special Events & Programming for further information.				

Allowable Land Uses

The following uses are allowed and encouraged at the Berkeley Waterfront, within designated subareas as indicated in Table 3-2:

Waterfront Commercial (WC) Area

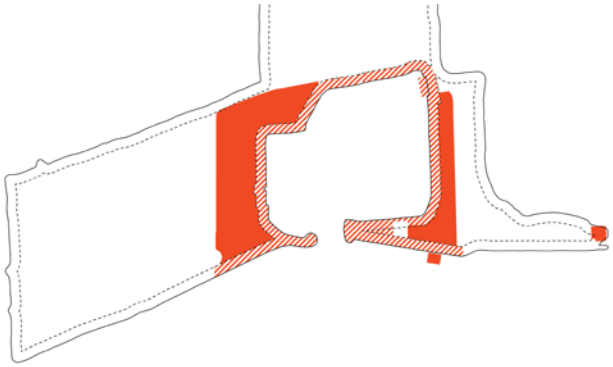
Commercial uses should support public access to Berkeley Waterfront recreation and open space, with an emphasis on protection of existing natural resources and ecological resilience. Visitor-serving facilities such as hotels, food service at a range of price points, and restrooms are encouraged at the Berkeley Waterfront. Projects should integrate parking demand management strategies to maximize efficient use of the Berkeley Waterfront's existing parking lots; increase use of public transportation to the Berkeley Waterfront; and encourage pedestrian / bike circulation throughout the Waterfront area.

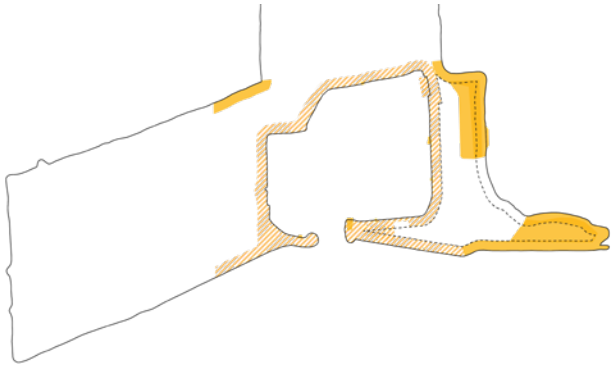
Waterfront Recreation (WR) Area

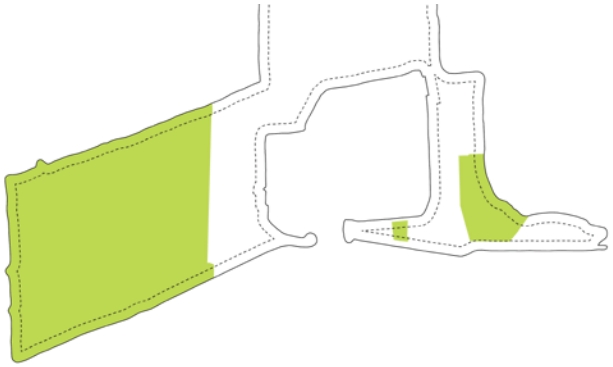
Active and passive recreational uses are encouraged at the Berkeley Waterfront, with an emphasis on water-based uses and opportunities to provide diverse experiences of the water for all users. Existing facilities form the foundation for recreational uses at the Berkeley Waterfront, including the Berkeley Marina, waterfront trail system, public parks, and diverse water-based commercial and non-profit organizations. In addition to enhancing these existing amenities, new uses are encouraged that are compatible with the Berkeley Waterfront's nature-based character and reinforce equitable public access.

Waterfront Parks (WP) Area

Access to nature at the Waterfront for all Berkeley residents and visitors is prioritized in the Waterfront Specific Plan. In addition to protecting and enhancing the Berkeley Waterfront's existing parks (Cesar Chavez Park, Shorebird Park, and Horeshoe Park) and trail systems, improvements to the overall Berkeley Waterfront public realm (all land outside of building envelopes) will support placemaking, wayfinding, ecological resilience, and opportunities for interim uses with diverse programming, such as festivals and events.

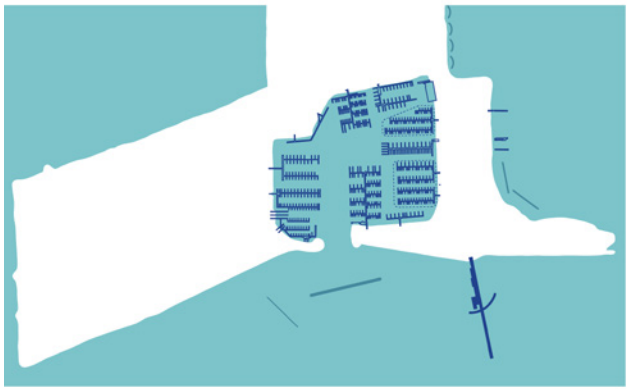






Water Area

Water-related uses and associated structures shall be permitted on both land and open water areas of the Berkeley Waterfront. This includes the marina, piers, docks, breakwaters, and watercraft launch facilities, subject to all required regulatory approvals. Opportunities to enhance existing facilities or introduce new complementary water-based uses or facilities that support community access to waterfront recreation are encouraged.



3.4 Development Standards

The development standards in Table 3-3 will be codified through zoning code changes adopted concurrently with this Specific Plan. The Waterfront Specific Plan identifies distinct subareas, which each have different physical characteristics and contexts.

Different use limitations (see Table 3-2 - Allowable Land Uses) and associated development standards apply to these subareas. The intent of these development standards, in coordination with design guidelines, is to provide clarity about what project type and scale are allowed, in addition to ensuring that design quality, character, and site integration are consistent with the overall vision for the Berkeley Waterfront as a shared community resource.

Berkeley Waterfront development standards are intended to allow a range of development projects at the Berkeley Waterfront that provide equitable public access, diverse recreational opportunities, and environmental resilience.

Waterfront Specific Plan Subareas

The Waterfront Specific Plan identifies eight (8) subareas of the zones mentioned in Section 3.3, which have distinct existing land uses and environmental contexts. Different use limitations and development standards are provided for each subarea. Future development should reinforce nature and recreation as essential to Berkeley Waterfront placemaking and identity. The greatest heights and intensity of development are focused in areas that are already developed, within the context of transportation and mobility improvements, environmental resilience, and opportunities for enhanced Berkeley Waterfront recreation and non-vehicular circulation. All future development should reinforce a cohesive Berkeley Waterfront public realm fabric.

Non-Conforming Uses

Berkeley shall provide for the reasonable continuance, modification, and /or termination of uses and structures existing as of the date of the adoption of the Waterfront Specific Plan that do not comply with the regulations and standards of the Waterfront Specific Plan. Berkeley Municipal Code Section 23.324 includes regulations for the development, use, change, expansion or alteration of nonconforming uses and structures.

Figure 3-8 | Waterfront Development Subareas

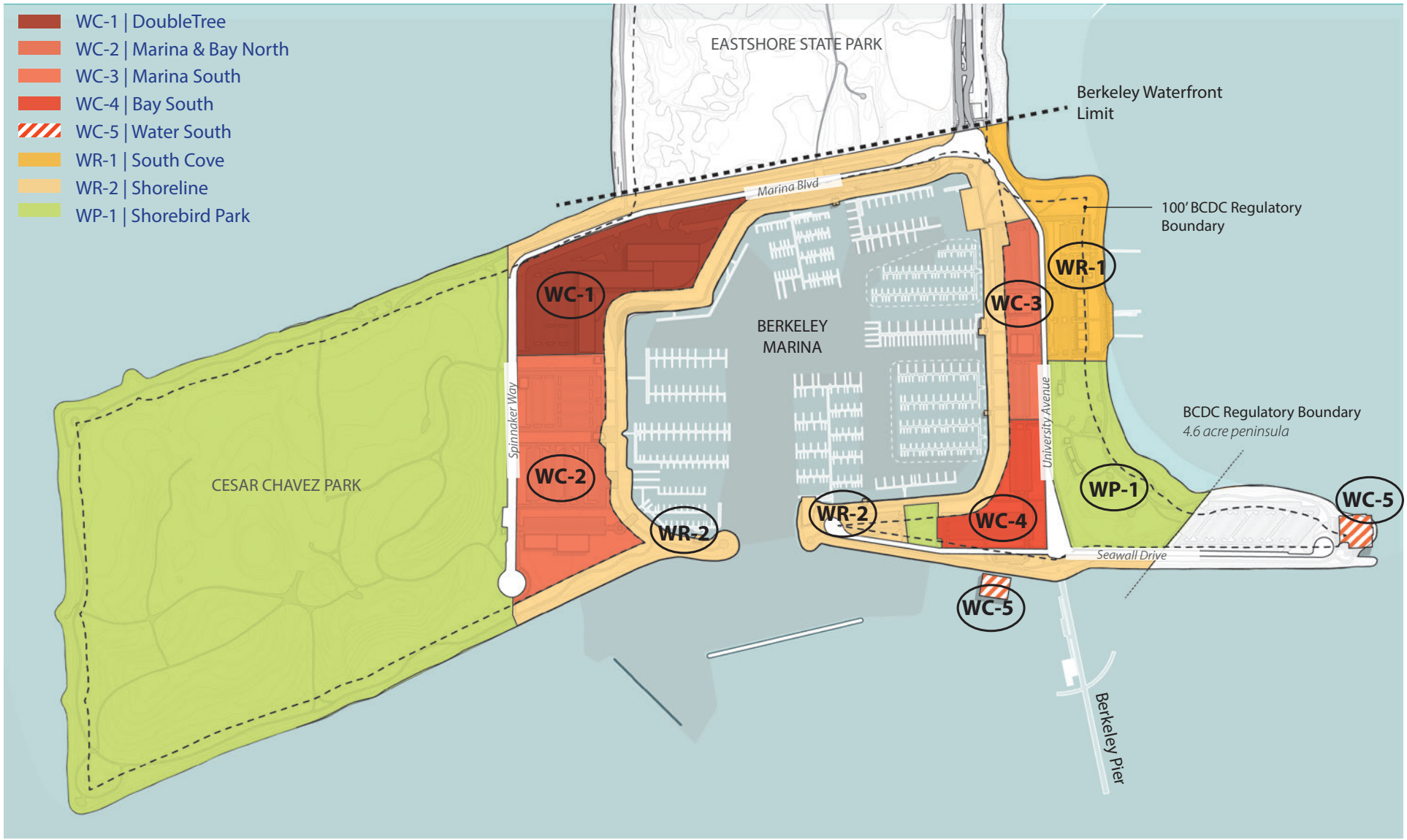


Table 3-3 | Waterfront Subarea Development Standards

		Area WC **Waterfront Commercial**				
		Subarea WC-1 Doubletree	**Subarea WC-2** Marina & Bay North	**Subarea WC-3** Marina South	**Subarea WC-4** Bay South	**Subarea WC-5** Over Water
Finished Floor Elevation		CA State Sea Level Guidelines				
Building Height, Maximum		65'	45'		65'	*Improvements or renovations only to existing structures; no new development.*
Setback from Revetment Crest, Minimum		30' [1] [2]				
Building Separation, Minimum		20'				
Building Subarea Coverage, Maximum		45%	25%			
Pedestrian Entrance Frequency, Minimum		50' min.	30' min.		50' min.	
Ground Floor Uses, Minimum		40% Active Use	60% Active Use	80% Active Use	60% Active Use	
Ground Floor Transparency, Minimum		60% water-facing facades [4] 40% land-facing facades [4]				
Usable Open Space, Minimum		5 sq. ft per 100 gross sq. ft [5]				
Off-Street Parking, Maximum (no Minimum)	**Lodging Uses**	0.9 per room	0.5 per room	0.5 per room	0.5 per room	N/A
	Non-Lodging Uses	no requirement				

Notes

[1] Exceptions for patio areas, single story height structures with roof decks, recreational amenities, and other elements that aid the transition from private to public realm Exceptions will also be considered for amenities that enhance the waterfront recreational and public realm experience

[2] Revetment crest to be located in coordination with City per SLR 2100 projections at time of development, per CA State Sea Level Guidelines.

