

Plan Bay Area 2050+ Final Blueprint: Environment Needs and Revenues Forecast

Summary

The forecasted needs and revenues for the Plan Bay Area 2050+ Final Blueprint are similar to what was presented in the Draft Blueprint [[November 2023 Draft Blueprint Needs and Revenue Forecast](https://mtc.legistar.com/gateway.aspx?M=F&ID=62dcca13-05e2-4cab-b339-ce8889d330d1.pdf) (<https://mtc.legistar.com/gateway.aspx?M=F&ID=62dcca13-05e2-4cab-b339-ce8889d330d1.pdf>)].

Updated strategy assumptions and project information led to some shifts in the forecasted needs. Additionally, some strategies were bolstered with new or expanded elements to address gaps in the Draft Blueprint approach. The rounded revenue forecast remains the same, with some slight adjustments to one time funding reductions associated with the 2021 and 2022 state budget cycles as well as continued regional success in the FEMA BRIC grant program. The Final Blueprint Environment Needs and Revenue Forecast can be used to help answer the question: what would it take to financially support the visionary Environment Element strategies included in the plan?

Similar to the Housing and Economy Elements, the Environment Element largely takes an unconstrained approach, where needs can exceed forecasted financial revenues. That approach is taken for Strategies EN1 through EN6. Revenues associated with Strategies EN8 and EN9 are tracked within the transportation element and are therefore fiscally constrained by the statutory requirements under Senate Bill 375 (2008). Strategy EN7, which like Strategies EN8 and EN9 is associated with reducing climate emissions, requires only incremental increases in public administrative costs to implement and does not draw upon forecasted revenues.

As shown in Figure 1, the forecasted needs for strategies EN1 through EN6 in the Environment Element of Plan Bay Area 2050+ are \$218 billion with \$30 billion in estimated forecasted revenues identified

through the year 2050. With Strategies EN8 and EN9 included, the Environment Element need is \$228 billion. All values are shown in year of expenditure dollars.

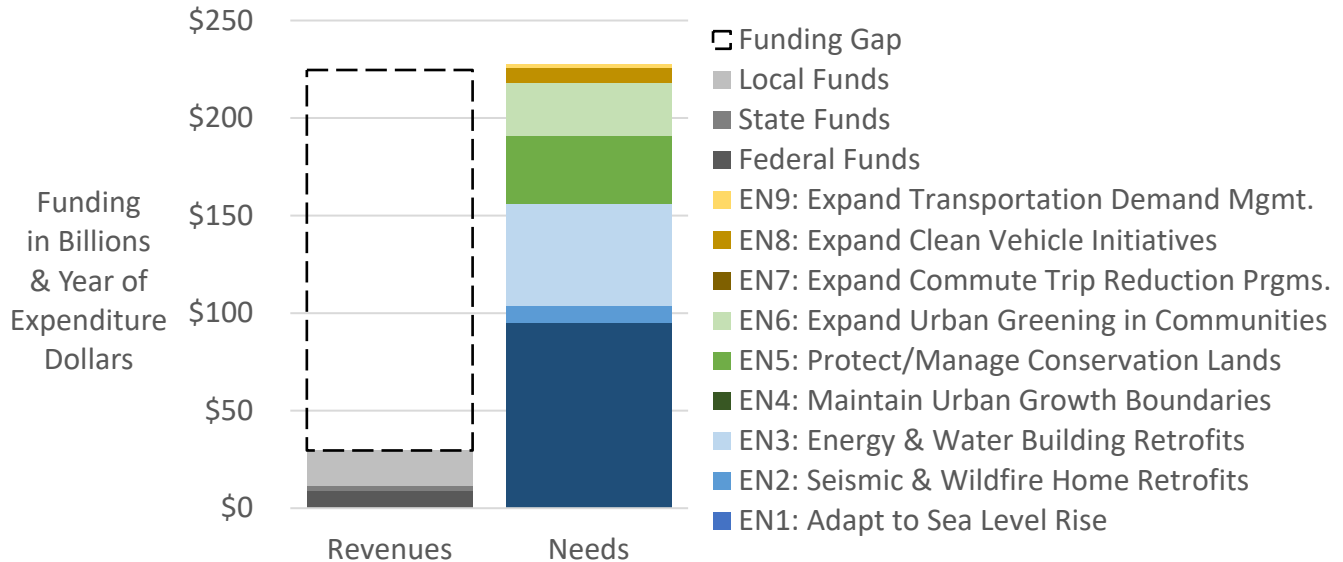


Figure 1: Forecasted Environment Element Revenues and Needs, Final Blueprint.

