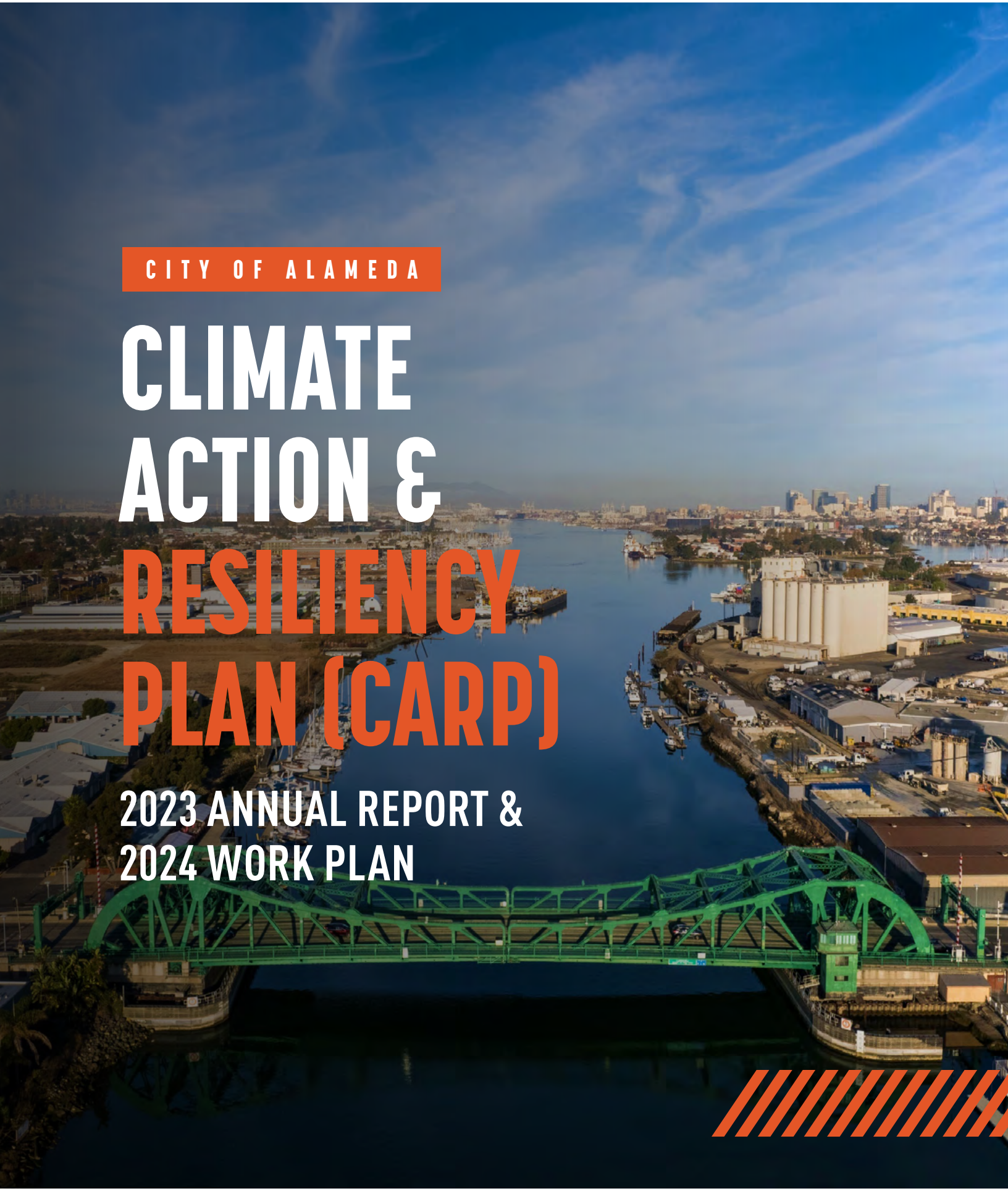

CITY OF ALAMEDA

CLIMATE ACTION & RESILIENCY PLAN (CARP)

2023 ANNUAL REPORT & 2024 WORK PLAN

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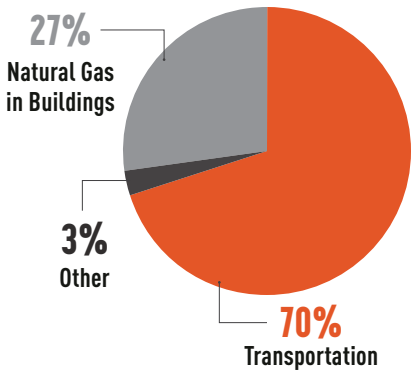
BOOK 02

INTRODUCTION

The Alameda Climate Action and Resiliency Plan (CARP) was adopted by the City Council in 2019 with the goal of reducing greenhouse gas emissions (GHG) by 50% below 2005 levels by 2030 and becoming carbon neutral as soon as possible, while adapting to a changing climate. In 2020, Alameda Municipal Power (AMP) implemented 100% clean energy, setting the stage for Alameda to achieve net zero emissions through electrified buildings and transportation. AMP's commitment to achieve and maintain 100% clean energy accounts for about 88% of CARP's 2030 goal. In 2024, the City will begin a mid-cycle update of CARP.



▶ Sources of Greenhouse Gas Emissions in Alameda

THE CLIMATE ACTION AND RESILIENCY PLAN ADVOCATES FOR:

CLEAN TRANSPORTATION

Safe routes for walking and biking, accessible, high-quality public transit, and driving electric when you must drive.

CLEAN BUILDINGS

Transitioning natural gas appliances in buildings to those that run on clean electricity.

ZERO WASTE

Supporting practices such as recycling, composting and reducing consumption.

CARBON SEQUESTRATION

Through tree planting and compost application.

EQUITY AND ENVIRONMENTAL JUSTICE

Promoting inclusive community engagement and social resilience.

CLIMATE ADAPTION

Increasing resilience to sea level rise and storm surges, drought, extreme heat, flooding, tsunamis, and earthquakes.

CARP IMPLEMENTATION

Many CARP actions will improve quality of life for Alamedans, reducing air pollution and the urban heat island effect, improving traffic safety, making homes both greener and safer, and enhancing community resilience. CARP implementation is an opportunity to align both GHG emission reduction and equity goals and create a process that facilitates a just transition into a sustainable future. The City will ensure that policies and programs developed to implement CARP address the needs of vulnerable communities.

One of Alameda's most significant climate threats is from rising sea and groundwater levels. Today's 100-year storm represents 3.5 ft of additional sea level rise, projected to occur towards the end of the century (California Sea Level Rise Guidance, 2024). Without early intervention, flooding will cause harm to not only community members and property, but ecological assets as well. Damages from sea level rise through 2050 are projected to cost $110 billion throughout the San Francisco Bay Area, with $22 billion in Alameda County. Through the City's leadership in the Oakland Alameda Adaptation Committee (OAAC), we are acting proactively to protect against current flooding and future sea level rise as well as protecting water quality and habitat and ensuring high quality of life for current and future generations.

CARP annual reports are presented to City Council in March each year to update Alamedans on significant accomplishments for climate mitigation and adaptation made within the year and inform the proposed work plans for the coming year. This annual report also serves as the annual report for the Climate Adaptation and Hazard Mitigation Plan, as required by the Federal Emergency Management Agency (FEMA).

WHAT CAN INDIVIDUALS DO TO FIGHT CLIMATE CHANGE?

The City of Alameda cannot avert climate change on its own. Community members, business, other cities and counties, the state, federal government, and the world must all collaborate in an immediate and concerted effort to reduce global emissions. Small changes can make a big difference. Together we can make a difference and secure our future on this island.

STEPS YOU CAN TAKE TO HELP FIGHT CLIMATE CHANGE

01 **Getting Around**
Walk, bike, or take transit instead of driving. If you must drive, drive electric.

02 **Buy Less or Used**
Buy less or buy used goods. Limit plastic packaging and single-use items.

03 **Reduce Footprint**
Take fewer flights, or purchase verified carbon offsets

04 **Eat Responsibly**
Minimize food waste and eat a low meat diet.

05 **Home Improvements**
Electrify, weatherize and seismically retrofit your home.

06 **Support Housing**
Support multi-family housing and increased density in your neighborhood.

Through the City's leadership in the Oakland Alameda Adaptation Committee (OAAC), we are acting proactively to protect against current flooding and future sea level rise as well as protecting water quality and habitat and ensuring high quality of life for current and future generations.

TOP 10 ACCOMPLISHMENTS IN 2023

Alameda is taking steps towards achieving CARP goals, but we need to accelerate our efforts to achieve our goal of becoming carbon-neutral by 2030. The following top 10 highlights the progress made in 2023.

UPDATING PLANS

City Council approved updating the City's **Zero Waste Implementation Plan** and a mid-cycle update of **CARP**.

10

Charging Ports

Installed 10 new charging ports at Seaplane Lagoon Ferry Terminal.

Began enforcement of the **Disposable Food Ware Ordinance**, following a pause during the pandemic.

Opened a Compost Hub in collaboration with Farm2Market & Makerfarm on Alameda Point where members of the community can collect compost free of charge.

03

Sea Level Rise Adaptation Projects

Kicked off three sea level rise adaptation projects with the Oakland Alameda Adaptation Committee.

Began development of **De-Pave Park Master Plan.**

Added drought tolerant landscaping at City Hall and City Hall West.

OKAPI Reusables launched a reusable cup network in cafes across the city with the help of Community Action for a Sustainable Alameda (CASA).

Began implementation of the **Equitable Building Decarbonization Plan.**

Began Development of **Urban Forest Plan**

KEY CARP STATISTICS

TRANSPORTATION: MODE SHIFT

Completed 2.7 new miles of bikeways in 2023, with 8.3 miles completed to date towards CARP's goal of 16.54 miles by 2030. Alameda's bicycle network now consists of 57 miles of bikeways.

- **Transit ridership was up in 2023, with an increase of 60% for AC Transit, 46% for ferry ridership on the Seaplane and Harbor Bay routes and 13% for BART, compared to 2022.** Transit ridership is still down compared to pre-pandemic levels.

TRANSPORTATION: TRANSITION TO EVS

- 6.8% of all vehicles registered in Alameda are electric, plug-in hybrid or fuel cell vehicles, up from 5.2% in 2022.
- 728 new EVs, plug-in hybrids and fuel cell vehicles were registered in Alameda in 2022, exceeding the CARP goal of increasing the number of new EVs by 390 per year.
- AMP issued 61 rebates for used EVs and 116 rebates for e-bike rebates in 2023.
- 234 residential, 2 multi-family, and 2 government and business customers received an AMP rebate to install a qualifying level 2 EV charger, marking a 60% increase from 2022.
- Since 2017, there are 2,232 more alternative fuel vehicles and 4,609 fewer gas-powered vehicles registered in Alameda.
- Alameda currently has 58 public EV chargers in 10 locations.

BUILDING ENERGY

- Natural gas consumption was up 1.7% in 2022 (the most recently available data) compared to 2021. While residential consumption decreased, commercial consumption increased 10% over 2022.
- 29.6% of Alameda households are heated with electricity, up from 26.8% in 2019.
- AMP issued rebates for 28 heat pump water heaters, 28 electric dyers, 44 heat pump space heaters, and 31 electric panel upgrades.
- 240 AMP customers completed rooftop solar installations in 2023, a 33% increase from 2022. The cumulative capacity of all solar generation systems in Alameda is 3,029.7 kW.