[3] An AUP may be granted to reduce useable open space requirements if shown to be necessary to build an all-electric building.

[4] Facades between 3 and 10 feet above grade (doors and transparent windows) to allow maximum visual interaction between exterior pedestrian areas and building interior. Dark or mirrored glass will not satisfy this requirement. Facades within 100' of shoreline edge are "water-facing".

[5] Each square foot of usable open space provided as publicly accessible open space shall be counted as two square feet towards achievement of minimum requirement.

		Area WR **Waterfront Recreational**		Area WP **Waterfront Park**
		Subarea WR-1 South Cove	**Subarea WR-2** Shoreline	**Subarea WP-1** Shorebird Park
Finished Floor Elevation		CA State Sea Level Guidelines		
Building Height, Maximum		35'		25'
Setback from Revetment Crest, Minimum		30' [1] [2]		100' [1] [2]
Building Separation, Minimum		20'		no requirement
Building Subarea Coverage, Maximum		15%	10%	2%
Pedestrian Entrance Frequency, Minimum		30' min.	20' min.	30' min.
Ground Floor Uses, Minimum		80% Active Use		80% Active Use
Ground Floor Transparency, Minimum		60% [4]		no requirement
Usable Open Space, Minimum		no requirement		
Off-Street Parking, Maximum (no Minimum)	**Lodging Uses**	N/A		
	Non-Lodging Uses	no requirement		

Notes

[1] Exceptions for patio areas, single story height structures with roof decks, recreational amenities, and other elements that aid the transition from private to public realm. Exceptions will also be considered for amenities that enhance the waterfront recreational and public realm experience

[2] Revetment crest to be located in coordination with City per SLR 2100 projections at time of development, per CA State Sea Level Guidelines.

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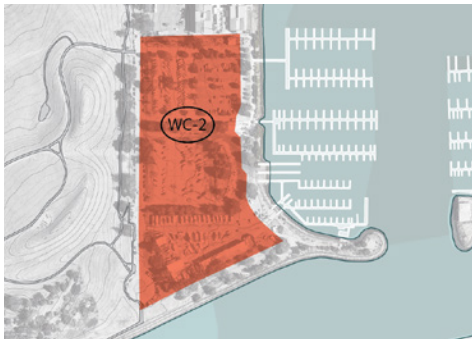
[5] Each square foot of usable open space provided as publicly accessible open space shall be counted as two square feet towards achievement of minimum requirement.

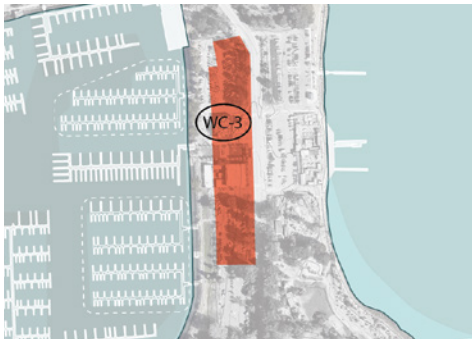
Waterfront Subareas

Subarea WC-1
Doubletree Hotel

Subarea WC-2
Marina & Bay North



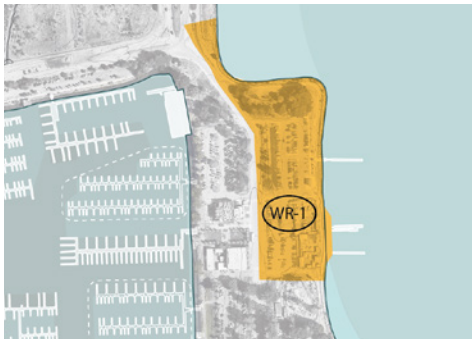
Subarea WC-3
Marina South



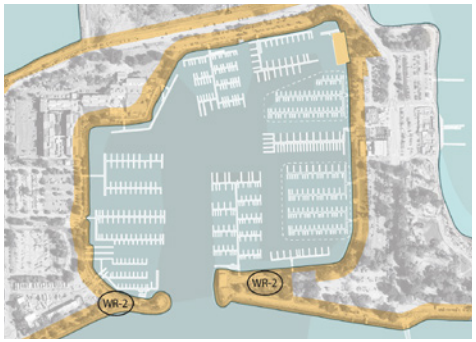
Subarea WC-4
Bay South

Subarea WC-5
Over Water

Subarea WR-1
South Cove



Subarea WR-2
Shoreline



Subarea WP-1
Shorebird Park

Figure 3-9 | Inner Harbor Massing and Setback Study

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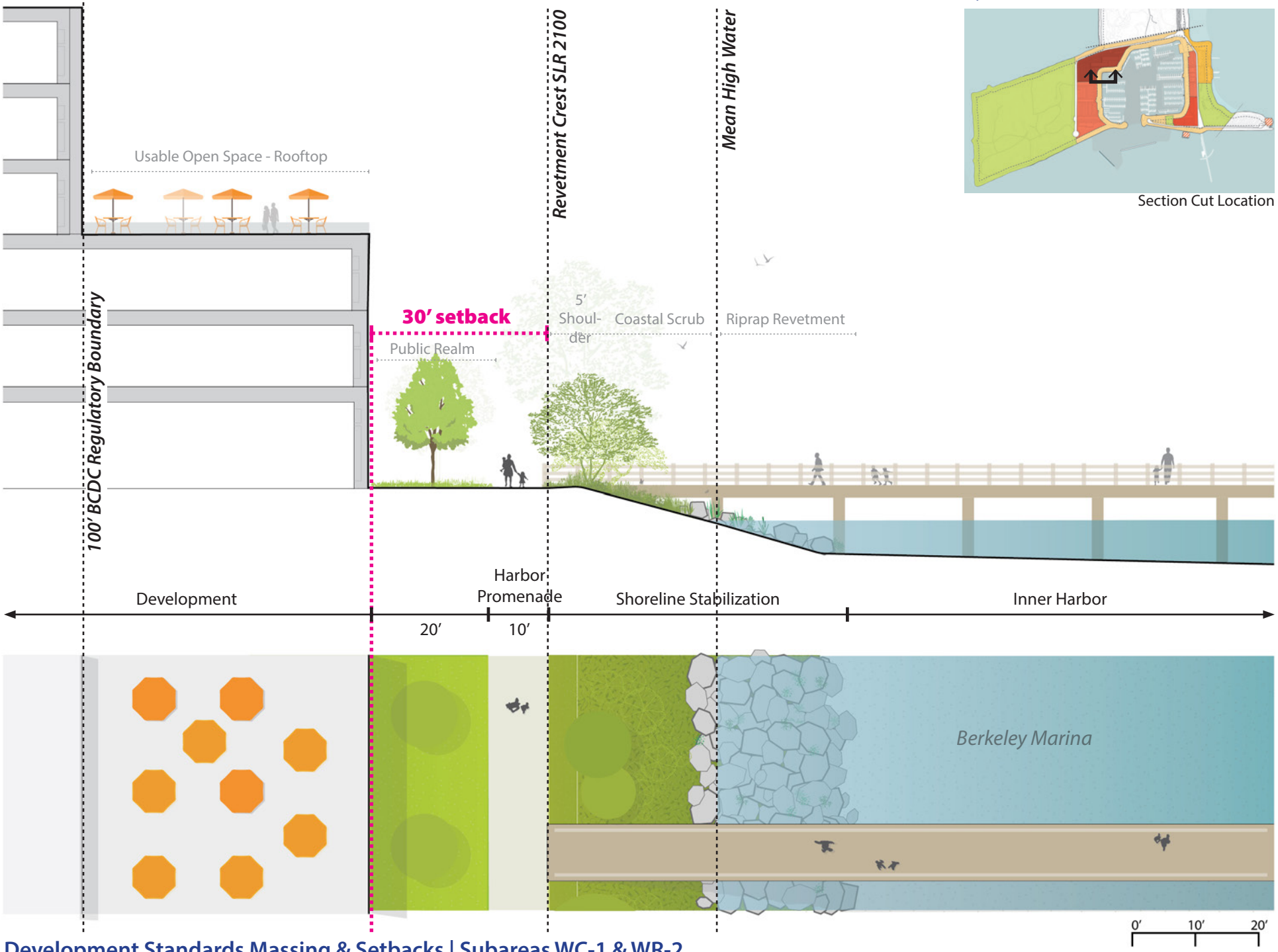
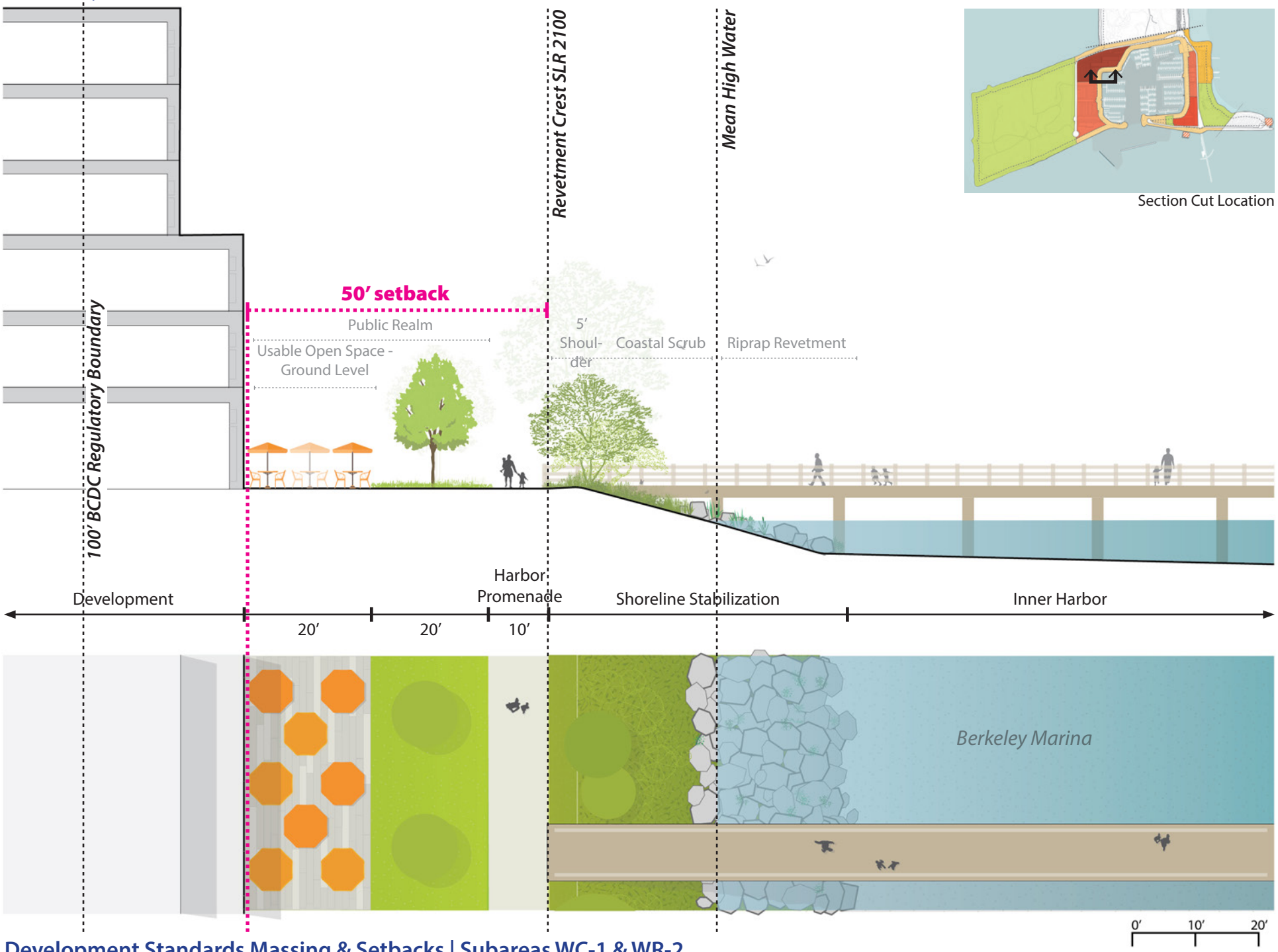