Updates to Environment Needs Assessment

The largest portion of the Environment Element funding need supports Strategy EN1 *Adapt to Sea Level Rise* investments. The strategy is directly informed by recent efforts to inventory locally-developed sea level rise adaptation projects. In spring 2024, MTC/ABAG and BCDC staff re-engaged local governments from across the region to update sea level rise adaptation project details that were originally inventoried as part of the [Sea Level Rise Funding and Investment Framework](https://mtc.ca.gov/digital-library/5024464-sea-level-rise-adaptation-funding-and-investment-framework-final-report) (<https://mtc.ca.gov/digital-library/5024464-sea-level-rise-adaptation-funding-and-investment-framework-final-report>), published in July 2023. 85% of local projects were reviewed during this outreach and resulted in updated project details. Between the Draft and Final Blueprint, some project updates resulted in higher resilience project cost estimates, while others had lower estimates. In total, the Final Blueprint includes over 400 sea level rise adaptation projects that total \$95 billion in year of expenditure dollars, \$1 billion more than the Draft Blueprint total. The Strategy EN1 *Adapt to Sea Level Rise* cost estimates support adaptation measures like marsh restoration, traditional levees, ecotone levees, and elevated infrastructure. In Plan Bay Area 2050+, the adaptation projects support areas at

risk from flooding when water levels rise 4.9-feet. This planning height captures not only areas that are likely to flood during the 2050 planning horizon from sea level rise alone, but also capture areas that may flood regularly with a combination of sea level rise and annual, king tide events and one- and five-year return period storms.

Plan Bay Area 2050+ worked to categorize sea level rise needs for the first time ever, reporting a total dollar need as well as sorting dollar needs into four buckets. A first sorting effort identified projects that, at a minimum, would provide protection and nature-based investments adjacent to existing neighborhoods, plan growth geographies, and key transportation corridors.

Table 1: Sea level rise adaptation needs, sorted by inundation height and planned status. Values do not always sum due to rounding.

	Planned Projects Includes projects that were generated through a local planning process.	Placeholder Projects Assumed adaptation costs along at-risk shoreline with no locally developed project.	Total
Bin 1 Project protects area with flooding at 1-foot.	\$7B	\$8B	\$15B
Bin 2 Project protects area with flooding at 4.9- feet.	\$52B	\$28B	\$81B
Total	\$58B	\$37B	\$95B

Strategy EN2 *Provide Means-Based Financial Support for Seismic, Wildfire and Accessibility Home Retrofits* was expanded between the Draft and Final Blueprint to respond to feedback on the need to increase how Plan Bay Area 2050+ addresses the needs of residents with disabilities. The approach is aligned with recent aging in place code upgrades and assumes a new component of the strategy to make accessibility improvements in existing Bay Area housing. This added scope increased the strategy need by \$2 billion, from \$7 billion to \$9 billion, or 29 percent.

Strategy EN5 *Protect and Manage High-Value Conservation Lands* did not have any scope or definition changes, but the initial assumption of what it would cost to acquire new conservation land for open space was revised down from \$42 billion to \$35 billion, resulting in a 20% reduction. This change was due to additional data being added to the methodology which included recent acquisitions in the region, leading to a lower per-acre cost average.

Strategy EN6 *Expand Urban Greening in Communities* was adjusted in two ways. First, the language of the strategy was updated to reflect the need for new parks to be designed for all ages and abilities, with corresponding costs incorporated. Additionally, the urban park component of the strategy was bolstered significantly to ensure the urban parks per acre metric continues to remain high as the region adds population over the 25-year plan period. In the Draft Blueprint, a modest investment in community parks resulted in a decline of the number of community parks acres per 1,000 residents. While the regional average remained above state goals of 3.0 acres per 1,000 residents, the Final Blueprint includes revisions to generate more community parks, resulting in a \$7 billion increase to the strategy needs.

All other Environment Element strategy needs remain the same as the Draft Blueprint.

Environment Revenue Forecast

As part of the limited and focused long-range plan update for Plan Bay Area 2050+, more emphasis has been placed on forecasted revenues to support the Environment Element. As of September 2024, staff have identified 48 federal, 48 state, and 35 local fund sources that can support one or multiple Plan Bay Area 2050+ Environment Element strategies. Together the forecasted funds total \$30 billion.

Climate has been a new area of emphasis in federal and state budget and spending deals in the years since Plan Bay Area 2050 adoption. The Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) at the federal level have created a wave of primarily one-time funding over the early years of the planning period to support many climate initiatives; California state budget surpluses in 2021 and 2022 similarly directed billions toward one-time climate funding. As part of the Final Blueprint some state budget sources have been reduced to reflect recent budget decisions, but the top line value remains the same.