WASTE

- Alamedans generated 2.1 pounds of waste per person per day in 2022, down from 2.4 pounds in 2019.
- 81% of Alameda's waste is composted or recycled, one of the highest diversion rates in Alameda County.

SEQUESTRATION

- The City of Alameda applied 2,173 cubic yards of compost in parks and open spaces in 2023.
- The City has increased the urban forest by 677 trees since 2019.

2023 PROGRESS AND 2024 WORK PLAN

While the City is making progress towards CARP goals, it is also clear there is more work to do. The 2024 priorities are designed to address those areas with the greatest need.

Staff have identified ten priorities for CARP implementation in 2024 and continue progress from 2023. Many of the 2024 priorities align with the City's Strategic Plan adopted in 2023. Where relevant, the related strategic plan project number is shown in parenthesis. The work plan will be carried out by a variety of City departments as indicated in the following table.

TASK	LEAD	DESCRIPTION
GHG Reduction		
Complete Greenhouse Gas Inventory and Update CARP for 2025 -2030 (CC1)	Planning, Building and Transportation	**2023:** » Council allocated $200,000 from general fund and approved agreement with Raimi & Associates for a mid-cycle CARP update. » Began CARP update and GHG inventory. **2024:** » Complete an updated GHG inventory. » Evaluate progress on CARP implementation to date. » Review and revise as needed the CARP vision, goals, actions, and performance metrics. » Incorporate and align CARP actions with Climate Adaptation and Hazard Mitigation Plan. » Conduct stakeholder and community engagement. » Develop implementation plans for key strategies. » Provide draft plan for public review. » Target City Council adoption in early 2025. www.alamedaca.gov/CARP
Adopt Urban Forest Plan and begin imple-mentation (CC3)	Planning, Building and Transportation ARPD Public Works	**2023:** » Held pop-up events to raise awareness and gain community feedback. » Conducted survey both online and in-person (839 respondents) to gain community feedback. » Established Working Group and met four times to discuss the plan. » Developed draft plan to be reviewed by public in mid 2024. **2024:** » Provide a draft plan for public review. » Target City Council adoption in fall 2024. » Draft a tree canopy preservation and replacement ordinance. » Partner with CBOs to conduct community tree planting and care events. » Seek grant funding to implement urban greening programs. www.alamedaca.gov/UrbanForestPlan

TASK	LEAD	DESCRIPTION
GHG Reduction		
Expand public electric vehicle (EV) charging network (CC2)	Planning, Building and Transportation Public Works AMP	**2023:** » Issued a Request for Proposals to designate an electric vehicle charging provider to procure and operate EV charging stations on City owned parking lots and curbside locations as well as AHA multi-family housing sites. » AMP developed a new technical assistance program to assist both multi-family residences and workplace sites with planning and designing EV charging projects, including site review, ADA compliance, cost estimates, installation process, and contractor referrals. » Applied to Charging and Fueling Infrastructure Grant Program for public EV chargers in city-owned parking lots, however grant was unsuccessful. » Installed 10 new charging stations at Seaplane Lagoon ferry terminal. **2024:** » Procure EV Charging Provider to expand public EV charging in City owned parking lots. » Examine new funding opportunities through the Inflation Reduction Act, CaleVIP 2.0, CARTS NEVI, and other grants to maximize cost efficiency. » Expand EV charging access for residents who rent or live in multi-family units. www.alamedaca.gov/ElectricVehicles
Implement near term priorities of the Equitable Building Decarbonization Plan (CC5)	Planning, Building and Transportation AMP Planning, Building and Transportation	**2023:** » City Council extended the all-electric new buildings ordinance to include substantial remodels and additions, however the ordinance is no longer enforceable in certain instances following a Federal Appeals Court decision. » Held three community engagement meetings on building electrification. » Added building electrification rebate information to all outgoing development permit approvals and placed flyers in the permit center. » Conducted a contractor survey on building electrification practices. **2024:** » Alameda Electrification Fair planned for March 16, 2024 from 1-4pm at Faction Brewing to educate the public on building electrification. » Request Federal Energy Efficiency and Conservation Block Grant (EECBG) funds for energy upgrades to Veterans Memorial Buildings. » Partner with AMP to engage the contractors and the public on building electrification opportunities. » Explore opportunities for existing multi-family residential retrofit pilot programs in partnership with AMP, Alameda Housing Authority, and others. » Seek opportunities to take advantage of IRS Elective Pay program for local clean energy and EV procurement. » Explore revenue measures and additional state and federal funding to support local efforts. www.alamedaca.gov/BuildingDecarb

TASK	LEAD	DESCRIPTION
Waste		
Continue to implement SB 1383 and increase compost application citywide.	ARPD Public Works	**2023:** » Opened a Compost Hub in collaboration with Farm2Market and Makers Farm on Alameda Point where members of the community can collect compost free of charge. 120 yards of compost have been given away so far. » Staff continued to procure and spread compost in parks throughout the City. **2024:** » Continue edible food recovery program and procurement of products made from recycled materials, following SB 1383 requirements. » Coordinate with StopWaste to procure compost and mulch as required by SB 1383 and determine potential areas to apply this material. www.alamedaca.gov/Departments/Public-Works-Department/Zero-Waste-Program-and-Services
Update Zero Waste Implementation Plan (CC9)	Public Works	**2023:** » City Council approved updating the City's Zero Waste Implementation Plan. » The City began to issue citations for non-compliance with the Disposable Food Ware Reduction Law and issued 8 citations in 2023. **2024:** » Implement new zero waste strategies and policy and program enhancements. » Conduct community engagement and public survey on current practices. » Target City Council adoption by the end of 2024. www.alamedaca.gov/Departments/Public-Works-Department/Zero-Waste
Adaptation		
Continue to develop Long-range Sub-regional Long-term Adaptation Plan (CC6)	Planning, Building and Transportation Public Works	**2023:** » City Council on behalf of the Oakland Alameda Adaptation Committee (OAAC) hired CMG Landscape Architecture to lead the consultant team to implement the three projects, and two funded Community Partner teams to conduct community engagement: Community Actions for a Sustainable Alameda (CASA) and Greenbelt Alliance. » City Council approved two federal grants to fund the Long-term Plan. » Developed Existing Conditions Analysis and Community Engagement Strategy. **2024:** » Feasibility assessment in spring 2024 » Draft plan and governance structure in late 2024 » Two rounds of outreach in spring 2024 and early 2025 » Request for City Council approval anticipated fall 2025. www.alamedaca.gov/AdaptationLongTermPlan

81% 81% of Alameda's waste is composted or recycled, one of the highest diversion rates in Alameda County.

TASK	LEAD	DESCRIPTION
Adaptation		
Continue Bay Farm Island Adaptation Project (CC6a)	Planning, Building and Transportation Public Works	**2023:** » City Council on behalf of OAAC hired CMG Landscape Architecture to lead the consultant team to implement the three projects, and two funded Community Partner teams to conduct community engagement: CASA and Greenbelt Alliance. » Developed Existing Conditions Analysis and Community Engagement Strategy. **2024:** » Alternatives analysis in spring 2024 » Draft design in fall 2024 » Two rounds of outreach in spring 2024 and early 2025 » Request for City Council approval in fall 2025. www.alamedaca.gov/AdaptationBayFarmIsland
Continue Oakland-Alameda Estuary Adaptation Project (CC6b)	Planning, Building and Transportation Public Works	**2023:** » City Council on behalf of OAAC hired CMG Landscape Architecture to lead the consultant team to implement the three projects, and two funded Community Partner teams to conduct community engagement: CASA and Greenbelt Alliance. » Developed Existing Conditions Analysis and Community Engagement Strategy. **2024:** » Alternatives analysis in spring 2024 » Draft concept design in summer 2024 » Two rounds of outreach in spring and fall 2024. » Final concept design requested for City Council approval in early 2025. www.alamedaca.gov/AdaptationEstuary
Conduct De-Pave Park Master Plan process (CC4)	ARPD	**2023:** » City Council approved the contract to begin developing the Master Plan in January 2023. » Held two community input rounds (of three total) attended by over 325 in total, including a meeting and onsite tour held specifically with Alameda Point Collaborative residents. Also issued two online surveys with over 1,000 responses including 150 responses from Wood Middle School students through their science classes. » Met regularly to review the project design with the Bay Restoration Regulatory Integration Team (BRRIT) which includes representatives from all regulatory agencies. » Met with Building 25 and 29 tenants regarding design options and impacts on their businesses as well as relocation options. » City Council received a report on the final three designs and provided direction to maximize the natural area and remove both Building 25 and 29. **2024:** » Present to the BCDC Design Review Board on January 9, 2024. » Final Master Plan will be brought to City Council for approval in March. » 30% design documents completed by summer 2024. » Grant applications will be submitted to fund regional permits and construction. www.alamedaca.gov/Departments/Recreation-Parks/De-Pave-Park

STATUS OF CARP STRATEGIES AND PERFORMANCE MEASURES

This section provides a detailed review of progress made on each CARP strategy in 2023 and provides an update on CARP's performance metrics.

Transportation

Transportation accounts for 70% of the City's GHG emissions. CARP builds on the goals and actions of the Transportation Choices Plan to reduce solo driving and to encourage walking, biking, riding transit, and telecommuting. In addition to mode shift, expanding the adoption of electric vehicles and charging infrastructure is an integral part of reducing GHG emissions from the transportation sector.

For further details on transportation, refer to the 2023 Transportation Annual Report and 2024 Work Plan.

MODE SHIFT

STRATEGY T1

Reduce commute vehicle miles traveled.

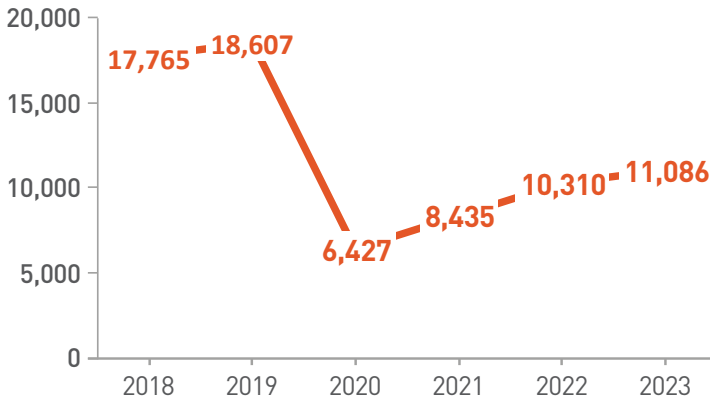
Encourage employees and employers to reduce commute trips by telecommuting. In addition, implement a combination of programs that encourage telecommuting and land use decisions that increase work-live spaces and mixed zoning.

STATUS: PENDING

One of the most critical ways to lower GHG emissions is to reduce the number of miles driven, especially by individuals in their cars. Alameda's General Plan update includes policies to encourage telecommuting and zoning amendments to facilitate mixed use development and work-live spaces to help reduce the total VMT (vehicle miles traveled).