Development Standards Massing & Setbacks | Subareas WC-1 & WR-2

Figure 3-10 | Inner Harbor Massing and Setback Study



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Development Standards Massing & Setbacks | Subareas WC-1 & WR-2

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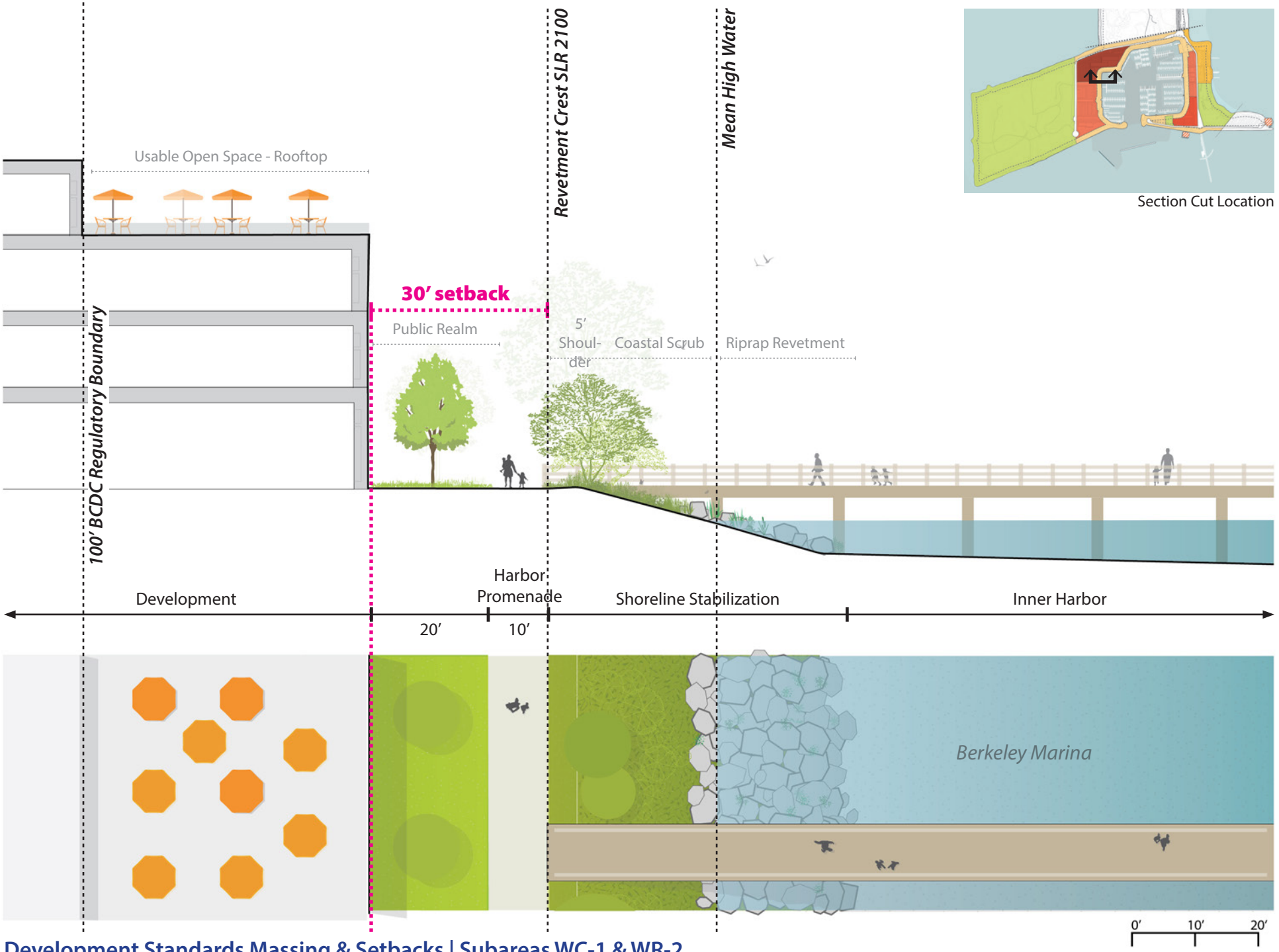
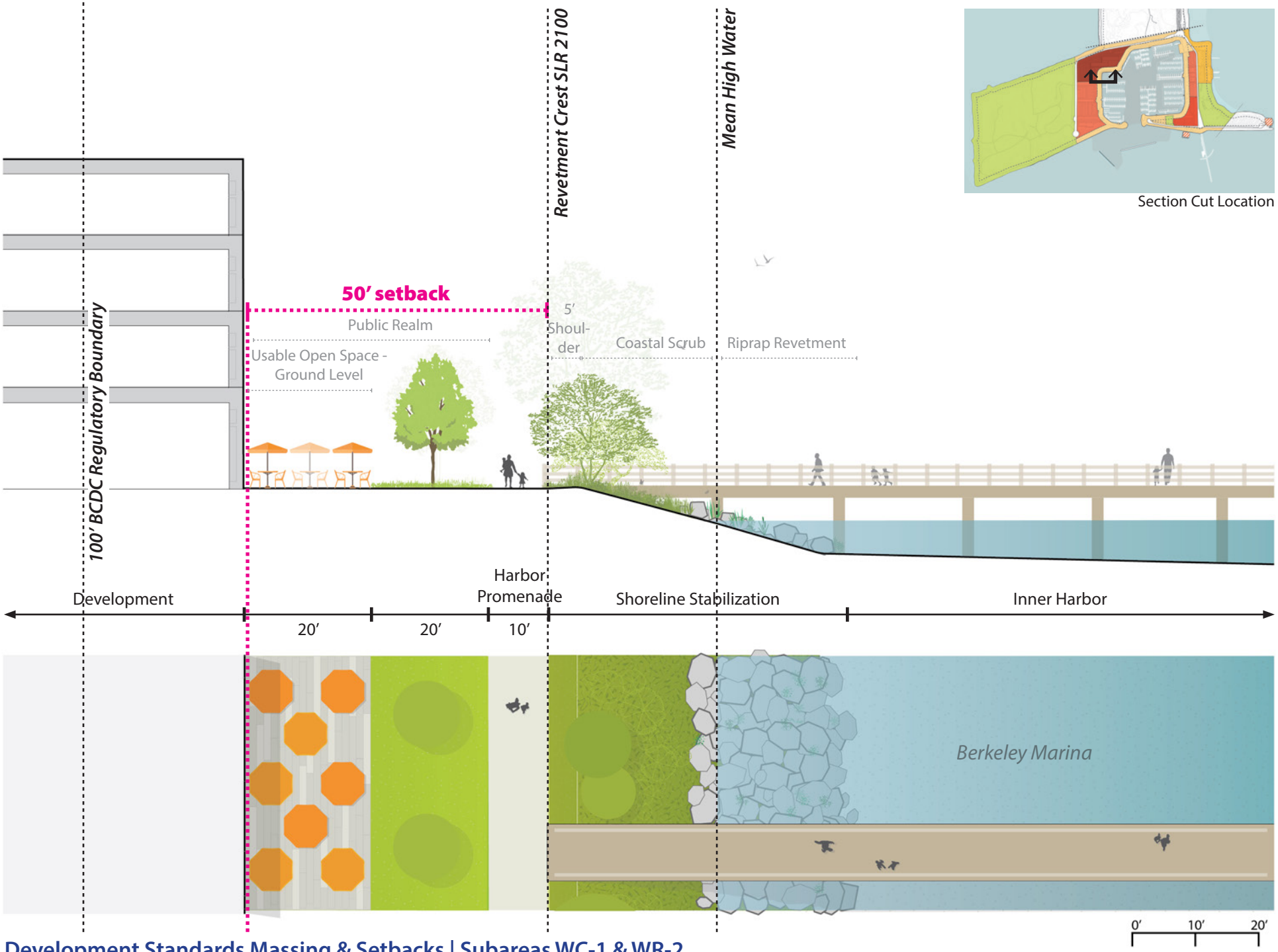


Development Standards Massing & Setbacks | Subareas WC-1 & WR-2



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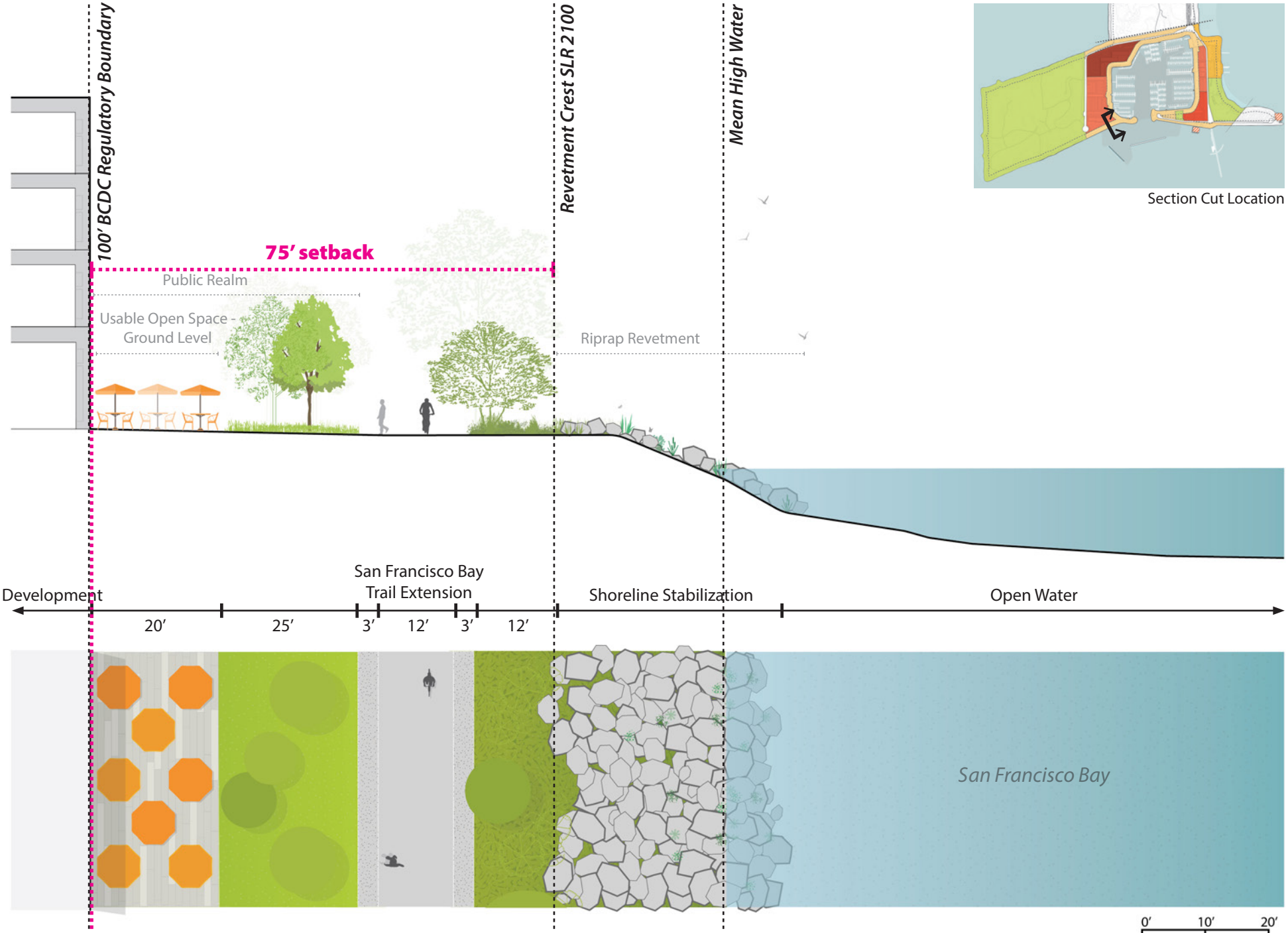
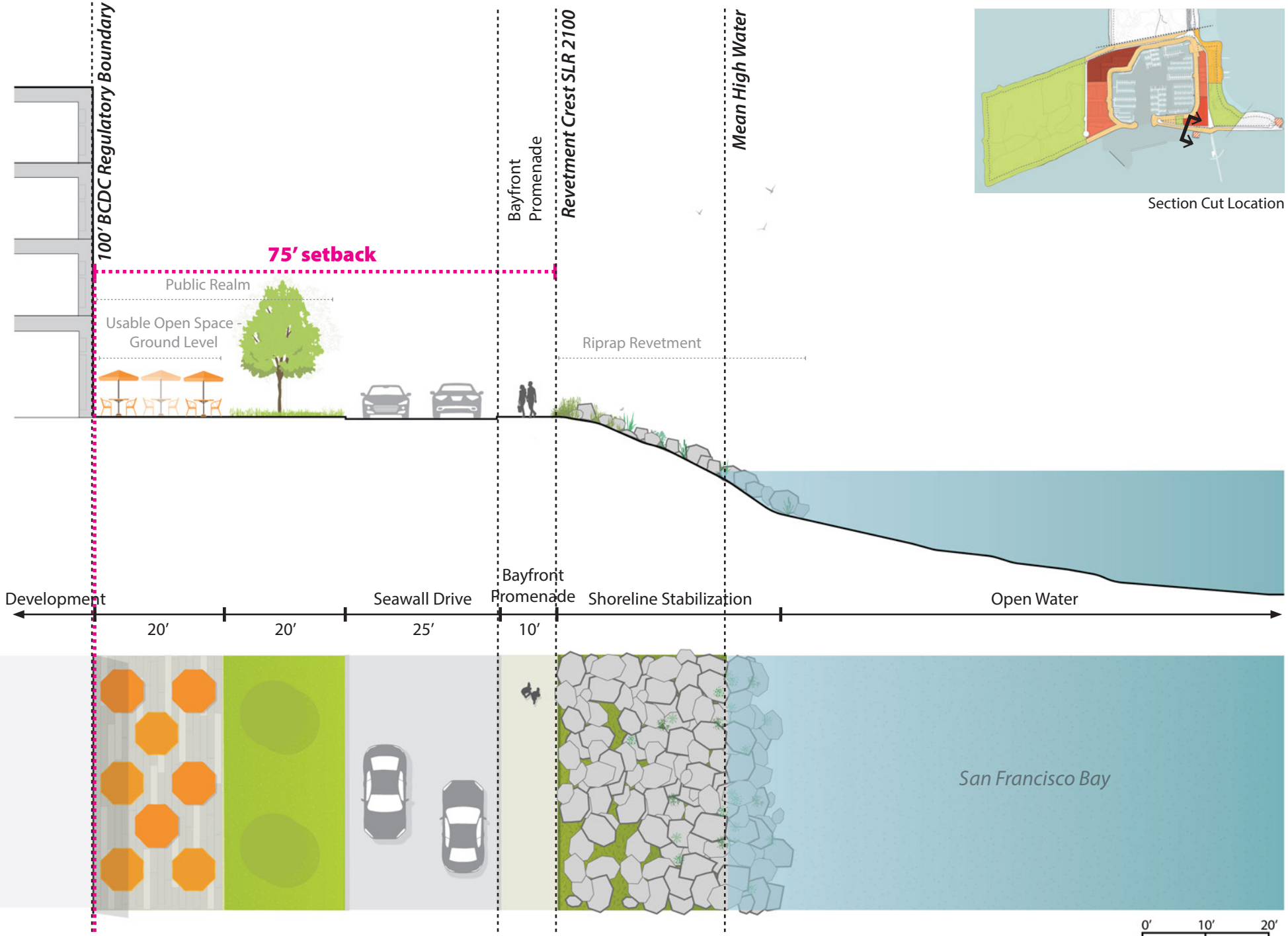
Development Standards Massing & Setbacks | Subareas WC-1 & WR-2