Not included in this draft final forecast are possible revenues from the 2024 State Climate Bond. If approved by voters in November 2024, staff will update the revenue forecast to reflect an additional \$1 billion in funding to support Strategies EN1 through EN6. Only half (\$5 billion) of the Climate Bond programs could be used to advance elements of Plan Bay Area 2050+ Environment Element strategies, and only a population proportional share of the State Climate Bond revenues would be assumed to flow to the Bay Area, an assumption consistent with other forecasted state and federal funding sources.

While there has been substantial recent action at the state and federal level to support investment in climate efforts, these are almost entirely one-time funds that are only anticipated in the early years of the plan's 25-year horizon. There are very few dedicated, programmed funding sources to support climate adaptation, building retrofits, and conservation. One bright spot for the Bay Area region has been its strong performance in the Building Infrastructure and Resilience Communities (BRIC) competitive grant program run by the Federal Emergency Management Agency (FEMA). In the first four years of the grant program, the Bay Area has received 7.5 percent of all national awards. For most revenue forecasts, it is assumed that the Bay Area will receive a population-based proportional share. For this grant program, we assume the midpoint between that lower value and performance over the first four years of the program. In total, the grant program is forecasted to result in almost \$3 billion for the region through 2050 to support sea level rise adaptation and seismic and wildfire retrofits. Local revenues for conservation and parks are significant, accounting for 25 years of development impact fees. Many jurisdictions have impact fees, primarily on housing to support new park development as well as enhancements to existing parks. For the revenues forecast, MTC staff collected samples of present-day impact fees across 25 jurisdictions. The median present-day values were \$16,000 and \$13,000 for single- and multi-family housing units respectively. The Plan Bay Area 2050+ forecast makes a conservative revenue assumption that the average impact fee will be half of present-day impact fee levels given recent trends to lower the impact fees in jurisdictions with higher fees and to reflect this as one way to lower the cost to develop housing. With the new household growth and housing units projected over the planning period, the impact fees are the single greatest revenue source in the Environment Element forecast. In addition to the impact fees, a number of local taxes as

well as bond measures adopted by cities, counties, and park districts also contribute significantly. For local and regional taxes, including but not limited to parks and conservation, it is assumed that they are reauthorized if they have an expiration date before 2050 – similar to the assumption made for many local transportation tax revenue sources.

Fund sources supporting strategies EN8 and EN9 are captured in the transportation revenue forecast for the Transportation Element (see Attachment B for more information) rather than the Environment Element, consistent with California Air Resources Board requirements. The assumed linkage of funds (and specific dollar value) between these two elements will be documented as part of the final plan.