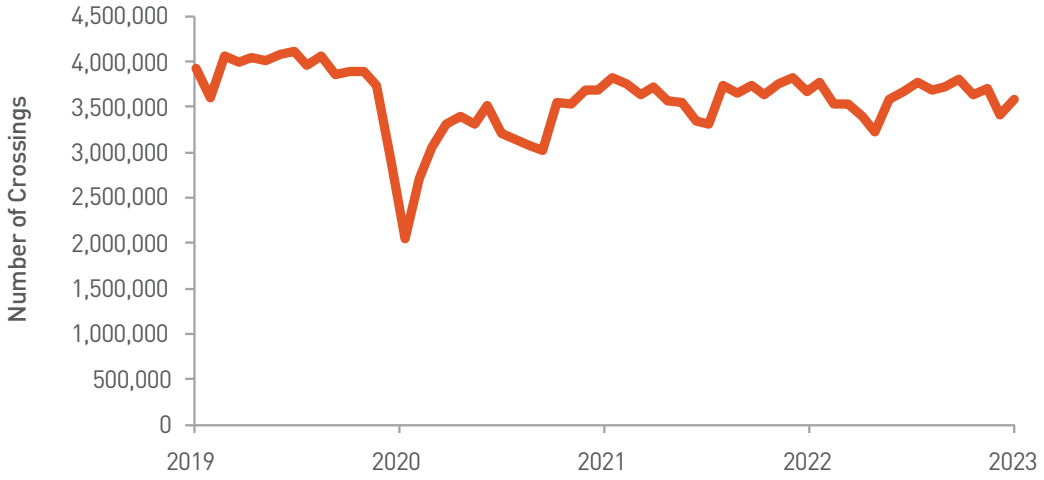
While public transit ridership is trending to pre-pandemic levels, freeway and bridge traffic largely returned to normal back in 2021 and has remained high.

- **Bus ridership** continued increasing in 2023, and average daily boardings on AC Transit bus lines serving Alameda were 72% higher than in 2020 (compared to 60% higher in 2022). However, 2023 ridership was still 37% lower than in 2019 before the pandemic began.
- Across its system, **ferry ridership was 10% higher** in 2023 than in 2022. Weekend ridership continues to be 100% or more of 2019 levels.
  - » *Ferry ridership on the Alameda Seaplane and Harbor Bay routes grew 46% over 2022 levels*
- **BART ridership** is steadily increasing, but still remains lower than pre-pandemic ridership. We looked at the average for the three most commonly used BART stations by Alamedan residents. 2023 ridership is 13% higher than 2022 ridership but remains 59% lower than 2019 ridership.

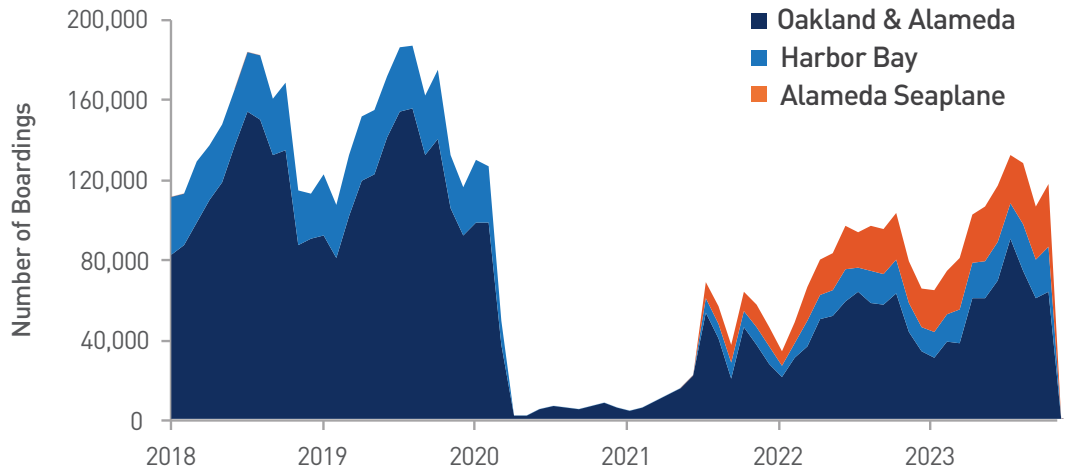


▶ **Average Daily Boardings for AC Transit Lines in Alameda**

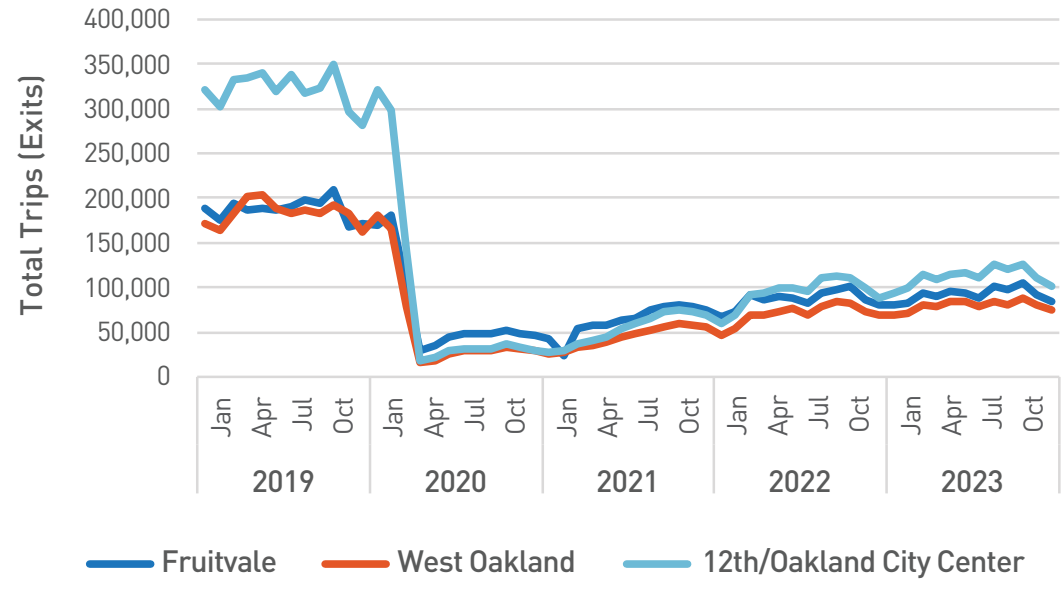
▶ **San Francisco- Oakland By Bridge Monthly Toll Crossings**



▶ **Ferry Ridership for Alameda Routes**



▶ **Monthly BART Ridership**



STRATEGY T2

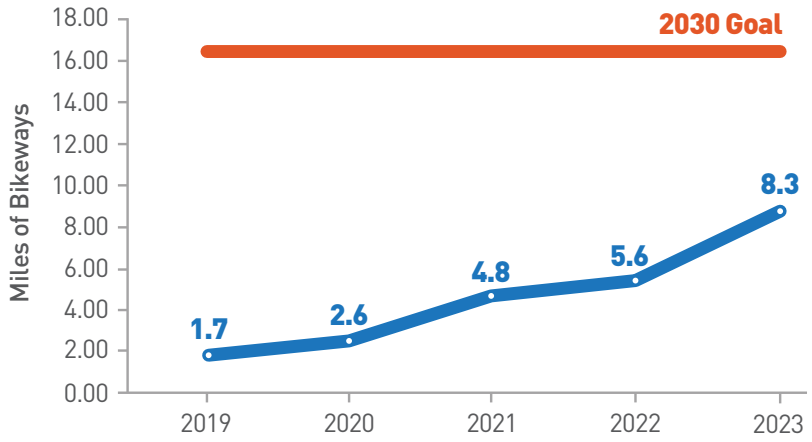
Build additional bike lanes

Construct an additional 10.44 miles of dedicated and protected bike lanes on top of the 6.1 miles bikeway projects already planned in the Transportation Choices Plan (TCP) and make pedestrian/bicycle improvements that increase safety, make it easier for people to use these modes, and connect residential neighborhoods with commercial centers and workplaces.

STATUS: MAKING PROGRESS

- Implementing the 2022 Active Transportation Plan promoting safe, accessible, and comfortable ways for people of all ages and all abilities to get around Alameda such as walking, biking, using wheelchairs and mobility scooters, e-bikes and e-scooters, skateboards, and more.
- In 2023, 2.7 new miles of bikeways were completed as part of CARP, TCP and ATP, and in support of development of Alameda's 2030 Low-Stress Backbone Network.
- In combination with progress in previous years, 8.3 miles of bikeways have been constructed towards the 2030 goal of 16.54 miles.
- In order to meet the CARP goal, 1.37 miles will need to be constructed annually until 2030. Alameda's bicycle network now consists of 57 miles of bikeways. Bikeways tracked towards the CARP goal do not include bike routes (roads with sharrows), which are still part of Alameda's bicycle network.

▶ **Cumulative Bikeways Constructed**



STRATEGY T3

Traffic signal synchronization

By 2030, improve synchronized timing of 25 traffic lights to improve traffic flow by slowing vehicle speeds and reducing idling.

STATUS: ON TRACK

Public Works has completed signal timing and coordination projects at 13 intersections in the Park and Webster Street corridors.

STRATEGY T4

Expand EasyPass Program

Provide 5,000 AC Transit EasyPasses in addition to the 5,000 already committed to in the TCP, for a total of 10,000 passes to be distributed by 2030.This strategy is prioritized for 2025-2030.

STATUS: MAKING PROGRESS

The City distributed 770 EasyPasses across 29 organizations to ATMA (Alameda Transportation Management Association) members in 2023, including Alameda Point Collective and Alameda Housing Authority.

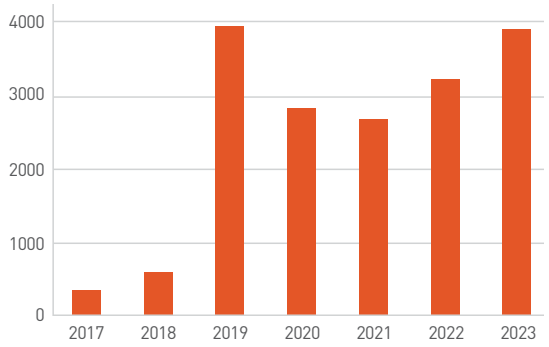
The City also provides free bus passes to low-income seniors and people with disabilities as part of a three-year pilot program in partnership with AC Transit using Measure BB paratransit funds. 804 seniors and people with disabilities now have an Alameda Free AC Transit Bus Pass. In 2023, over 142,000 rides have been taken, averaging 11,885 per month. 519 unique riders took over 14,000 rides in December 2023.

The bus pass program serves a diverse population, and over 60% of participants do not speak English. Staff are translating program applications and communications into Traditional Chinese, Simplified Chinese, Spanish, Tagalog, and Vietnamese. AC Transit cites that with over 80% of passes actively being used, it is one of their most successful programs, and is a model for other cities to replicate.

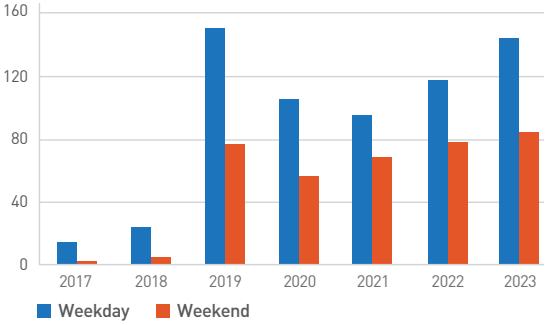
The Alameda Independent Mobility Program, or AIM, is halfway through its three-year pilot program. So far it has provided over 1,000 rides to 111 residents who are fully enrolled in East Bay Paratransit. Since January 2023, the program has provided an average of 80 rides per month.

Affordable Student Transit Passes are distributed to four participating AUSD schools. In 2021-2022 school year (the most recently available data), AUSD had a 31% participation rate (190 students) of those eligible for the pass. Pass holders averaged 5.3 boardings per month and there were 8,533 boardings total in 2021-2022, the most current year data is available.