Figure 3-13 | Bayfront North Massing and Setback Study

Section Cut Location



Development Standards Massing & Setbacks | Subareas WC-2 & WR-2



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Development Standards Massing & Setbacks | Subareas WC-4 & WR-2

3.5 Design Guidelines

The WSP Design Guidelines outline important areas for consideration during individual project design, aiming to support development that is consistent with the WSP's community-driven vision for future development at the Waterfront. They provide broad areas for developers and City staff to consider, serving as a resource to evaluate specific development project proposals. These guidelines are intentionally flexible to encourage creative and high quality design, while adapting to emerging and future design trends and best practices.

The identity of the Berkeley Waterfront is defined by its immersive coastal environment and diverse recreational amenities. Development should ensure that the landscape and public access are prioritized, while new structures are designed to recede through careful massing, façade articulation, and material selection. Enhancement of adjacent public realm areas and inclusion of public ground-floor uses will be essential to integrate buildings and renovated parking lots with the broader Berkeley Waterfront.

Sustainable infrastructure systems that support broader City goals for carbon neutrality and resilience to evolving environmental conditions due to climate change will require close collaboration with the community of public and private stakeholders at the Berkeley Waterfront, reinforcing a cohesive waterfront character and placemaking.

The following guidelines provide a framework for evaluating development project proposals to ensure high-quality and site-specific design, while encouraging and embracing creativity through flexible and adaptable parameters. Guidelines are organized into (5) inter-related areas of focus, which supplement requirements in the Berkeley Municipal Code and Berkeley Design Review Parameters.

Waterfront Buildings

New and renovated buildings should be designed for sensitive integration within the Berkeley Waterfront landscape. Incorporate the following design strategies to effectively integrate buildings into the existing Berkeley Waterfront and broader cityscape:

Contextual Waterfront Design | Buildings at the Berkeley Waterfront should be designed to integrate with the landscape, with an emphasis on appropriate mass and bulk.

Waterfront Sensitivity | All new landscape and building designs shall have particular sensitivity within100' from mean high water to maximize indoor outdoor flow and an inviting design that integrates the user experience with the waterfront setting.

Public Entrances | Building entrances should be located where they are most visible and welcoming from adjacent public areas and pathways.

Ground Floor Uses | Ground floors of all buildings should include publicly-accessible uses on the ground floor, including lobby, restaurant, or café areas. Maximize visibility between the inside and the outside at the ground level at these areas as well as non-public areas to reduce the creation of visual "walls" within the landscape of the Berkeley Waterfront.

Cohesive Materials | A broad range of construction products is acceptable, with an emphasis on natural and sustainable materials such as FSC-certified wood, glass, and recycled metals. Opaque surfaces should be colored to recede into the landscape, based on adjacency to vegetation or water.

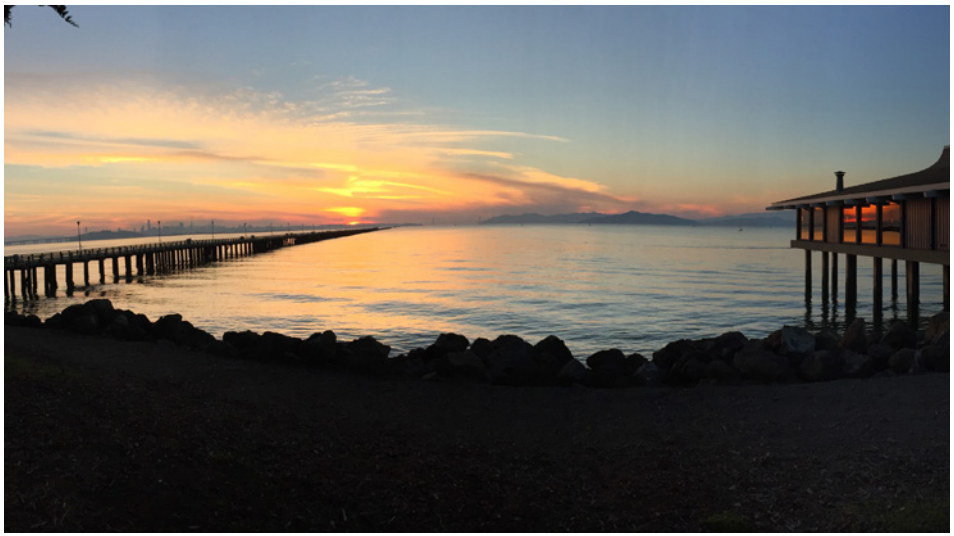
Waterfront Viewsheds

The Berkeley Waterfront's remarkable setting within ecologically rich environment of the San Francisco Bay is essential to enduring value. Prevent negative impacts of redevelopment to the following priority viewsheds, and seek opportunities to positively impact or improve viewsheds:

Viewsheds to Water | Development should be designed with attention to how it impacts views from the Berkeley Waterfront or adjacent urban areas out to the San Francisco Bay. Massing should be strategically designed so that buildings block views to water as little as possible, and material palettes should help buildings to visually recede within the waterfront landscape as much as possible.

Viewsheds to Land | Views from watercrafts on the Bay back towards Berkeley are also a priority, requiring similar massing and material considerations so that land based natural resources such as the EastshoreState Park, Cesar Chavez Park and Shorebird Park and the Berkeley skyline are prioritized.

Viewsheds from Redevelopment | High-quality long-term development will include leveraging the spectacular natural setting of the Berkeley Waterfront. Views to the water should be prioritized from both indoor and outdoor spaces, as well as attention to how development may enhance views from other buildings or structures at the Berkeley Waterfront.



Waterfront Public Realm

Incorporate the following design strategies to support a cohesive Berkeley Waterfront landscape, reinforcing placemaking and equitable public access:

Shared Public Open Space | Integration with adjacent public realm may include open space with open lawns, shaded seating, or small plazas that engage community use, and emphasize the integration of development and landscape. Safe lighting should also be incorporated between all buildings and adjacent public trails and streets. Fencing is not allowed, with exceptions for screening utilities and waste storage areas.

Pedestrian Circulation | New developments should incorporate clear and welcoming connections to Berkeley Waterfront trails and pathways. Fences at the edge of development are not allowed, except where they are associated with storage of recreational equipment.

Waterfront Plant Communities | Recommended native and adapted species are included as a resource – targeted to the specific objectives of the Berkeley Waterfront's diverse landscape typologies. All new plantings should be reviewed and approved for consistency with the Berkeley Waterfront's identified plant communities, maintenance requirements, and resilience to evolving climate conditions.

Outdoor & Rooftop Usable Open Space | Programmed outdoor spaces are recommended as part of any new development or renovation (i.e. outdoor dining or seating). In addition, rooftop patios with programmed space and intensive or extensive green roofs are recommended as a way to further engage the spectacular views at the Berkeley Waterfront.

Mobility

Incorporate the following design strategies to renovate existing surface parking lots, with a priority on environmental sustainability and resilience:

Parking Lots as Public Space | Due to the unique characteristics of the Berkeley Waterfront, parking lots should be designed as an extension of the public realm with an appropriate amount of landscape to create a comfortable experience.

Waterfront Circulation | Circulation at the Berkeley Waterfront should facilitate micromobility and pedestrian connectivity between destinations at the Berkeley Waterfront further reducing reliance on cars.

Electric Vehicle Charging Stations | Parking lots should consider incorporating more electric vehicle charging stations on both the north and south side of the Berkeley Waterfront, in addition to the electric vehicle charging stations that already exist.

Cool Materials & Solar Shading | New or renovated parking lots should include elements such as large canopy trees and solar power shade structures where possible.

On-Site Stormwater Management | New or renovated parking lots should strive to manage stormwater on site using a combination of rain gardens, permeable pavements, and underground cisterns as appropriate. Captured stormwater may be reused for building systems or landscape irrigation, reducing potable water use and contributing to enhanced resiliency during periods of extreme drought.

Waterfront Sustainability & Resiliency

Redevelopment at the Berkeley Waterfront is an opportunity to establish site assets that are enduring and adaptable to change.

Incorporate the following design strategies in new or renovated structures, in coordination with Berkeley's Green Building Requirements:

Sea Level Rise | All proposed re-development projects for recreational or commercial opportunities shall comply with CA State Sea Level permitting guidelines.

Ecological Sensitivity | Protecting and enhancing the ecological vitality of the Berkeley Waterfront is critical to placemaking character and enduring value of the Berkeley Waterfront as a shared natural resource for all residents and visitors.