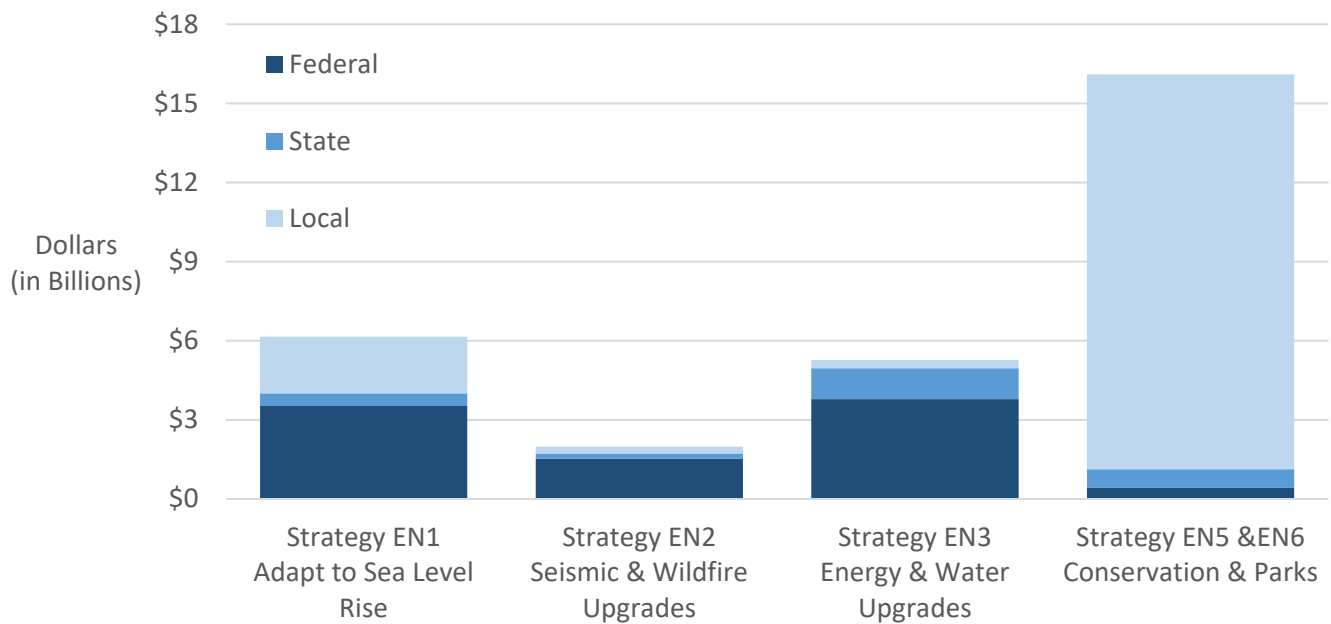


Figure 2: Forecasted Revenues for Environment Element, Strategies EN1, EN2, EN3, EN5 and EN6

The Environment Element strategies have significant unfunded needs. When the implementation phase of the plan occurs, advocacy for new programmatic revenues, as opposed to one-time initiatives, is likely to be discussed, as well as ensuring existing funding is used as strategically as possible to get the most from the resources that do exist.

Environment Needs and Revenues Reference Tables

The tables below provide additional information on the draft needs and revenues for the Environment Element. Table 2 provides a high-level accounting for the forecasted needs, while Table 3 provides a list of the top four revenue sources for federal, state, and local sources incorporated at this point in time for the revenue forecast. Additional information on the technical assumptions used for the element will be further developed as part of the Plan Bay Area 2050+ supplemental reports. Due to rounding, totals for Tables 2 and 3 do not always sum.

Table 2: Estimating Needs for Plan Bay Area 2050+ Environment Element

Environment		Amount
Strategy	Strategy Component	(in \$Billions, YOY)
Strategy EN1	Adapt to Sea Level Rise Projects	\$95
Strategy EN2	Residential Seismic Retrofits	\$4
Strategy EN2	Residential Wildfire Retrofits	\$3
Strategy EN2	Residential Accessibility Retrofits	\$2
Strategy EN3	Residential Water Efficiency Retrofits	\$17
Strategy EN3	Residential Energy Decarbonization Retrofits	\$28
Strategy EN3	Commercial Energy Decarbonization Retrofits	\$8
Strategy EN4	Urban Growth Boundaries	< \$1
Strategy EN5	Acquisition of High Value & Higher-Cost Lands	\$12
Strategy EN5	Acquisition of High Value & Lower-Cost Lands	\$23
Strategy EN6	Urban Park Creation	\$10
Strategy EN6	Urban Tree Canopy Expansion	\$2
Strategy EN6	Trail Network Gap Closures	\$5
Strategy EN6	Green Infrastructure Expansion	\$10
Strategy EN7	Commute Trip Reduction Programs	< \$1

Strategy EN8	Electric Vehicle Charging	< \$1
Strategy EN8	Electric Vehicle Subsidies	\$7
Strategy EN9	Transportation Demand Management Initiatives	\$2
Total		\$228

Table 3: Top Funding Sources for Plan Bay Area 2050+ Environment Element Revenue Forecast

Scale	Major Funding Program	Amount (\$Billions, YOY)
Federal	Energy Efficient Home Improvement Credit, IRS/DOE	\$3.3
Federal	Building Resilient Communities and Infrastructure, FEMA	\$2.9
Federal	Various Funding Programs, USACE	\$1.5
Federal	Hazard Mitigation Assistant Grant Programs, FEMA	\$0.3
Federal	OBAG PCA Grant Program, FHWA funding	\$0.2
Federal	Other (43 programs)	\$1.0
Federal	Subtotal	\$9.3
State	BayREN Energy Grants, CPUC funding	\$1.2
State	Sustainable Agricultural Lands Conservation, DOC	\$0.3
State	Wildfire Prevention Grants, CAL FIRE	\$0.2
State	Nature Based Sea Level Rise Solutions Grants, SCC	\$0.1
State	Transportation Infra. Climate Adaptation Project Program, Caltrans	\$0.1
State	Other (44 programs)	\$0.7
State	Subtotal	\$2.6
Local	Housing Impact Fees	\$11.3
Local	Measure F, Sonoma County	\$1.8
Local	Measure AA, Regional	\$0.9
Local	Measure M, Sonoma County	\$0.4
Local	Measure A, San Francisco	\$0.3
Local	Other (29 Measures)	\$3.0

Local	Subtotal	\$17.7
All	Total	\$29.5