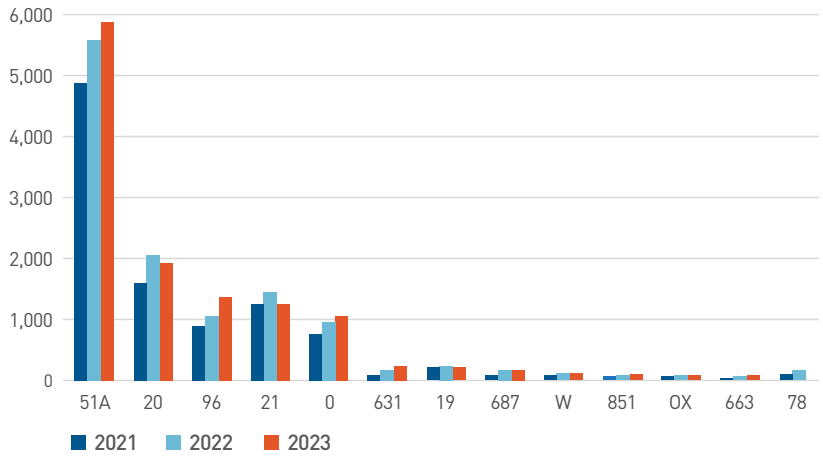
▶ **Average ATMA Monthly Boardings by Year**



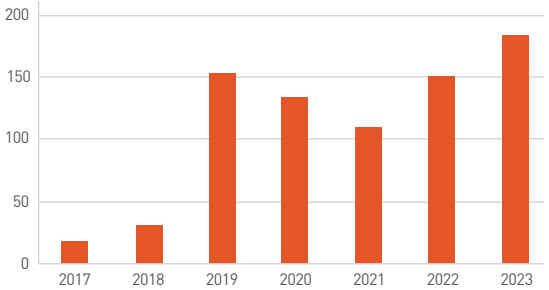
▶ **Average ATMA Daily Boardings by Year**



▶ **Average Weekday Boardings in Alameda, Fall 2021-2023**



▶ **Average ATMA Unique Monthly Users by Year**



STRATEGY T5

T5. Ban gas-powered leaf blowers.

Ban gas-powered leaf blowers in the City of Alameda.

STATUS: COMPLETE

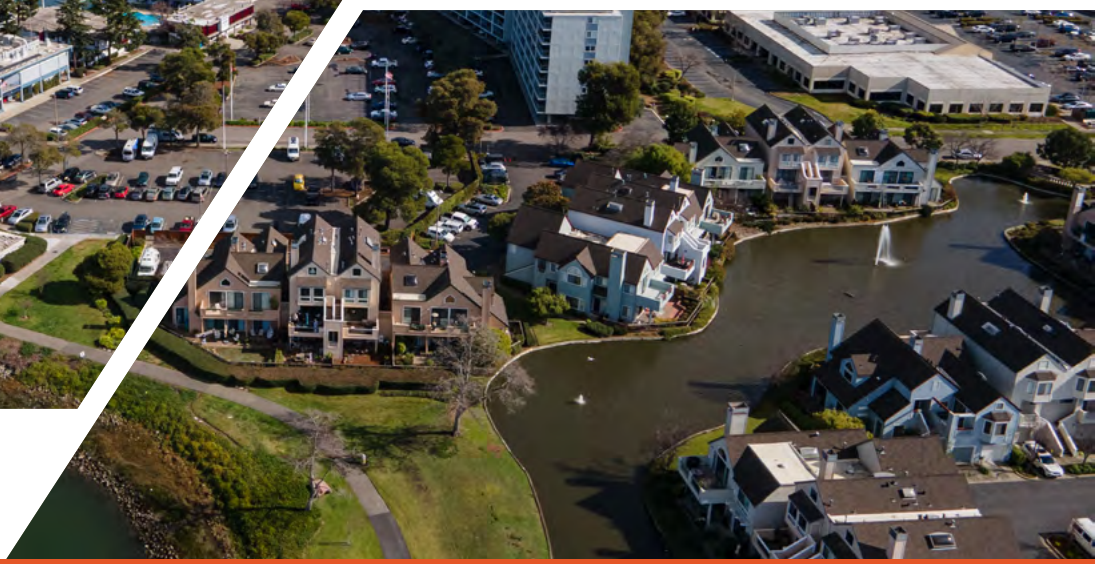
- The City of Alameda ordinance banning the sale and use of gas-powered leaf blowers went into effect on January 1, 2023.
- Staff conducted education and outreach to implement the leaf blower ban and began complaint-based enforcement actions.
- 89 notices of violation have been issued for gas-powered leaf blowers.
- Starting in 2024, the sale of new gas-powered blowers, mowers, weed trimmers and chainsaws will be banned in California.
- More information about the leaf blower ban and enforcement can be found at www.alamedaca.gov/leafblowerban.

1 HOUR
LEAF BLOWER USE

300 MILES
DRIVING FROM LA TO VEGAS

1 HOUR
LAWN MOWER USE

1,00 MILES
DRIVING FROM LA TO DENVER



TRANSITION TO ELECTRIC, ZERO EMISSION VEHICLES

STRATEGY T6

Increase availability of EV chargers citywide

Ensure that all new developments with new parking lots install charging stations for residents and/or customers. Streamline permitting processes for existing homeowners and business owners who wish to install charging stations. Add public charging stations in all City-owned parking lots. Allow residents to rent their driveways and private EV chargers to renters who do not have access to convenient charging.

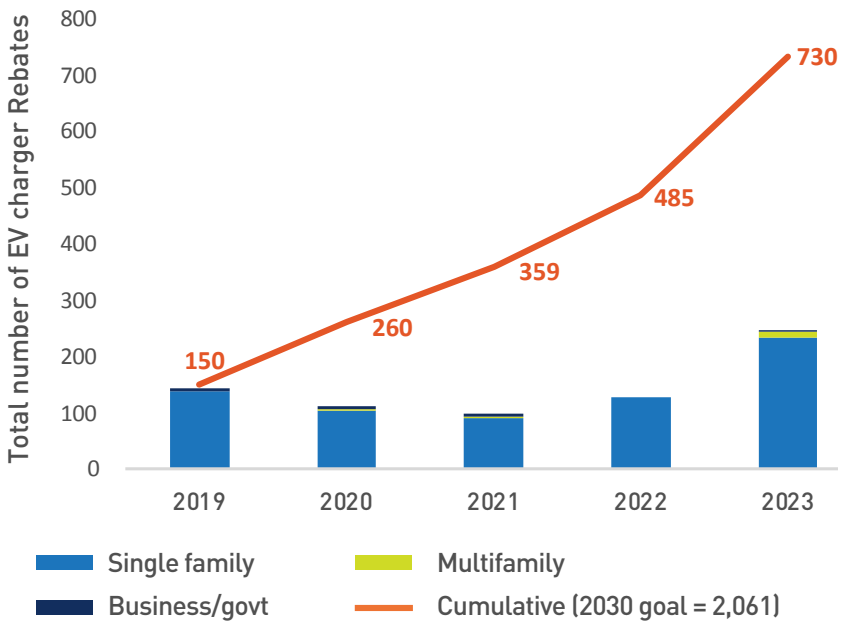
STATUS: MAKING PROGRESS

- The City issued an RFP for an EV Charging Provider in order to expand the network of publicly accessible charging stations in Alameda. The proposed charging stations will be on city-owned parking lots and curbside locations, as well as Alameda Housing Authority multi-family housing sites.
- The permit center streamlined permitting/same day web permits for residential & commercial EV chargers and other electrification upgrades.

AMP EV Charger Rebates:

- **Residential:** AMP continues to encourage the installation of level 2 EV chargers at residential properties and offers customers in single family homes up to $500 in rebates for installing a qualifying level 2 EV Charger. In 2023, 234 residential customers received an AMP rebate to install a qualifying level 2 EV charger.
- **Multi-family:** AMP works closely with multi-family building owners serving as a resource and technical assistance guide for Level 2 charging installation. AMP launched a new Multi-Family Level 2 Charging rebate program in 2023. This rebate is $8,000 per charger up to $48,000 for qualifying multi-family buildings. Nine rebates were issued in 2023.

▶ **Total EV Charger Rebates Issued In Alameda**



- **Businesses:** AMP works with businesses and government property owners to encourage installation of EV charging infrastructure and provides up to $39,000 for up to 6 level 2 charging stations per site. In 2023 2 commercial rebate applications were issued.
- **245 Level 2 charger rebates were issued in 2023**, marking a 94% increase over 2022. 730 charger rebates in total have been issued since 2019. At the current rate, AMP is projected to issue about 1,500 total rebates (including residential) by 2030, a little short of CARP's goal of 2,061.

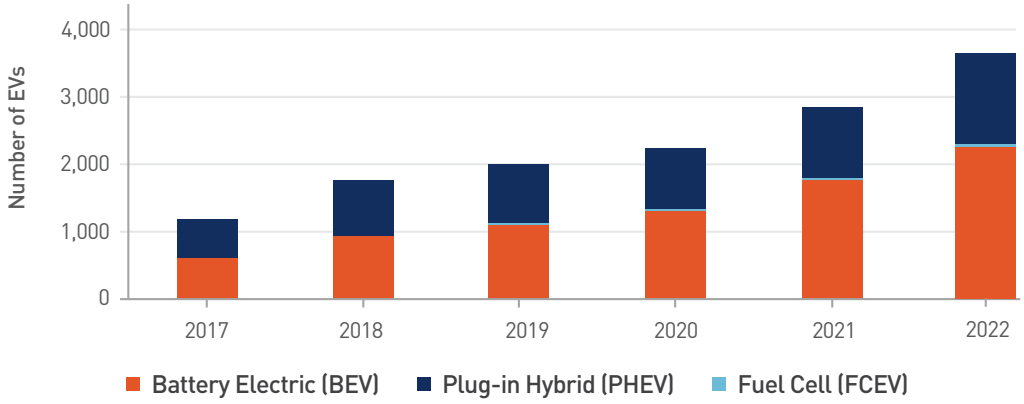
STRATEGY T7

Promote purchase of LEVs and ZEVs

Implement communications and outreach activities to promote the acquisition of light-duty EVs.