Regional & Renewable Materials | New and renovated structures should prioritize inclusion of regional and rapidly renewable materials, including recycled steel, wood, stone, and concrete. In addition to mitigating ecosystem degradation and climate change impacts, regional materials encourage opportunities for façade construction that borrows from and blends with the local environment.

Low Carbon Design | New and renovated buildings should include decarbonization strategies, including electrification, energy efficiency, renewable energy generation, storage, and demand management.

3.6 Climate Adaptation & Resiliency

Climate change adaptation and resiliency at the Berkeley Waterfront should be integral to design and construction decisions for all future projects at the Waterfront. State and regional regulatory guidelines (i.e. BCDC) should be referenced at the time of project development to ensure compliance with current projections and best practices. Adaptation to the impacts of climate change and planning for a more resilient Berkeley Waterfront are strategically focused on the entire Berkeley Waterfront Area, supported by site-based adaptation strategies and development standards that support a holistic systems-based approach. Areas for project consideration outlined below are intended to supplement the City's *Resilience Strategy Plan* and *Climate Action Plan*, reinforcing the interdependency of the Berkeley Waterfront and broader City to establish a resilient urban landscape.

Climate adaptation at the Berkeley Waterfront will also require diverse sustainability strategies for the planning and design of public infrastructure and building systems to protect natural resources and reduce reliance on fossil fuels. Guided by Berkeley's Vision 2050, a comprehensive approach to upgrade and repair aging infrastructure to provide carbon-free electricity across a highly distributed system, systems at the Berkeley Waterfront should target site-based and area-wide opportunities to minimize and ultimately eliminate reliance on fossil fuel-based energy sources.

Sea Level Rise

The current shoreline edge is predominantly composed of riprap revetment with top elevation varying between 10' and 12'. Physical protection of the shoreline will continue to be a priority since the land is composed of capped municipal waste and construction fill. Projected sea level rise for planning purposes is based on the "100 Year Extreme Tide + Low Risk Aversion SLR" estimate. This estimate projects the upper end of the "likely range" of occurrence and anticipates concurrent 100-year extreme tide and storm surge conditions. Repairs to shoreline protection should establish revetment crest height 6" above this elevation. Site development, including rehabilitation of existing or construction of new buildings, and further should set finish floor elevation 1' above this elevation. A Berkeley Waterfront Sea Level Rise and Repair Plan should be established referencing the CA State Sea Level permitting guidelines.

Stormwater Management

As more extreme weather events result in precipitation events that exceed the capacity of existing systems, replacement and supplementing of conventional drainage with green infrastructure will be essential for Berkeley Waterfront resilience. Soft or hybrid natural systems can create multiple benefits beyond flood mitigation, including protecting the Berkeley Waterfront ecosystem by removing pollutants, beautifying the Berkeley Waterfront, and capturing stormwater for other uses such as building systems or landscape irrigation. Recommended green infrastructure for stormwater management at the Berkeley Marina include rain gardens, permeable pavement, and cisterns. Reducing site hardscape, green roofs, and enhancing the urban canopy at the Berkeley Waterfront as whole will also contribute to reducing site flooding and retention of stormwater on site, instead of diversion into the Bay's sensitive ecosystem.

Water Conservation

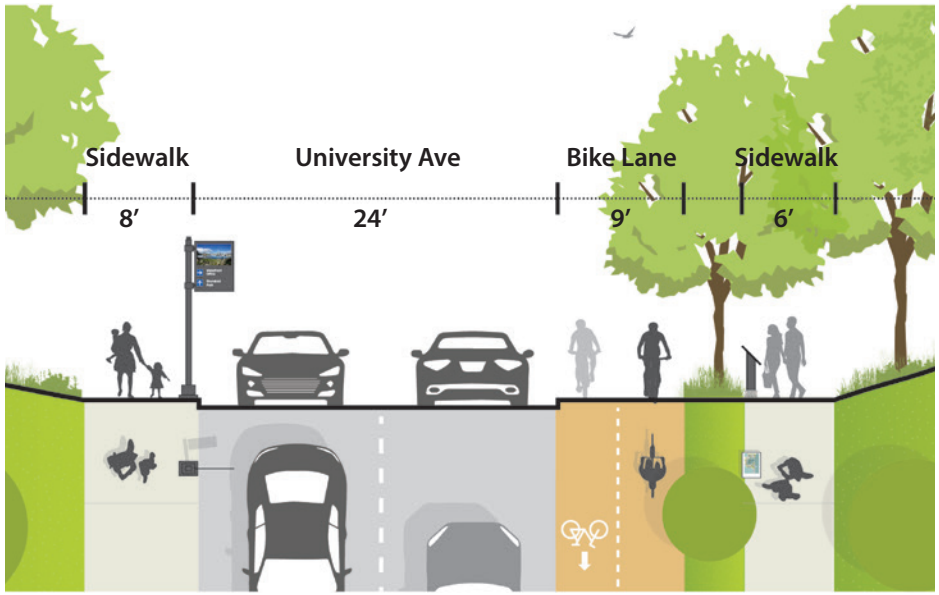
Paired with management of stormwater during extreme events is planning for the capture and reuse of this same water on site for building systems and landscape irrigation. Building water capture offers further opportunities to reduce potable water use at the Berkeley Marina, through graywater building systems that reuse this water for appropriate purposes such as toilets. As periods of drought occur more frequently, access to stored stormwater can be used for landscape irrigation. Selection of plant species will also be essential for establishing resilient plant communities that can withstand fluctuating precipitation levels. As climate change impacts both precipitation and temperature, planting zones have been shifting northward. Although the Berkeley Waterfront is currently in hardiness zone 10a, species identified with hardiness zones 9 and 10 (i.e. Santa Barbara) have proved particularly resilient in recent years. Both native and adapted plants that tolerate low water supply and urban conditions should be used throughout the Berkeley Waterfront, with inclusion of non-invasive species acclimated to warmer annual temperatures.

Clean Energy

As identified in the City's Resilience Strategy and Climate Action Plan, Berkeley seeks an energy system that, by 2050, delivers carbon-free electricity across a highly distributed system. Multiple and multifaceted changes to existing infrastructure and its uses will be required to achieve these ambitious carbon reduction goals. In general, these changes can be summarized as: 1) maximize energy efficiency, 2) electrify everything possible, 3) decarbonize and clean up the grid, 4) develop additional wind and solar power sources on public land and 5) phase out use of fossil fuels. Multiple and multi-faceted changes to existing infrastructure and its uses are required to achieve this goal, which will involve integrated public and private commitment to development that relies on renewable resources. Buildings will increasingly include energy generation and energy storage that have been traditionally taken care of by central utilities. We will be seeing more solar panels, microgrids, and batteries.

Complete Streets & Public Transit

In coordination with the Berkeley Complete Streets Policy, the implementation of complete streets design principles will be vital to the future Berkeley Waterfront. This can be defined as street design and infrastructure that allows for "safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods, users and operators of public transportation, emergency vehicles, seniors, children, youth, and families". This would include wayfinding elements such as signage and site furniture as well as allowing for multimodal travel in the Berkeley Waterfront, with a goal of reducing reliance on cars.



Resilient Ecologies

Incorporating ecological principles of design at the Berkeley Waterfront will supoort management of effects of climate change such as increased flooding and stormwater run-off. As climate change and its effects persist into the future, it is crucial to plan for not only the ecologies of the Berkeley Waterfront today, but also plan for adaptable plant communities in an uncertain future. This would include a planting palette of current native species, adapted species that are not invasive, in addition to plant communities that are projected to thrive at the Berkeley Waterfront over the course of the next 50 years, such as species from southern locations such as Santa Barbara.

Cooling Opportunities

The ongoing threat of climate change will continually be altering the conditions at the Berkeley Waterfront, such as potential increases in drought events and hotter days. Due to this, identifying strategic cooling opportunities at the Berkeley Waterfront will be crucial to ensure equitable access to destinations across the Berkeley Waterfront especially for those traveling by foot or bike. Cooling opportunities could include increased tree canopy cover, water features such as misting, decreased impervious surfaces especially low albedo surfaces like asphalt that absorb heat, and more. Not only do these cooling opportunities allow for more comfortable circulation across Berkeley Waterfront destinations by pedestrians, but the effects of cooling also increase the amount of habitable space at the Berkeley Waterfront creating a network of micro destinations even on the hottest days.

SECTION 4

IMPLEMENTATION & FINANCING

SECTION NOT INCLUDED

PUBLIC DRAFT 09-11-2023

SECTION 5

APPENDIX

5.1 Glossary & Abbreviations

Abbreviations

BCDC San Francisco Bay Conservation and Development Commission
BMC Berkeley Municipal Code
BWSP Berkeley Waterfront Specific Plan
CEQA California Environmental Quality Act
EIR Environmental Impact Report
USACE United States Army Corps of Engineers
SLR Sea Level Rise
CSLC California State Lands Commission
BAAQMD Bay Area Air Quality Management District ()
LWCF Land and Water Conservation Fund (LWCF)

Glossary of Public Agencies

CIty of Berkeley Agencies, Departments & Commissions

Parks, Recreation & Waterfront Department Committed to administering excellent recreation programs; maintaining our trees, landscaping, and infrastructure; and improving and enhancing parks and facilities through capital improvements. The Parks, Recreation & Waterfront Department maintains the City's parks, playgrounds, pools, camps, community centers, and waterfront facilities; provides diverse recreation programs and special events throughout the year; delivers resident camps opportunities for youth, families, and seniors; operates the largest public marina on the Bay; and plans, designs, and constructs capital improvements to our parks, recreation and waterfront facilities and infrastructure.

Planning Commission Recommends modifications to the General Plan and related policy documents such as this WSP and its incorporation within the Zoning Ordinance. All Zoning Ordinance amendments are developed through this Commission and recommended to the City Council, who takes action to codify amendments and plans. Other purviews include subdivision map consideration and review and comments on substantial projects from surrounding jurisdictions.

Parks, Recreation & Waterfront Commission Advises Council on parks, recreation, and the Waterfront. Areas of review include City parks, open space, greenery, pools, programs, recreation centers, the Waterfront, and resident camps; early childhood education programs; and animal care issues in parks.

Design Review Committee A subcommittee of the Zoning Adjustments Board, charged with the review and approval of design proposals for all projects in commercial, manufacturing, and some higher residential zoning districts. Membership shall consist of two members of the Zoning Adjustments Board, one member of the Landmarks Preservation Commission, one member of the Civic Arts Commission (each member appointed by that Commission); and three members of the public who are appointed by the Zoning Adjustments Board. The membership shall include a minimum of two licensed architects, one licensed landscape architect, and two laypersons.

Landmarks Preservation Commission Designates structures and sites having special historical and architectural interest and value. Encourages preservation, maintains list of landmarks or historic sites, and reviews construction, alteration, and demolition permit applications.

Transportation & Infrastructure Commission Advises Council on transportation and public works infrastructure policies, facilities, and services.

Zoning Adjustments Board Approves or denies permits related to the use and development of land in Berkeley.

Regional Agencies

San Francisco Bay Conservation and Development Commission (BCDC) State-created agency with authority to permit or deny any project in or over the San Francisco Bay or within 100 feet of the shoreline, after reviewing the project in light of specified criteria. BCDC's responsibilities include protecting San Francisco Bay from excessive fill and preserving the Bay waterfront for Bay-oriented or water-dependent uses.

State Agencies

California State Lands Commission The California State Lands Commission is a unit of our state government that is responsible for management and protection of natural and cultural resources, as well as public access rights, on some of California's publicly owned lands, including the Berkeley Waterfront

Federal Agencies

United States Army Corps of Engineers (USACE) Federal organization with regulatory oversight of civil works that impact water navigation, flood control, disaster response, shore protection, hydropower, water supply, recreation, and environmental restoration. The Berkeley Waterfront is within the USACE's South Pacific Division, overseen directly by the San Francisco District.

Glossary of Land Uses

Public & Quasi-Public Uses

Club / Lodge A building occupied by a group of persons organized for a purpose to pursue common goals, activities or interests, usually characterized by certain membership qualifications, payment of fees or dues, regular meetings and a constitution or by-laws.

Community Center A non-commercial facility where the public can meet for social, educational, or recreational activities.

Museum / Cultural Center A non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates, and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study, and enjoyment.

Park / Playground Non-commercial facilities that provide open space and/or recreational opportunities to the public.

Food and Alcohol Service, Lodging, Entertainment, and Assembly Uses

Commercial Recreation Center, waterfront-related Any establishment at which water-related recreation facilities are offered to the public as a principal commercial activity of such establishment. This use includes sailing centers, boat tour facilities, xxx, xxx, and xxx.

Food Service Establishments An establishment which in whole or in part prepares food or beverages for immediate consumption on or off the premises.

(a) Carry Out Food Store A store which serves food or non-alcoholic beverages for immediate consumption not on the premises, but usually in the vicinity of the store. This use is usually characterized as an establishment which serves food altered in texture and/or temperature on a customer-demand basis, puts such food in non-sealed packages or edible containers, requires payment for such food before consumption, and provides no seating or other physical accommodations for on-premises dining. Examples of this use include delicatessens and other stores without seating which sell doughnuts, croissants, ice cream, frozen yogurt, cookies, whole pizzas and sandwiches. This use excludes bakeries and food products stores.

(b) Quick Service Restaurant An establishment which serves food or beverages for immediate consumption either on the premises, or to be taken out for consumption elsewhere. This use is usually characterized as an establishment in which food is cooked on a customer-demand basis, payment is required before consumption, limited or no table service is provided (no waiters), and seating or other physical accommodations for on-premises customer dining is provided. Examples of this use include establishments selling primarily hamburgers or other hot or cold sandwiches, hot dogs, tacos and burritos, pizza slices, fried chicken, or fish and chips.

(c) Full-Service Restaurant An establishment which serves food or beverages for immediate consumption primarily on the premises, with only a minor portion, if any, of the food being taken out of the establishment. This use is characterized as an establishment in which food is cooked or prepared on the premises on a customer-demand basis, which requires payment after consumption, and provides seating and tables for on-premises customer dining with table service (waiters).

Hotels, Tourist A building with sleeping rooms used, designed, or intended for occupancy by transient guests for a period not to exceed 14 consecutive

days. This use includes inns, bed and breakfasts (B&Bs), and hostels, and excludes building with residential hotel rooms and dwelling units.

Maritime Uses (Land)

Boat Fuel / Charging Station An establishment that provides fuel or electric power to service motorized boats.

(a) Gasoline Boat Fuel Stations An establishment that dispenses gasoline, diesel or other similar fuel into boats. Excludes alternative fuel stations and electric boat charging stations.

(b) Alternative Fuel Station Any establishment that dispenses alternative fuel as defined by the Energy Policy Act of 2005.

(c) Electric Boat Charging Station A facility that supplies electric energy for the recharging of plug-in electric boats.

Boat Repair & Service An establishment that repairs, services, paints and/or conducts bodywork on boats on its premises. Includes restoration of motorized and non-motorizewd watercraft.

Boat Sales & Rentals An establishment that sells or rents boats that are stored either indoors or outdoors on its premises.

Recreational Boating and Water Use Primary, support and ancillary facilities for recreational boating and other water sport enthusiasts (e.g. swimmers, kayakers and windsurfers) including but not limited to: sailing center for yachting events, swimming, rowing and boating clubs, marinas, visiting boat docks and moorings, boat rental facilities, boat launches, fueling stations, repair and dry storage facilities, administrative functions, visitor, boat trailer and employee parking, public restrooms, and other public facilities.

Incidental Uses

Alcoholic Beverage Service The retail sale of beverages containing alcohol for on-site consumption subject to regulation by the State Department of Alcoholic Beverage Control ABC as an on-sale establishment.

Live Entertainment Any one or more of any of the following, performed live by one or more persons, whether or not done for compensation and whether or not admission is charged: musical act (including karaoke); theatrical act (including stand-up comedy); play; revue; dance; magic act; disc jockey; or similar activity.

Outdoor Cafe Seating Tables and/or chairs (including benches) and umbrellas associated with a lawfully operating food service establishment located in an outdoor area on private property.

Other Miscellaneous Uses

Maintenance Facility & Yard XXXXX

Parking Lot The exclusive or primary use of a lot for off-street parking spaces in an open paved area.

Parking Structure The exclusive or primary use of a lot for off-street parking spaces in a structure built specifically for parking purposes.

Public Market, Open Air An open air or enclosed marketplace, including a farmer's market, with multiple owner operated and/or independent merchants selling retail food items and handcrafted goods from local and

regional producers, so long as:

(a) At least 75 percent of retail space is devoted to the sale of general or specialized food products; and

(b) No more than 25 percent of retail space is devoted to one or more of the following incidental uses:

i. Owner operated and/or independent food service establishment selling food from local and regional producers; and
ii. Sales of retail products from local and regional produce."

Transportation Services Facilities for land-based, water-borne or intermodal (e.g. connections between water and land transportation services, including ferry facilities) transportation operations, including but not limited to: transit and traffic facilities, areas for ticket sales, passenger information and waiting, bus, automobile, taxi, and rideshare staging areas and pick-up and drop-off zones, and related administrative functions.

Glossary of Terms

Commercial Use The categories of commercial uses of a property include retail products store, personal/household service, food service establishment, entertainment establishment, office, tourist hotel, automobile uses, live/work units, mixed use development, wholesale use, parking lot and any use listed as a sub-category of the above uses; or any other use determined to be a business activity (except home occupations), as these terms are defined in this chapter.

Mean High Water The average of all the high water heights observed over the National Tidal Datum Epoch.

Public Access Areas or features which are open to the public, often provided as part of new development or public improvements, including but not limited to: esplanades, promenades, boardwalks, pedestrian access to piers, small plazas, visual or informational displays, kiosks, signage, public fishing and viewing areas and related public amenities.

Public Realm The Public Realm at the Waterfront is comprised of public spaces , including trails, pathways, open space, grassy areas, nature-scapes, streets and sidewalks, parks, open spaces, and the buildings and bay that frames it them. The Public Realm at the Waterfront will prioritize pedestrian space, pedestrian and visual connections, public open spaces and nodes of interest, greenery and landscaping, signage, and places for community gathering and experiences.

Waterfront-Related Activities, businesses or industries which depend on a waterfront location to function, such as marina-related activities, berthing of historic, ceremonial or other ships, ferry and excursion boat operations, fishing uses, maritime support uses, recreational boating and water use, ship repair, and water taxi docking.

Revetment Crest The top elevation of a revetment, the facing of stone or other armoring material to protect a streambank or shoreline. A riprap revetment consists of layered, various-sized rocks placed on a sloping bank.

Usable Open Space Outdoor space, including natural and landscaped ground areas, pools, patios, decks and balconies designed for active or passive recreational use and which is accessible to the occupants of a building on the same lot.

5.2 Supporting Studies & Reports

The following studies were produced as part of Waterfront Specific Plan (formerly "Berkeley Marina Area Specific Plan") process, with the exception of the "Berkeley Marina Sea Level Rise AB 691 Assessment Study".

These were developed by the City's consultant team for the project:

Hargreaves Jones – Landscape Architecture & Planning
Keyser Marston Associates – Economics
Moffatt & Nichol – Marine Engineering
BkF Engineering – Civil Engineering
Nelson\Nygaard – Transportation Planning

The Waterfront Specific Plan process began in the spring of 2020, just as the global pandemic emerged, which extended the anticipated duration of the effort and has required particular focus on continuing to update and revise financial data included in these documents. These studies significantly informed the development of the Waterfront Specific Plan.

Final versions are the result of coordination with the final Waterfront Specific Plan – following a EIR process, extensive community and stakeholder engagement, and frequent review by City Council, City Commissions, and City staff from multiple departments.

Infrastructure Assessment (May 2021)
Hargreaves Jones, Moffatt & Nichol, Nelson\Nygaard, Bkf Engineering

Implementation Strategy (April 2021)
Keyser Marston Associates

Existing Amenities and Operations Assessment (April 2021)
Keyser Marston Associates

Hotel Food and Beverage Revenue Potential (September 2022)
Keyser Marston Associates

Dredging Needs Technical Memo (April 2021)
Moffatt & Nichol

Slip Mix Study (August 2022)
Moffatt & Nichol

Parking & Mobility Framework (January 2022)
Nelson Nygaard

Berkeley Marina Sea Level Rise AB 691Assessment Study (August 2019)
NCE

Table 1-2 | Waterfront Capital Funding (2008-2025)

Berkeley Waterfront CIP Projects			
Project	Year	Funding Source	Amount
Dock Replacement (H-I)	2008	DBAW Loan, Marina Fund	4300000
Dock Replacement (B-C)	2010	DBAW Loan, Marina Fund	3650000
Finger Dock Float Replacements	2010	MF	407000
South Cove Middle Dock Replacement	2010	DBAW, MF	100000
Landfill Rip Rap Repair	2011	Zero Waste Fund	464000
Boat Pump-out Station	2011	DBAW Grant, Marina Fund	75000
Selective Piling Replacement	2011	MF	555000
Shorebird Nature Center Classroom	2011	State Parks Prop 12 Grant Funds	911000
Selective Piling & Float Replacements	2012	MF	828500
Skates/ N Lot ADA Pathway	2013	GF, MF	80000
Bay Trail Phase 1 and 2	2014	MTC, SCC, ABAG Grants	2400000
Bait Shop Beam & Wall Renovation	2017	GF, MF	180000
Launch Ramp Gate, Pay Station, Bollards	2017	Marina Fund	118000
Cesar Chavez Park Flare Station Replacement Complete	2018	GF, ZWF	832000
South Cove Parking Lot and Restroom	2018	DBAW, NFW, SCC Grants, Marina Fund	2410000
Finger Docks Phase 1	2019	General Fund, Marina Fund	145000
Landfill Rip Rap Repair- South East Area	2020	Zero Waste Fund	435000
Finger Docks Phase 2	2020	General Fund	160000
South Cove Bay Trail Phase 3, Docks and ADA Gangway	2020	PCA, Costco Busan(2), SCC Grants, Marina Fund	1122000
Bike Lockers	2021	Grant, General Fund, Marina Fund	125000
Corporation Yard Electrical Upgrade	2021	T1p1	410000
Berther parking Lot Security Camera System	2021	Marina Fund	140000
Finger Docks Phase 3	2021	General Fund/Marina Fund	230000
Pier- Ferry Feasibility Study	2021	T1p1, WETA, Marina Fund	465000
Slip Holder Restrooms (4) Renovation	2021	General Fund	350000
Launch Ramp Paving Improvements	2021	Marina Fund	80000
199 Seawall Painting and Roofing	2021	Marina Fund	94000
Marina Streets Proj (University/ Marina Blvd/ Spinnaker V	2022	T1p2, Streets Fund, Double Tree	8034000

Berkeley Waterfront CIP Projects			
Marina Sea Level Rise Study (AB691)	2022	T1p1, Marina Fund	214000
FG Dock Gate Replacement	2022	Marina Fund	25000
Fire Hose/Ladder Replacement	2022	Marina Fund	38000
LM, FG, BC, DE, N Restroom Fencing	2022	Marina Fund	45000
Dock Gates Key Fob Replacement	2023	Marina Fund	100000
Selective Piling Replacement	2023	T1p2, General Fund, ARPA	3630000
Finger Docks Phase 4	2023	ARPA, General Fund	350000
Sewer Replacement -University Avenue	2023	Sewer, General Fund	440000
199 Structural Evaluation	2023	Marina Fund	100000
Old Ferry Pier/Gateway Platform Structural Evaluation	2023	Marina Fund	30000
Tree Removals Due to 2023 Storms	2023	General Fund	200000
Steel Plates/Reinforcement -Dock Repairs	2023	Marina Fund	320000
South Cove Cranes (Small 2021- Large 2023)	2023	Marina Fund	90000
125-127 University Ave Improvements	2023	General Fund	300000
CT Gateway Improvements and Signage	2023	CT CC Grant	3400000
Shorebird Nature Center Painting and Repairs	2023	Marina Fund	34000
Vessel Removal/ Boat Repairs 2008-2023	2023	SAVE Grant	450000
O and K Dock Electrical Upgrades	2024	General Fund	1753000
Dredging: Main Entrance and Inner Channel	2024	ARPA, Marina Fund	7700000
Berkeley Marina Area Specific Planing Study	2024	General Fund	1050000
D and E Dock Replacement	2024	T1p2, Marina Fund, DT, Loan, SSC Grant	8260000
South Cove West Parking Lot	2025	MF, SSC Grant	1236000
Cesar Chavez Restroom (New)	2025	T1p2	445000
K Dock Public Restroom Renovation	2025	T1p2	400000
Cesar Chavez Main Path Replacement	2025	SSC Grant	2113000
Pier - Ferry Design Development	2025	SSC and ACTC Grants, WETA	11103900
Totals			72927400