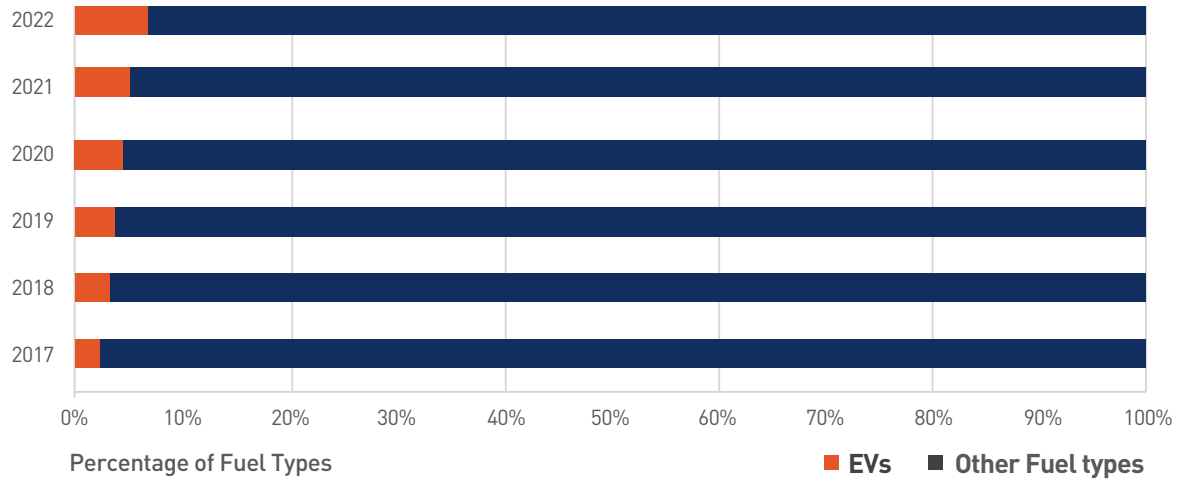
STATUS: ON TRACK

- Alameda residents continue to purchase EVs at an increasing rate. In 2022, the latest data available, 728 new EVs, plug-in hybrids and fuel cell vehicles were registered in Alameda, exceeding the CARP goal of increasing the number of EVs by 390 per year.
- 6.8% of registered vehicles in Alameda are electric, plug-in hybrid or fuel cell vehicles, for a total of 3,449 vehicles.
- AMP conducted two Electric Vehicle 101 webinars, created new one-pagers outlining all of AMP's clean transportation programs, and had two in-person EV Expo events to educate customers about EVs. The April Ride and Drive event had 300 registrants and the October event had 284 registrants.
- AMP has also worked with other Electric Vehicle campaigns and non-profits to promote regional and state level programs to customers.
- In 2022, California passed legislation that requires 100% of new vehicle sales to be zero-emission vehicles by 2035, which will help the City further reach its EV adoption goals.



▶ **EV Ownership in Alameda**

Source: California Energy Commission (2023). California Energy Commission Zero Emission Vehicle and Infrastructure Statistics. Data last updated April 28, 2023. Retrieved November 19, 2023 from https://www.energy.ca.gov/zevstats



▶ **Share of EVs vs Gasoline, Diesel and Other Fuel Types**

Source: California Energy Commission (2023). California Energy Commission Zero Emission Vehicle and Infrastructure Statistics. Data last updated April 28, 2023. Retrieved November 19, 2023 from https://www.energy.ca.gov/zevstats

STRATEGY T8

Continue programs to encourage new EV purchases.

Encourage EV ownership by promoting a manufacturer's suggested retail price rebate. Also, emphasize continuation of programs from AMP, subject to PUB approval, to provide rebates to residential and non-residential customers who purchase a level 2 EV charging station.

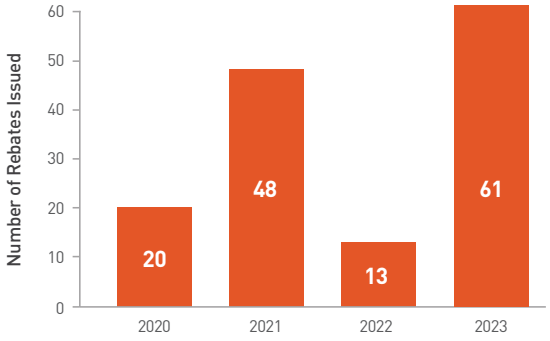
STATUS: MAKING PROGRESS

- AMP continued their rebate for used EVs by offering $4,000 for all residents who purchased a used EV and $6,000 for income-qualified residents. This rebate can combine with federal tax credits for EV purchases.
- A total of 61 used EV rebates were issued in 2023. The City's goal is to issue 821 EV rebates by 2030. AMP has given out 142 EV charger rebates to date.
- AMP also provides up to $600 for the purchase of an e-bike. 116 e-bike rebates were issued by AMP in 2023. Alameda TMA members can receive an additional $300 rebate.

SINCE 2017,
REGISTERED VEHICLES IN ALAMEDA:

2,232 MORE
ELECTRIC VEHICLES

4,609 FEWER
GAS-POWERED VEHICLES



▶ **Used EV Rebates Issued by AMP**

STRATEGY T9

Continue to encourage businesses to install EV charging stations.

Implement communications and outreach activities to encourage workplaces and businesses to install EV charging systems.

STATUS: PENDING

- CARP's goal is to add 260 new charging ports at business and government locations in the first five years of CARP.
- AMP's commercial EV charger rebate provides up to $39,000 for business or governments to install up to six level 2 EV chargers. AMP has received applications for 2 commercial charger installations in 2023.
- There are currently 58 public EV chargers at 10 locations, with more planned for 2024. Ten new Level 2 EV chargers were added to Seaplane Lagoon Ferry Terminal in 2023.

STRATEGY T10

Electrify City's fleet

Convert the light-duty portion of the City's vehicle fleet to EVs and right-size the fleet.

STATUS: MAKING PROGRESS

- Consistent with the Council's fleet policy, the City is replacing light duty vehicles with EVs as they are replaced. The fleet is also being right sized to reduce the number of vehicles the City manages. City Hall West has a dedicated alcove for charging those vehicles.
- The city currently has three Go 4 Interceptor parking enforcement vehicles, and nine electric Nissan Leaf vehicles used for Engineering & Inspection Capital Improvement Projects.
- In 2023, the Police Department has ordered one Ford Transit electric cargo van for Animal Control and one electric motorcycle.
- AMP currently has six Ford F-150 Lightning electric trucks, six charging ports to support the trucks, six sedans (4 BEV, 2 PHEV) and four L2 dual-connector chargers to support the sedans.

The City currently has three Go 4 Interceptor parking enforcement vehicles, and nine electric Nissan Leaf vehicles used for Engineering & Inspection Capital Improvement Projects.

Energy Use in Buildings

Energy use in buildings accounts for 27% of the City's GHG emissions. Because AMP provides 100% clean energy to all customers, fuel switching from natural gas to electric for space heating, water heating, cooking and clothes drying appliances will reduce emissions. In addition, increasing energy efficiency through weatherization, building insulation, and more efficient appliances will further reduce overall energy use and emissions.

STRATEGY E1

"Fuel switch" in existing buildings

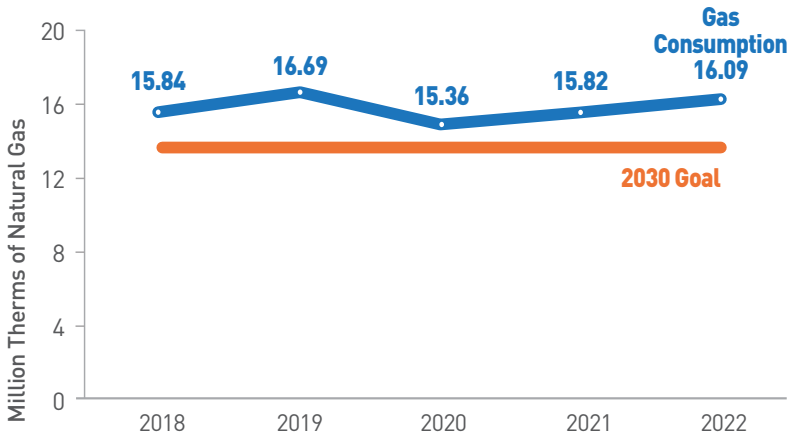
Convert natural gas consumption to electricity use in residential and commercial buildings. Require switching from natural gas to electric appliances and heating when existing residential buildings are being substantially expanded. Support programs that encourage homeowners/commercial building owners to implement electrification retrofits.

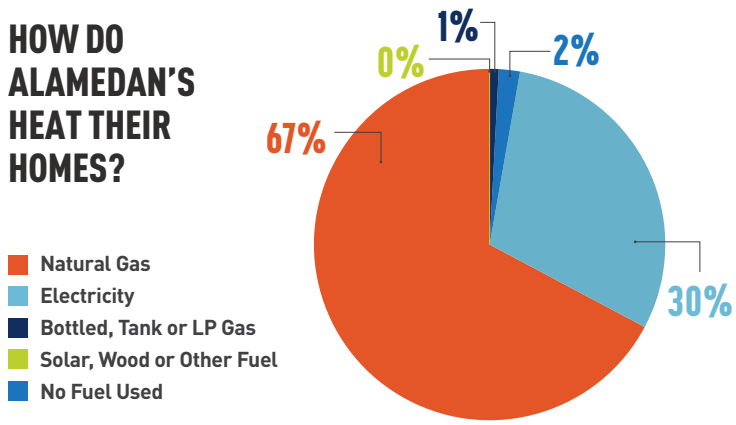
STATUS: PENDING

In 2022, the latest data available, overall gas consumption increased in Alameda by about 1.7% over 2021. Residential gas consumption decreased by over 200,000 therms while commercial usage increased by nearly 500,000 therms compared to 2021.

- Currently, 29.6% of Alameda households are heated with electricity, compared to 26.8% in 2019. This is equal to almost 9,000 households citywide. Around 20,000 households heat their homes with gas.
- Staff is continuing to seek grant opportunities to fund pilot programs, technical assistance and other programs to support transitioning from gas to electric appliances.
- The City conducted a contractor building electrification survey in 2023 to learn how often they currently perform electrification measures, and how the city can better support additional electrification measures and raise awareness to customers.
- The City replaced fluorescent lights in the Civic Center Parking structure with energy efficient LED lighting.

▶ Natural Gas Consumption





STRATEGY E2

Electrification of new residential construction

Prepare ordinances requiring all new residential construction to be 100% electric-powered with no gas hookups.

STATUS: PENDING

- In December 2022, City Council renewed and expanded the all-electric reach code requiring all new construction and significant renovations or additions to be all-electric.
- An all-electric building is defined as a building that has no natural gas or propane plumbing installed within the building property lines, and instead uses only electricity as the source of energy for its space heating, water heating, cooking appliances and clothes drying appliances.
- In April 2023, the Federal Appeals Court struck down Berkeley's natural gas ban ordinance. This decision means that the City of Alameda can no longer enforce our all-electric new buildings ordinance in certain instances. Staff is working to identify other ways to support electrification of new buildings, especially on city owned property.

STRATEGY E3

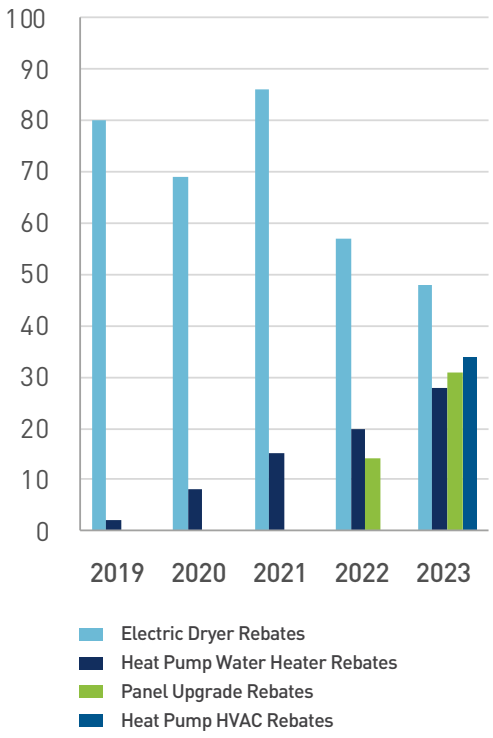
Programs to encourage fuel switching in certain appliances

Programs to encourage fuel switching in certain appliances. Encourage the PUB to continue implementing AMP rebate programs incentivizing residential customers to install ENERGY STAR-labeled electric clothes dryers and electric heat pump water heaters (HPWH).