Table 2-2 | WSP Unfunded Capital & Major Maintenance Needs (September 2023)*

Waterfront Specific Plan - Unfunded Capital & Major Maintenance Needs (as of September 2023)

Amenities/Projects	Rough Order of Magnitude Estimate (in 2023 value)
Existing Infrastructure in Need of Replacement/Major Maintenance	
Inner Harbor (Revenue Generating Assets)	
Finger Dock Replacements	$1,600,000
Timber Pile Replacement (on L, M, N, O&K)	$4,400,000
Inner Harbor Basin Dredging	$8,500,000
J-Dock Replacement including piling	$11,500,000
L-Dock Major Maintenance (Floats, Decking, Waler)	$370,000
M-Dock Major Maintenance (Floats, Decking, Waler)	$457,000
N-Dock Major Maintenance (Floats, Decking, Waler)	$265,000
O-Dock Major Maintenance (Floats, Decking, Waler)	$530,000
K-Dock Major Maintenance (Floats, Decking, Waler)	$370,000
Inner Harbor Subtotal:	**$27,992,000**
César Chávez Park	
Perimeter Pathway Improvements (Trail Surface, Trail Furniture & Signs) - Phase 1B	$530,000
Interior Pathways Improvements and Amenities - Phase 2	$2,650,000
Master Plan	$1,000,000
César Chávez Park Pathways Subtotal:	**$4,180,000**
Parking Lots	
F & G Lot Reconstruction	$950,000
O Lot Reconstruction	$1,010,000
J & K Lot Reconstruction	$1,060,000
Launch Ramp Lots Reconstruction	$2,030,000
L & M Lot Reconstruction	$1,320,000
Marina Blvd On-Street Parking (South of Virginia Street Extension)	$2,100,000
199 Seawall Parking Lot	$4,000,000
Parking Lots Subtotal:	**$12,470,000**
Streets	
Seawall Drive Reconstruction - North of University Avenue Segment	$790,000
Waterfront Entrance Kiosk Building on University Avenue	$527,000
Seawall Drive Improvements (South of University Ave Segment)	$3,400,000
Streets Subtotal:	**$4,717,000**
Shorelines/Pathways/Pier	
Marina Blvd Resilient Shoreline & Public Access Improvements (Trail from CCP to Roundabout)	$4,000,000
University Ave Shoreline and Habitat Resiliency Project	$4,040,000
Inner Harbor Basin Northeast Sea Level Rise Improvement	$3,220,000
199 Seawall Lot Eastern Shoreline Failure Repair	$1,000,000
Bay Trail Improvements (Adventure Playground to Pier Plaza)	$1,800,000
Berkeley Pier Renovation (including restroom)	$37,381,500
Shorelines Subtotal:	**$51,441,500**

**Note: The needs totaling $128M include existing Waterfront infrastructure in need of replacement/major maintenance. The following list is of projects that include new infrastructure or a mix of new and existing infrastructure.*

Waterfront Specific Plan - Unfunded Capital & Major Maintenance Needs (as of September 2023) *(continuation)*

Amenities/Projects	Rough Order of Magnitude Estimate (in 2023 value)
Existing Infrastructure in Need of Replacement/Major Maintenance	
South Cove Area	
South Cove Sailing Basin Boating Access Dredging	$14,500,000
South Cove Seawall Replacement	$5,500,000
South Cove Area Subtotal:	**$20,000,000**
Buildings (Not in Lease Agreements)	
Shorebird Nature Center-classroom (K)	$105,000
125-127 University Improvements	$1,300,000
O, LM, FGHI, DE Restrooms Structural Improvements	$2,100,000
199 Seawall Building Priority Structural Repair	$1,750,000
Buildings Subtotal:	**$5,255,000**
Emergency Response Supporting Infrastructure	
Secondary Fire Water Loop	$1,953,000
Emergency Response Subtotal:	**$1,953,000**
Total Unfunded Projects Needs:	**$128,008,500**
New Capital Projects in Planning/Design (not all existing infrastructure)	
Preferred Plan - Berkeley Pier with Ferry Access Project	
Non-Motorized Watercraft Access Point	$1.5M
Restroom Plaza & Pier Entrance Facility	$1.2M
*Bay Trail Improvements (Adventure Playground to Pier Plaza)**	$1.8M
*Seawall Drive Improvements (South of University Ave Segment)**	$3.4M
Public Transit and Active Transportation Improvements on University Ave (Roundabout to Pier)	$1.1M
199 Seawall Parking Lot - Amphitheater/Event Stage	$1M
*199 Seawall Parking Lot**	$4M
*Dual-Purpose Pier with Ferry Access***	$5M to $69.5M
Recently Funded by State Coastal Conservancy and ACTC grants, and WETA Contribution	($11.1M)
***Berkeley Pier with Ferry Access Project Subtotal*:**	**$19M to $72.4M**
Bike Park at University Ave.	**$2M**

**Existing infrastructure, also included in list above.*

***Actual City cost to be determined by future grants and WETA contribution*

Table 2-3 | Replacement Costs for Recently-Completed Waterfront Capital

Note: This table illustrates how to approach life cycle cost analysis and planning. This only includes projects completed over the last 15 years. As Waterfront capital projects are completed, they will move from the unfunded list in Table 2-2 to this replacement cost table.

	Completed Projects	Year Completed	Value of Replacement Elements at Completion	Intended Replacement Elements	Adjustment factor for Replacement Elements (Not all elements of a project needs replacement at end-of-life)	Adjusted Value of Replacement Element
Inner Harbor	H&I Dock Replacement	2008	$ 4,300,000.00	Entire System	NA	$ 4,300,000
	B&C Dock Replacement	2010	$ 3,650,000.00	Entire System	NA	$ 3,650,000
	Finger Dock Replacement	2010	$ 407,000.00	Entire System	NA	$ 407,000
	Boat Pump-Out Station	2011	$ 75,000.00	Entire System	NA	$ 75,000
	O&K Dock Electrical	2024	$ 1,753,000.00	Entire System	NA	$ 1,753,000
	Dredging: Main Entrance and Inner Channel	2024	$ 7,700,000.00	Entire System	NA	$ 7,700,000
	D&E Dock Replacement	2024	$ 8,260,000.00	Entire System	NA	$ 8,260,000
Marina Facilities	Bike Lockers	2021	$ 125,000.00	Entire System	NA	$ 125,000
	Marina Corporation Yard Electrical Upgrade	2021	$ 410,000.00	Entire System	NA	$ 410,000
	Slip Holder Restrooms (4) Renovation	2021	$ 350,000.00	Entire System	NA	$ 350,000
	Dock Gates Key Fob Replacement	2023	$ 100,000.00	Entire System	NA	$ 100,000
	125-127 University Ave Improvements	2023	$ 300,000.00	Entire System	NA	$ 300,000
	K-Dock Public Restroom Renovation	2025	$ 400,000.00	Entire System	NA	$ 400,000
South Cove	South Cove Middle Dock Replacement	2010	$ 100,000.00	Entire System	NA	$ 100,000
	South Cove West Parking Lot	2018	$ 2,410,000.00	Asphalt	30%	$ 723,000
	South Cove Bay Trail Phase 3, Docks, ADA Gangway	2020	$ 1,122,000.00	Asphalt & Docks	50%	$ 561,000
	South Cove East Parking Lot	2025	$ 1,236,000.00	Asphalt	50%	$ 618,000
Streets	University Ave (West Frontage to Marina Blvd)	2022	$ 3,480,000.00	Asphalt	30%	$ 1,044,000
	Marina Blvd	2022	$ 395,000.00	Asphalt	100%	$ 395,000
	Spinnaker Way	2022	$ 1,500,000.00	Asphalt	30%	$ 450,000
	Bay Trail Phase 1 & 2	2014	$ 2,400,000.00	Asphalt	100%	$ 2,400,000
Cesar Chavez Park	Cesar Chavez Main Path Replacement	2025	$ 2,113,000.00	Entire System	NA	$ 2,113,000

ts	Life Expectancy	Year for Replacement	Future Value Cost at Time of Replacement [at 3% yearly inflation]	Present Value converted to Annunity at 3% inflation	Uniform	Annual Set Aside
.00	50	2058	12,099,608.55	200,118.95	345,703.10	$200,000 pegged to inflation (3% annual increase)
.00	50	2060	10,896,077.37	164,657.43	294,488.58	
.00	50	2060	1,214,987.26	18,360.43	32,837.49	
.00	30	2041	127,682.48	5,453.15	7,093.47	
.00	30	2054	4,382,640.85	87,648.12	141,375.51	
.00	40	2064	25,871,221.73	328,885.55	631,005.41	
.00	50	2074	37,297,395.63	318,289.38	731,321.48	
.00	30	2051	285,990.96	6,661.65	10,213.96	
.00	30	2051	938,050.35	21,850.23	33,501.80	
.00	20	2041	595,851.57	25,448.04	33,102.87	
.00	20	2043	180,611.12	6,721.57	9,030.56	
.00	30	2053	728,178.74	15,305.78	24,272.62	
.00	30	2055	1,030,033.10	19,618.65	32,188.53	
.00	20	2030	122,987.39	16,050.64	17,569.63	
.00	20	2038	1,126,410.44	60,563.24	75,094.03	
.00	30	2050	1,246,143.13	30,610.52	46,153.45	
.00	20	2045	1,184,151.91	38,777.89	53,825.09	
.00	20	2042	1,830,660.32	72,885.69	96,350.54	
.00	20	2042	692,634.89	27,576.48	36,454.47	
.00	20	2042	789,077.72	31,416.25	41,530.41	
.00	20	2034	3,322,161.29	259,385.87	302,014.66	
.00	20	2045	4,048,726.50	132,585.25	184,033.02	
			Total Annual Setaside:	**1,888,870.76**	**3,179,160.68**	

5.3 EIR Basis of Study - Waterfront Build Out

The WSP could support a range of buildout possibilities. The high and max development scenarios are provided for the purposes of EIR evaluation. The EIR will evaluate the most significant possible buildout over the 50 year life of the plan, rather than the likely buildout.