STATUS: MAKING PROGRESS

- AMP began offering customers a new $1,500 rebate for heat pump heating and cooling (HVAC) systems and continued to offer a $1,500 rebate for heat pump water heaters (HPWHs), a $50 rebate for electric dryers, and a $2,500 rebate for electric panel upgrades.
- AMP also offers a $100 smart thermostat rebate. Customers who are approved for the HPWH rebate can also receive an automatic bonus of $100 if they install a smart thermostat at the same time.
- AMP issued rebates for 28 heat pump water heaters, 28 electric dyers, 44 heat pump space heaters, and 31 electric panel upgrades.
- AMP offers no cost food service audits to qualifying customers, and additional commercial rebates for switching to electric food service equipment and HPWHs.
- To continue the upward trend of HPWH adoption, AMP staff conducts continual research on technology developments and designs programs accordingly.
- 120-volt heat pump water heaters came on the market in fall 2023 for the first time. This advancement allows for HPWH to plug into a standard outlet, reducing electrification barriers and potentially attracting a larger pool of customers.

▶ **Electrification Rebates Issued by AMP**



STRATEGY E4

Green roof installations on new developments in Alameda Point

Require at least 10% of roof areas on new development in Alameda Point to be installed as green roofs. This action aligns with the Alameda Point Stormwater Management Plan requirements.

STATUS: COMPLETE

The Alameda Point Stormwater Management Plan requires installation of green roofs at Alameda Point. City Council approved revisions to the Design Review ordinance in 2019 exempting green roof, cool roofs, and similar roof treatments from design review, provided the installation does not require modifying the existing roof form or pitch.

STRATEGY E5[1]

Promote distributed generation (rooftop solar)

STATUS: ON TRACK

CARP does not set specific goals for solar generation. However, in 2023, 240 customers completed rooftop solar installations, which marked a 33% increase from the previous year. AMP offers the Eligible Renewable Generation (ERG) plan for new renewable generation customers that provides a monthly bill credit for the excess energy they deliver to AMP's power grid.

- The cumulative energy capacity for all rooftop solar systems on the island is 3,029.7 KW energy.
- AMP now waives the $330 interconnection fee for residential customers installing new PV systems or new PV systems with battery storage in buildings built before January 1st, 2020.
- AMP offers income qualified solar rebate for $500 to customers whose annual household income is less than $106,000. This rebate covers the cost of City and application administrative fees.
- The City launched a new streamlined solar permitting process using SolarApp+ in December 2022 that works in conjunction with the building department's new expedited same day permitting process for electrical service upgrades, heat pumps and EV chargers. With the new online permitting program, the time to get a solar permit in Alameda will be reduced from a month or more to about an hour.

STRATEGY E6

Draft zoning code amendment to facilitate reduction in energy use

STATUS: COMPLETE

City Council approved revisions to Design Review ordinance in 2019 that exempt replacement or upgrading of windows and doors from design review.

1 GHG reduction actions have been renamed so that the unquantified actions called "supplemental actions" in the CARP are numbered in the same manner as the quantified actions. E5 and E6 were referred to as unnumbered supplemental actions in the CARP and do not have specific goals associated with them

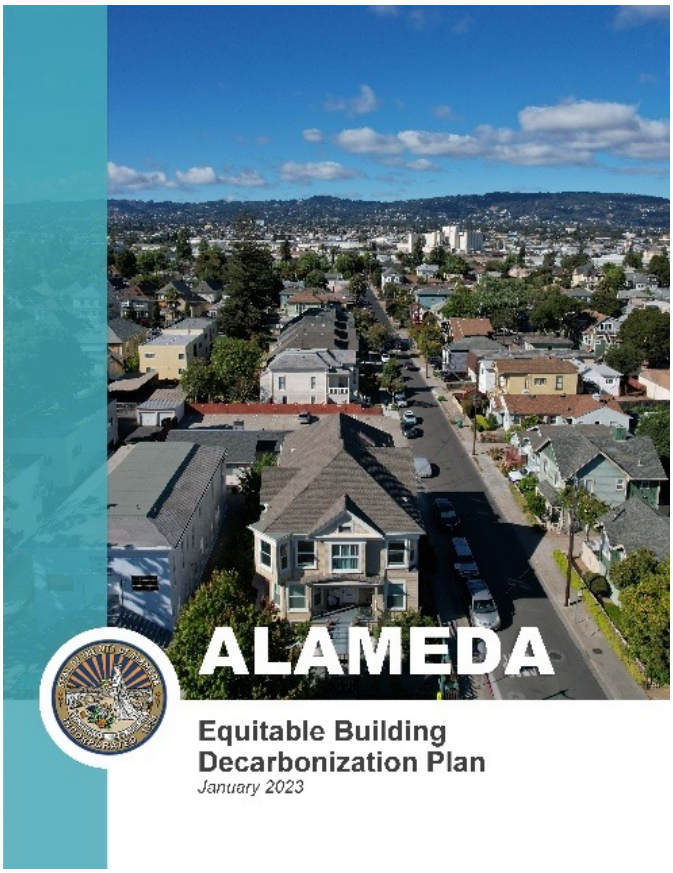
Additional Progress

Equitable Building Decarbonization Plan

Staff developed an Equitable Building Decarbonization Plan with community input for Council consideration that lays out the process for shifting natural gas use in existing buildings toward clean, energy efficient all-electric buildings in accordance with the City's climate and equity goals.

The plan provides a phased approach that includes new policies and programs, financing options, expanded rebates, and community education and outreach. The plan aligns with other citywide efforts to create affordable, safe, healthy and resilient housing and prepare the City to leverage grants and funds as they become available.

As part of the development of the plan, the City conducted an electrification workshop series with seven community workshops and an electrification community survey. The plan was adopted by the City Council on January 17, 2023 and is available at https://www.alamedaca.gov/BuildingDecarb.



Land Use and Housing

High density development and urban areas reduce GHG emission through reduction in VMT (vehicle miles traveled), promotion of mode shift, less energy for cooling and heating and decreased procurement of construction material. The City continues to support regional plans for high-density, transit-oriented development. The City's General Plan was updated in 2021 and is consistent with CARP in supporting affordable, high-density or mixed-use development.

2023-2031 Housing Element

The 2023-2031 Housing Element is Alameda's housing plan for the 2023-2031 planning period. It is Alameda's blueprint for how and where it will provide sufficient housing for all members of the Alameda community, including seniors, families, single-person households, single parent households, people with disabilities, lower-income households, and people experiencing or facing the prospect of homelessness.

The Housing Element is a hugely important component of meeting Alameda's CARP goals. A denser housing pattern contributes to lower greenhouse gas emissions by ensuring that residents can be less dependent on cars to get around town. Providing a range of affordable housing in Alameda also ensures that Alameda's workers of all incomes have the opportunity to live closer to where they work and rely less on vehicles. New development in Alameda is also required to be all electric and tends to be more energy efficient, reducing building emissions. The Housing Element is available at https://www.alameda2040.org/housing. For further details on the housing element implementation, refer to the 2023 Housing Element Annual Report.

Carbon Sequestration

In addition to reducing new GHG emissions, actively drawing down the existing carbon in the atmosphere is also a critical part of mitigating climate change. Applying compost to parks and open areas as well as increasing the size of the urban forest with more trees will help develop carbon sinks that sequester carbon.

STRATEGY S1

Apply compost to Alameda's parks and open spaces

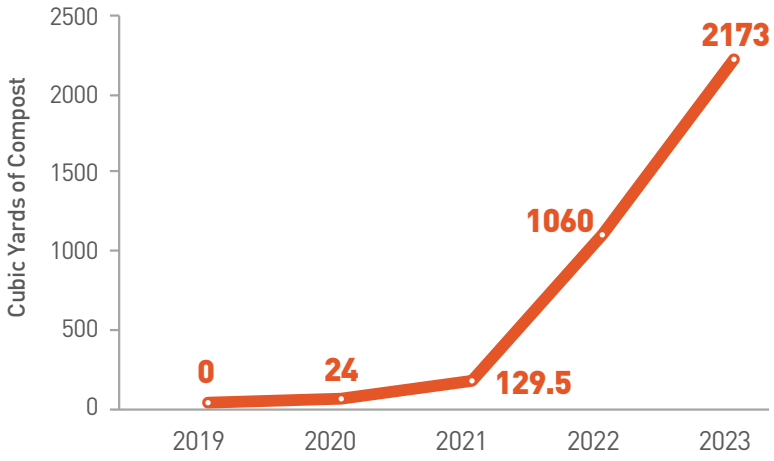
Diverted organic waste will be processed into compost that will be used in Alameda parks and other open spaces, such as preserved areas in Alameda Point.

STATUS: MAKING PROGRESS

In 2023, as a result of SB 1383 compliance and a new sports field maintenance program, the City applied a total of 2,173 cubic yards of compost in parks and open spaces.

In collaboration with Farm2Market and Makers Farm, the City opened a Compost Hub on Alameda Point where community members can come by to collect compost free of charge. To date 120 cubic yards of compost have been given away.

Staff anticipates needing to go to Council for guidance in 2024 on how to achieve our compliance procurement of material related to SB 1383. The City does not have enough green space where large amounts of compost can be applied to fulfill this requirement. Though the City is prioritizing compost application with the City, full implementation of SB 1383 may require procurement of material for use outside of the city boundaries. Staff will return to Council with options and a proposed approach to continue to increase compost and mulch application and make progress towards CARP goals and SB 1383.



▶ **Compost Applied in Public Spaces Annually**

In collaboration with Farm2Market and Makers Farm, the City opened a Compost Hub on Alameda Point where community members can come by to collect compost free of charge. To date 120 cubic yards of compost have been given away.

STRATEGY S2

Further develop urban forest

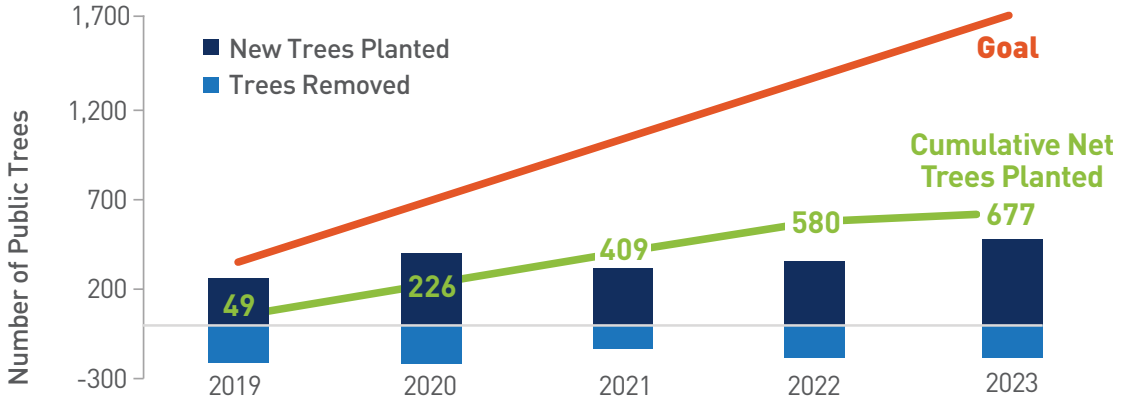
Plant 3,500 additional trees in Alameda by 2030, adding 1,500 trees to the existing commitment of adding 2,000 trees.

STATUS: MAKING PROGRESS

In 2023, Parks and Rec and Public Works planted 283 trees and removed 186 for a net gain of 97 trees. The City has now increased its urban forest by 677 trees since 2019 although is still short of its goal of gaining 350 trees per year for a total of 1,750 trees since 2019.

In 2023, the City began development of the Urban Forest Plan which will update the 2010 Street Tree Master Plan and expand it to include park trees and increase the city's overall tree canopy. As part of the plan update, staff held four pop up events, a listening session, an Earth Day student letter writing activity, and a community-wide online survey with 839 responses to raise awareness and obtain input from both Alamedans and stakeholders on existing urban forestry experiences, needs and priorities. An Urban Forestry Working Group met four times to discuss the plan, bringing together City staff, stakeholder organizations, individuals from the environmental field, and community organizations and advocates. The draft plan will be available for public review in mid 2024 and will be presented to Board and Commissions and City Council for adoption in fall 2024.

▶ **Net Trees Planted**



ALAMEDA'S URBAN FOREST STATISTICS

01

Cuts CO^2

Alameda's urban forest sequesters 447 tons of carbon dioxide annually, equivalent to taking 300 cars off the road each year.

02

Removes Pollution

The **pollution removed** by the city's tree inventory is equivalent to the carbon dioxide emissions of 9,880 tons of burned coal.

03

Unique Canopy

The City's urban forest contains **25,962 trees and 301 unique species.** The average citywide canopy cover is 11.2%, ranging from low of 5.1% to a high of 21.1% by Census Tract.

Waste

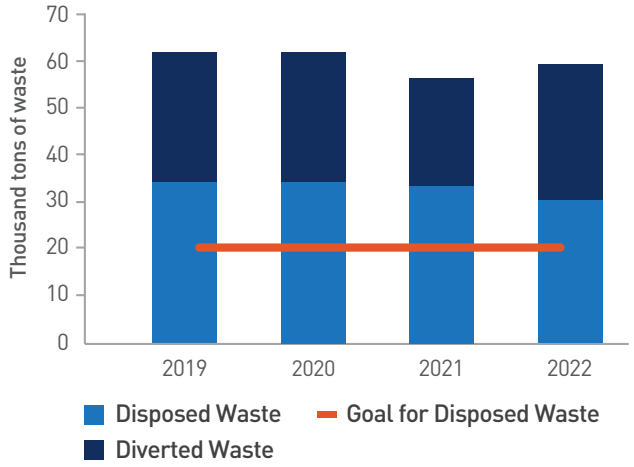
All physical goods that are consumed and used in Alameda have carbon emissions from their manufacturing and transportation process. Efforts to reduce consumption of goods and reduce the amount of materials sent to the landfill are essential to reducing Alameda's carbon footprint.

Zero Waste

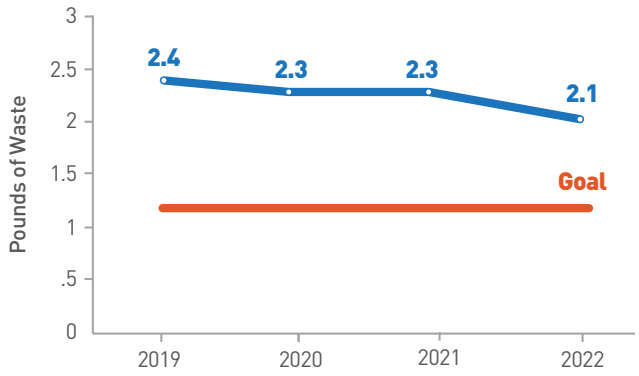
Alameda's Zero Waste Implementation Plan (ZWIP) supports a "zero waste culture" in Alameda, emphasizes a circular economy model, and increasing diverted material from the landfill. While Alameda is very good at diverting waste from the landfill and is at the forefront of cities in Alameda County there is still work to be done. The current diversion rate is 81% with 2.1 pounds of waste per person per day disposed of in the landfill. In 2022, the latest data available, 30.3 thousand tons of waste was disposed of in the landfill from Alameda. The City's zero waste goal is to achieve 89% diversion, or 1.2 pounds per person per day of waste disposed in landfill, which translates to no more than 20,000 tons of material to landfill annually. In 2024, the City of Alameda will conduct an update of the ZWIP to help achieve these goals.

As part of the City's Franchise Agreement with ACI and to comply with SB 1383, ACI conducts visual surveys of trash, recycling and compost containers and issues both courtesy notices and non-collection notices to residents and businesses to help reduce contamination and increase the amount of material diverted from the landfill.

▶ **Disposed and Diverted Waste**



▶ **Waste Per Person Per Day**



Disposable Food Service Ware Reduction Law

The City's food ware ordinance requires disposable food ware packaging to be reusable or made from compostable fiber-based products. The City began issuing citations for non-compliance starting in January 2023 following a pause during the pandemic. Eight citations were issued in 2023. To support compliance, the City entered into a five-year agreement with Rethink Disposable to provide technical assistance and grant funding to businesses to switch from disposable to reusable food ware, staff will also continue to educate the public and provide compliance assistance regarding this law. All residents, businesses, institutions, and schools are now also required to have compost and recycling collection services by state and local law.

ALAMEDA'S FOOD WARE RULES

Restaurants · Parklets · Bars · Food Trucks

REUSABLE IS THE BEST OPTION

Durable dishware that is washed and reused saves money and the planet.

COMPOSTABLE FIBER IS COMPLIANT

Paper-like, wooden or bamboo options break down more readily than any alternatives.

PLASTIC IS NOT ALLOWED

These single-use items are rapidly polluting our oceans, and are no longer acceptable in Alameda.

1. Alameda's Disposable Food Service Ware Reduction Law went into effect on January 1, 2018. This Law is enforced and businesses will receive citations and fines for non-compliance.
2. Disposable food ware packaging must be made from compostable, natural fibers (paper-like, wood, uncoated is best).
3. Any form of plastic, single-use items are prohibited as food ware, including "Biodegradable" or "Compostable" plastics.
4. Transition your business toward reusable dishware and save money. ReThink Disposable, in partnership with the City of Alameda, can offer free consultation to get you started. Call (415) 369-9160 x 303 or email rethinkdisposable@cleanwater.org.

3-STREAM WASTE SORTING REQUIRED

Businesses are required to provide sorting receptacles for customers as shown below. Label each bin clearly for their designated purpose, and add pictures where appropriate.

- All reusable dishware (No disposable food ware, cups, or wrappers provided to customers)? Then 3-stream receptacles are NOT required in this specific case.
- Customers should not be using City of Alameda's sidewalk litter or recycling bins as a result of waste generated from your business - please capture disposable waste by providing 3-stream containers, as required.
- Businesses must ensure that the area near their business remains free of litter, leaves, grime, and spilled food/drink. *AMC 4-1.6 Commercial Litter Maintenance.*
- Keep area swept and tidy, and ensure that no substances are discharged to the sidewalks, streets, gutters or storm drain.
- Pressure washing or sidewalk cleaning cannot result in any washwater discharge to the street or storm drain system. Consider BASMAA-certified surface cleaning practices. Violators are subject to citations, fines, and even permit revocation.

ReThink Disposable

Questions? Call City of Alameda Public Works
(510) 747-7900 • AlamedaRecycles.org

cleanwater program

ALAMEDA

SEA LEVEL RISE ADAPTATION

Oakland Alameda Adaptation Committee

In 2021, the Oakland Alameda Adaptation Committee (OAAC) was formed by an interagency collaboration between the City of Alameda, the Port of Oakland, City of Oakland, Caltrans, East Bay Regional Park District (EBRPD), community-based organizations (Community Partners) and other key stakeholders to plan for sea level rise adaptation, protect and restore water quality, habitat, and community resilience in the Oakland-Alameda subregion. OAAC meets quarterly and has over 100 members from local, regional, state, and federal agencies, as well as community-based organizations and Tribes. Alameda is the lead agency supporting the OAAC, which is leading the sub-regional approach to adaptation, now mandated by state law through SB 272 (2023).

A steering committee meets monthly to set the strategic direction of the OAAC. Members organizations are listed to the right.

The San Leandro Operational Landscape Unit (OLU) that encompasses the Oakland-Alameda subregion is one of 30 OLUs along the Bay shoreline identified by SFEI as sharing common physical characteristics that would benefit from being managed as individual units. While OLUs cross jurisdictional boundaries, they adhere to natural and physical boundaries of tides, waves, watershed, and sediment movement.

The Committee was formed in recognition that adapting to sea level rise requires:

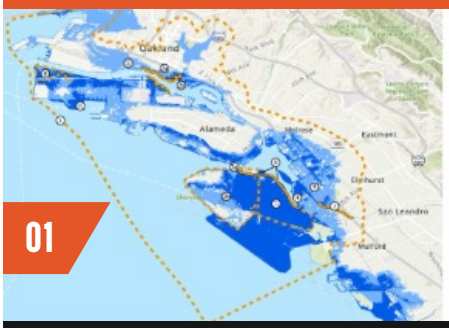
- **A holistic effort** that crosses jurisdictional boundaries
- **Necessitating collaboration** among agencies + communities
- **Awareness** that what we do as a community to address our own shoreline vulnerabilities can potentially impact adjacent communities.

OAAC believes that we are stronger speaking with one voice across jurisdictions and agencies and that the community should have a voice and seat at the table.

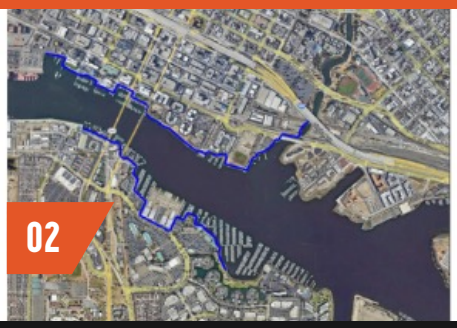
PROTECTING OUR COMMUNITY

The OAAC was formed to plan for sea level rise adaptation, protect and restore water quality, habitat, and community resilience in the Oakland-Alameda subregion.

OAKLAND-ALAMEDA ADAPTATION COMMITTEE PROJECTS



SUB-REGIONAL ADAPTATION PLAN



OAKLAND-ALAMEDA ESTUARY ADAPTATION PROJECT

BAY FARM ISLAND ADAPTATION PROJECT

OAAC Projects

The City of Alameda in collaboration with the members of the Oakland-Alameda Adaptation Committee are exploring strategies to mitigate the impacts of sea level rise and groundwater flooding, focusing especially on nature-based solutions but incorporating gray infrastructure such as levees and seawalls where needed. These adaptation projects will additionally benefit areas of Oakland that contain vulnerable, underserved populations. More information about OAAC and the current projects can be found at www.alamedaca.gov/OaklandAlamedaAdaptationCommittee.

OAAC 01

Sub-regional Adaptation Plan

This project consists of developing a plan to protect the Oakland-Alameda sub-region from near- and long-term sea level rise and associated shoreline hazards

www.alamedaca.gov/AdaptationLongTermPlan

PLAN STATUS:

- **In progress.** Began September 2023 when City Council approved the CMG Landscape Architecture consultant agreement.
- **Budget:** $840,000 ($300,000 from San Francisco Estuary Partnership (SFEP) and $540,000 from National Fish and Wildlife Foundation (NFWF).
- **Key Milestones and Timelines:** Feasibility assessment in spring 2024, draft plan and governance structure in late 2024, two rounds of outreach in spring 2024 and early 2025, and request for City Council approval anticipated fall 2025.
- **Important Considerations:** While a formal governance structure has not been established, funding for the next stages is not anticipated until late 2025, giving time for OAAC to formalize its governance structure. The plan will include a sub-regional governance structure evaluation to jointly manage projects and administer funds with recommendations expected later this year by the consultant team and legal experts. Any recommendation for governance structure will be taken to City Council for review and approval.