IN PROGRESS

WC-1
total land area: 400,714 sf
structure(s) land area: 92,944 sf
percent cover: 23%

WC-2
total area: 455, 821 sf
structure(s) area: 14,700 sf
percent cover: 3.2%

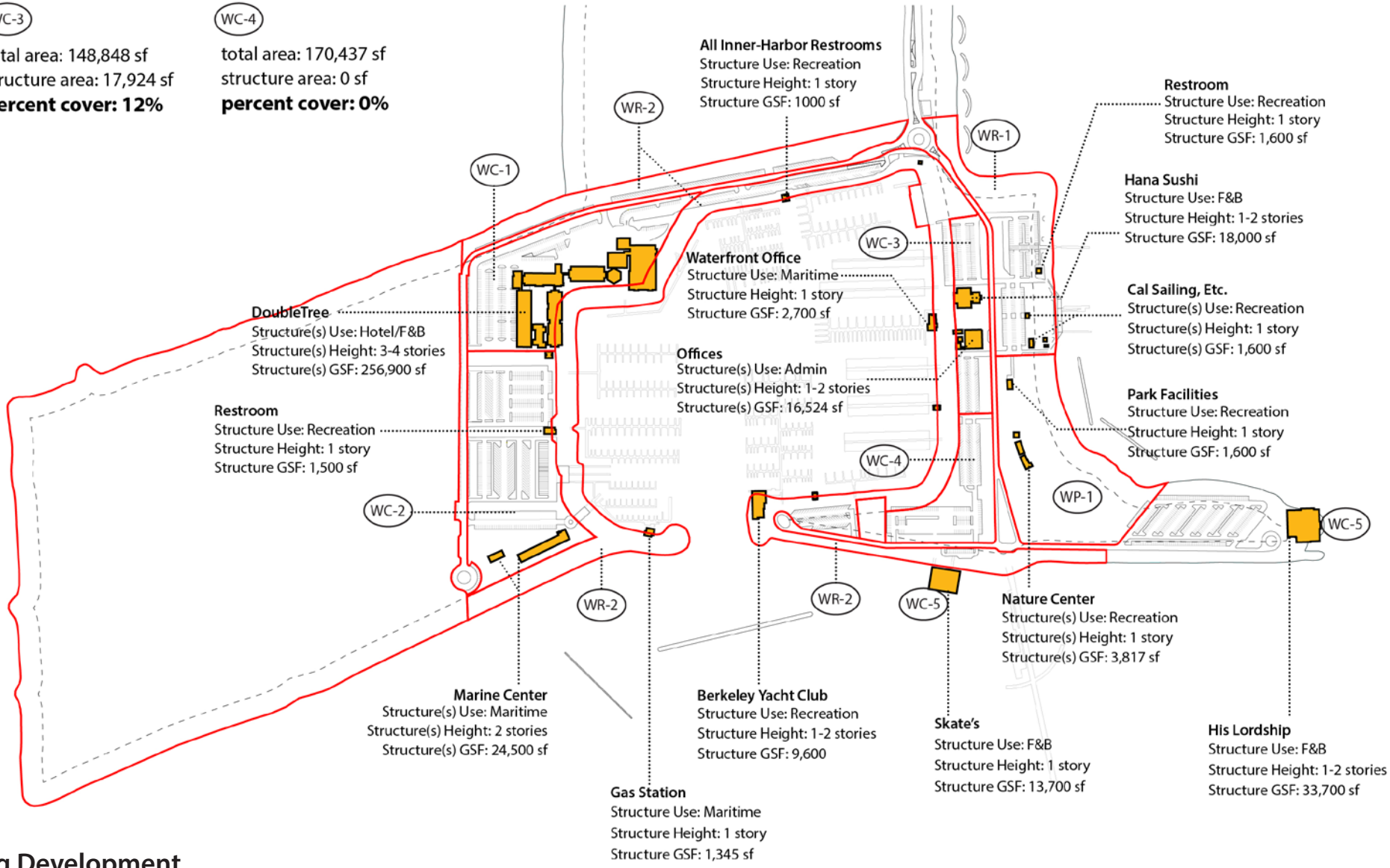
WR-2
total area: 1,036,771 sf
structure(s) area: 28,208 sf
percent cover: 2.7%

WR-1
total area: 289,215 sf
structure(s) area: 2,114 sf
percent cover: 0.7%

WP-1
total area: 398,761 sf
structure(s) area: 4901 sf
percent cover: 1.2%

WC-3
total area: 148,848 sf
structure area: 17,924 sf
percent cover: 12%

WC-4
total area: 170,437 sf
structure area: 0 sf
percent cover: 0%



Existing Development

WC-1
total area: 400,714 sf
structure area: 128,047 sf
percent cover: 32 %

WC-2
total area: 455, 821 sf
structure area: 33,647 sf
percent cover: 7.4 %

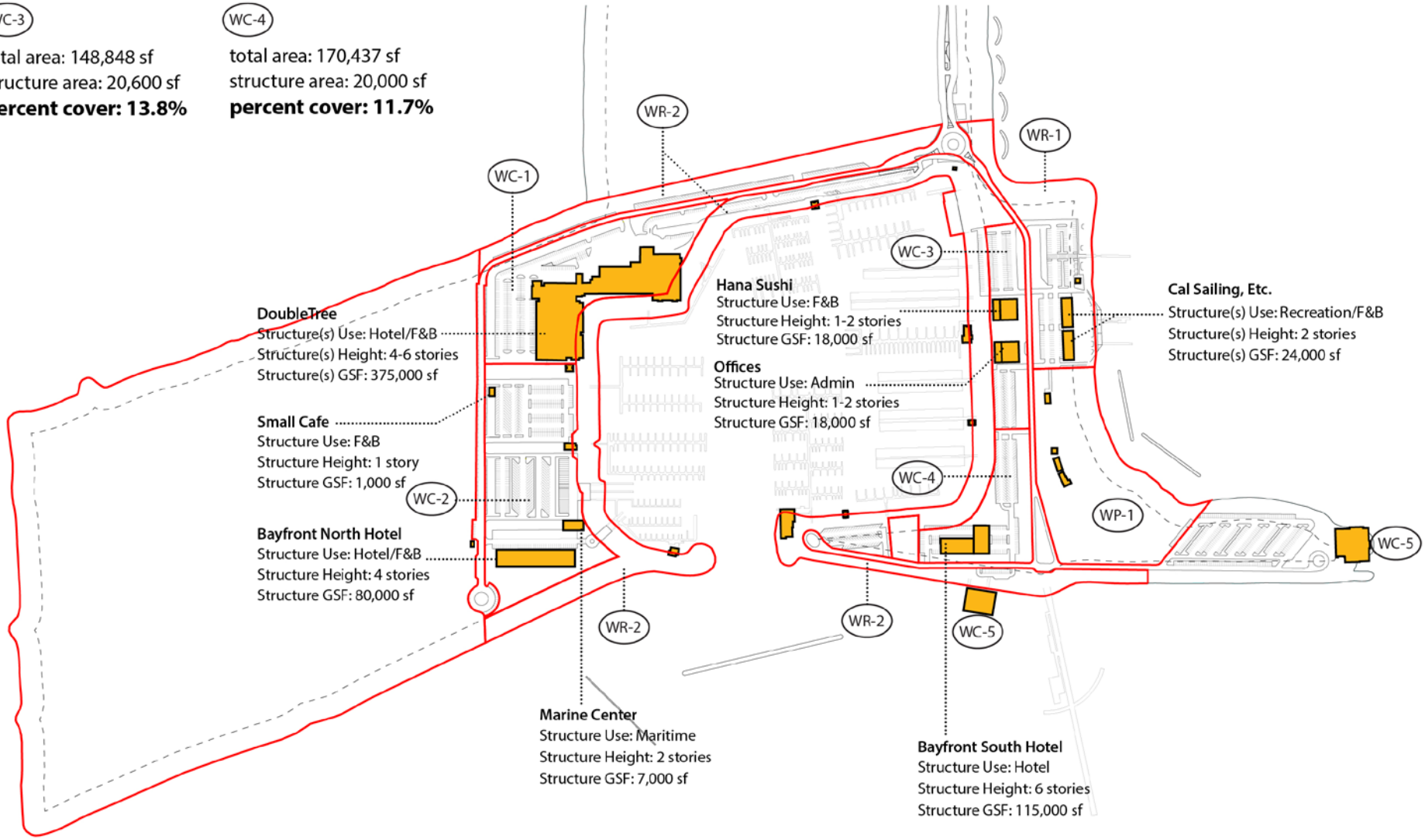
WR-2
total area: 1,036,771 sf
structure area: 29,188 sf
percent cover: 2.8 %

WR-1
total area: 289,215 sf
structure area: 12,656 sf
percent cover: 4.4%

WP-1
total area: 398,761 sf
structure area: 4901 sf
percent cover: 1.2%

WC-3
total area: 148,848 sf
structure area: 20,600 sf
percent cover: 13.8%

WC-4
total area: 170,437 sf
structure area: 20,000 sf
percent cover: 11.7%



High Development

WC-1
total area: 400,714 sf
structure area: 176,000 sf
percent cover: 44%

WC-2
total area: 455, 821 sf
structure area: 127,000 sf
percent cover: 28%

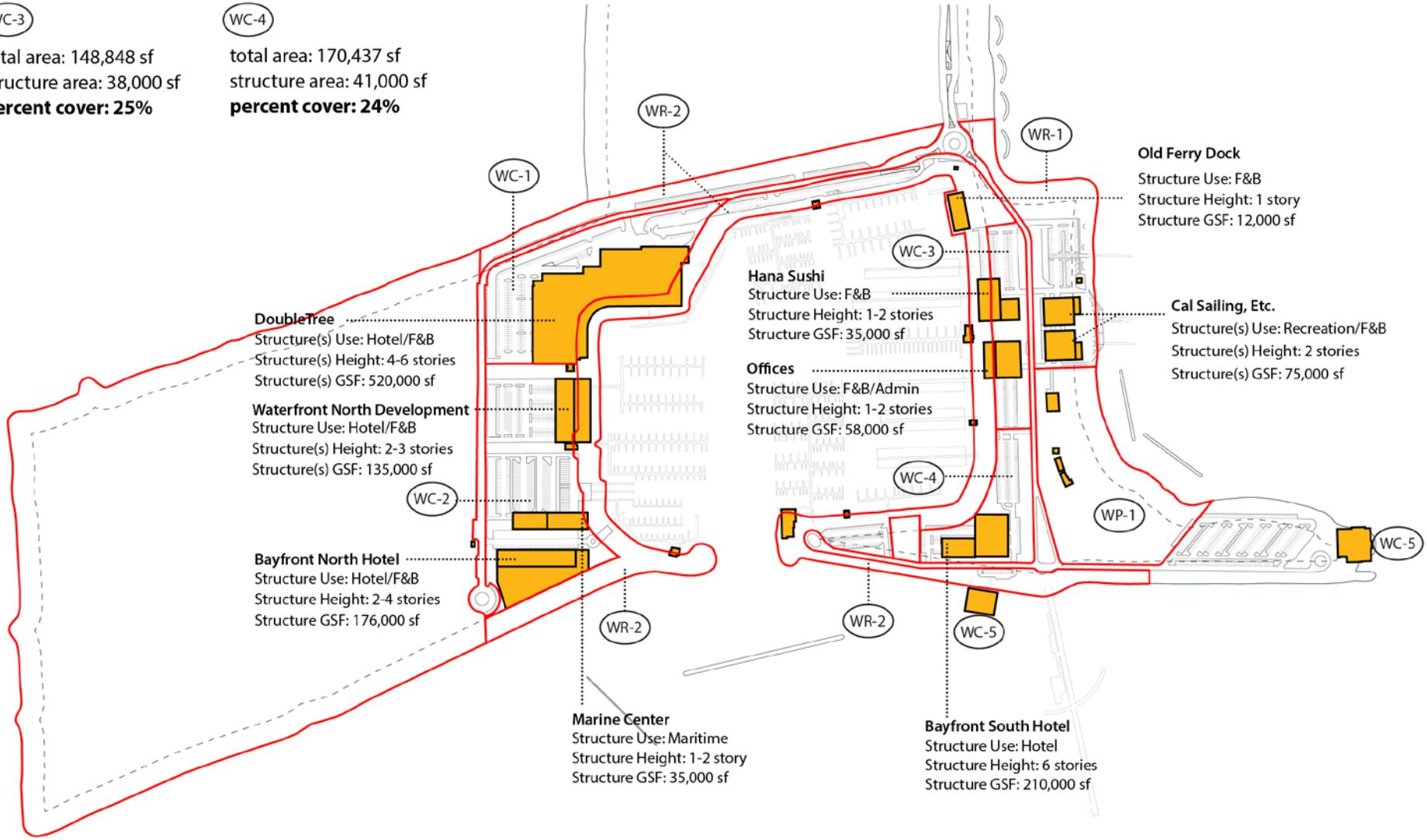
WR-2
total area: 1,036,771 sf
structure area: 103,000 sf
percent cover: 10%

WR-1
total area: 289,215 sf
structure area: 40,000 sf
percent cover: 14%

WP-1
total area: 398,761 sf
structure area: 8,200 sf
percent cover: 2%

WC-3
total area: 148,848 sf
structure area: 38,000 sf
percent cover: 25%

WC-4
total area: 170,437 sf
structure area: 41,000 sf
percent cover: 24%



Max Development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