OAAC 02

Oakland-Alameda Estuary Adaptation Project

This project consists of developing a design concept, which is equivalent to 10 percent design, to protect both Downtown Oakland/Jack London Square and the City's northern shoreline near the Posey/Webster Tubes from sea level rise and flooding.

www.alamedaca.gov/AdaptationEstuary

PLAN STATUS:

- **In progress.** Began September 2023 when City Council approved the CMG Landscape Architecture consultant agreement.
- **Budget:** $500,000 ($425,000 from Caltrans and $75,000 from the City of Alameda).
- **Key Milestones and Timelines:** Alternatives analysis in spring 2024, draft concept design in summer 2024, two rounds of outreach in spring and fall 2024, and final concept design requested for City Council approval in early 2025.
- **Important Considerations:** To continue momentum on this project, more funding will be needed in March 2025 to complete environmental clearance, permitting, design and construction.

OAAC 03

Bay Farm Island Adaptation Project

This project consists of developing a long-term adaptation plan for the entire Bay Farm Island as well as developing designs to address shoreline overtopping locations of Veterans Court and the Lagoon Outfall.

www.alamedaca.gov/AdaptationBayFarmIsland

PLAN STATUS:

- **In progress.** Began September 2023 when City Council approved the CMG Landscape Architecture consultant agreement.
- **Budget:** $2 million ($1.5 million FEMA and $530,000 City of Alameda).
- **Key Milestones and Timelines:** Alternatives analysis in spring 2024, draft design in fall 2024, two rounds of outreach in spring 2024 and early 2025, and request for City Council approval in fall 2025.
- **Important Considerations:** To continue momentum on the high priority project by Veterans Court and the Lagoon Outfall, more funding will be needed in October 2025 so as to complete environmental clearance, permitting, design and construction.

BAY FARM ISLAND ADAPTATION PROJECT LOCATIONS

Next Steps for Bay Farm Island Adaptation Project

By 2025, the early-stage planning and project scoping tasks for the Bay Farm Island Adaptation Project will be complete, but the subsequent steps of developing the project designs and construction details will require additional and significant amounts of funding because sea level rise adaptation are large infrastructure projects. City staff and OAAC are pursuing major grant funds and capitalizing on time-sensitive funding opportunities before completion of the current projects to help ensure continuity of the sea level rise planning and implementation efforts and to build upon the momentum of the current sub-regional collaboration.

As a result, OAAC and the City, as the lead agency, are applying for a $55 million FEMA Building Resilient Infrastructure and Communities (BRIC) grant to advance the Bay Farm Island Adaptation Project (described above) as well as adaptation for SR-61/Doolittle Drive, East Oakland's Columbian Gardens neighborhood, and enhancements to San Leandro Bay tidal marshes. The graphic above shows the proposed scope of work for the BRIC grant, which consists of a detailed technical report that is required as part of the grant application submittal, and highlights the flood hazards along with the mitigation actions that are covered in the grant application.

The BRIC grant is important for the Bay Farm Island Adaptation Project because a major benefit of the project to the City is the removal of the lagoon area of Bay Farm Island from the FEMA 100-year floodplain, which would potentially alleviate these lagoon area property owners from flood insurance requirements. The project will also bring tangible benefits such as protecting the SR-61/Doolittle Drive transportation corridor, closing the gap in the San Francisco Bay Trail on Doolittle Drive to create a 17-mile continuous trail, bolstering the Bay Trail along Bay Farm Island's northern shoreline from erosion, and enhancing marsh habitat and access to the San Leandro Bay shoreline. The Alameda and Oakland City Councils approved submission of the BRIC grant application at their respective meetings on February 20, 2024.

DE-PAVE PARK PLAN

21 ACRES OF ECO PARK

De-Pave Park is a 21-acre planned ecological park in which all existing concrete will be removed to create tidal wetlands and wildlife habitat.

De-Pave Park Master Plan

De-Pave Park is a 21-acre planned ecological park in which all existing concrete (from the former Naval Base airfield/runway system) will be removed to create tidal wetlands and wildlife habitat. This park is located on the western side of Seaplane Lagoon at Alameda Point and was originally envisioned and described in the Alameda Point Town Center and Waterfront Precise Plan. The park will create a tidal ecology system that adapts to sea level rise through inundation and includes public access and environmental education.

City Council approved the De-Pave Park Vision Plan in 2021 and the City was awarded an $800,000 planning grant from the San Francisco Bay Restoration Authority (SFBRA) Measure AA grant. In 2023 and funded by this grant, the City conducted a broad-based and inclusive Master Plan process with three progressive rounds of community input, both onsite and virtually, and directly met with Alameda Point Collaborative (APC) residents throughout the process. Staff also met with tenants of Buildings 25 and 29, located within the site. Additionally, APC staff is developing a Community Stewardship Program framework to implement when the park begins construction. This is a volunteer and workforce development program that grows plants and manages habitat maintenance.

The final Master Plan design was also informed by meetings with the Bay Restoration Regulatory Integration Team (BRRIT) which includes representatives from all regional regulatory agencies, the SF Bay Conservation and Development Commission (BCDC) Design Review Board, and the Alameda County Mosquito Abatement District. In November 2023, City Council approved one of three design options which included removal of Buildings 25 and 29 and creates four additional acres of habitat.

The final Master Plan design is being presented to City Council in March 2024 with expanded habitat, larger natural play area and amenities such as the parking lot and restroom placed to optimize habitat and view corridors. The next steps in 2024 are to complete 30% design documents and apply for grants to build the park!

LEGISLATIVE ACTIONS

The City of Alameda supported the following State bills related to climate action and resilience in 2023 and will continue to support additional resources to assist in the City's implementation of the CARP.

Transportation

AB 126 (Reyes and Gonzalez).
Past decarbonization efforts have led the Legislature to create the Clean Transportation Program (CTP), the Air Quality Improvement Program (AQIP), and Enhance Fleet Modernization Program (EFMP). The funds awarded to the CTP go towards projects enhancing 13 different clean transportation goals. These programs are currently funded by small fees on tire sales, vehicle and boat registrations, and smog abatement, which provide $173 million annually. AB 126 will enhance the existing fees that fund the CTP program and continue the CTP program that was set to sunset in 2024, to extend until 2035. This bill supports zero-emission vehicle and infrastructure deployment.

AB 2127 (Update).
This bill will require the California Energy Commission to publish a biennial report providing updates on electric vehicle charging infrastructure needed to meet California's zero-emission vehicle targets by 2030. The current analysis in this report predicts California will need 1.01 million chargers by 2030. Alameda is playing its part in trying to expand electric vehicle charging infrastructure, focusing particularly on areas where residents may not be able to install their own charger, such as multifamily homes or apartment buildings.

AB 1317 (W. Carrillo).
This bill would create a pilot program requiring property owners of new multi-family residential properties in specific counties, including Alameda County, to unbundle the cost of parking from the cost of the housing unit. The City of Alameda supports measures that help alleviate both on- and off-island and on- and off-peninsula traffic concerns and efforts to lower transportation sector greenhouse gas emissions.

SB 712 (Portantino).
This bill prevents landlords from prohibiting their tenants from owning or storing personal micromobility devices such as wheelchairs, bicycles, scooters, skateboards, hoverboards, and their electric equivalents. The City of Alameda supports measures that make Alameda safer for pedestrians and bicyclists, directly or indirectly reduce of help alleviate both on- and off-island and on- and off-peninsula traffic concerns, and access to transportation improvements throughout the City with an emphasis on enabling residents to get safely to BART, ferries, and other methods of commuting.

Climate Resiliency

AB 1567 (Garcia).
This bill will enact the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, Clean Energy and Workforce Development Bond Act of 2024. If approved by voters, it will authorize the issuance of bonds in the amount of nearly $16 billion to finance projects in these categories. Alameda supports these goals and is making progress in especially drought flood protection and extreme heat mitigation.

SB 676 (Newsom).
This bill prohibits local governments from adopting ordinances or regulations that ban the installation of drought-tolerant landscaping, synthetic grass, or artificial turf on residential property. This will promote less water usage (e.g. from sprinkler irrigation). Alameda supports this legislation by promoting drought tolerant landscape and alternatives to a traditional, heavy water consumption lawn.

Waste

AB 1572 (Friedman).
This bill declares that the use of potable water to irrigate nonfunctional turf is wasteful and incompatible with state policy relating to climate change. The City of Alameda supports measures that provide resources for local agencies to adapt to the impacts of climate change, including addressing sea level rise and flood protection, implementing drought tolerant landscaping, and providing recycled water infrastructure.

SB 244 (Eggman).
This law, also known as the Right to Repair Act, requires manufacturers of electronic devices and appliances to make repair guides, replacement parts and tools available to consumers. Californians will have more opportunities to repair their electronics rather than letting them go to waste, and avoid costly repairs that are often not much cheaper than buying a new device. The City of Alameda supports legislation that promotes landfill diversion efforts.

AB 529 (Gabriel).
The bill will require the Department of Housing and Community Development to convene a working group to identify challenges and opportunities that help support the creation and promotion of adaptive reuse residential projects. It will add the facilitation of the conversion or redevelopment of commercial properties into housing, including the adoption of adaptive reuse ordinances or other mechanisms that reduce barriers for these conversions, to the list of specified pro-housing local policies. This will promote "recycling" unused buildings into housing, which will generate less waste than the construction of new buildings. Alameda supports this effort, and already has adaptive reuse projects within Alameda Point.

SB 707 (Newman).
This bill would require textile producers to create a stewardship program for the collection and recycling of "postconsumer apparel or postconsumer textile article that is unwanted by a consumer." This will reduce the amount of textile that enters landfills, and will encourage the repair, reuse, or secondhand sale of clothing that is returned by customers. Alameda supports legislation that promotes landfill diversion efforts.

Greenhouse Gas Emissions

SB 511 (Blakespear).
This bill will require the state board, before January 1, 2028, to develop and publish on its website, a report on the GHG emissions inventories for the calendar year 2025 for each city, county, or city and county that requests inclusion in this report, and update these inventories every 5 years starting in 2030. Alameda supports the efforts to make GHG inventories more accessible to the public, and we are conducting our own updated GHG inventory in 2024.

SB 527 (Min).
This bill will require the Public Utilities Commission, in consultation with gas corporations, to develop and supervise the administration of a Neighborhood Decarbonization Program to target zones that rely heavily on natural gas, and create pilot programs to decarbonize them. This promotes reduced emissions of GHG and air pollution, the maintenance of reliable, safe and resilient energy service while maintaining the rate affordability for gas customers, with the intent to decommission gas assets in these zones. Alameda supports decarbonization efforts and converting customers from gas to clean energy.

AB 43 (Holden).
This bill would eventually establish a Low Carbon Product Standard (LCPS) to facilitate a credit trading platform for building materials. This will help reduce the amount of carbon in materials used in the construction of new buildings. Alameda supports this bill as the City also looks to lower GHG emissions in construction of new buildings.

STAFFING AND PARTNERSHIPS

A full-time Sustainability and Resilience Manager was hired at the beginning of 2021 to lead implementation of the CARP, as recommended in the CARP. In 2023, this position moved from the City Manager's Office to the Planning, Building and Transportation Department where a new Sustainability and Resilience Division was created within the department. A 60% project manager position was added to manage the adaptation projects. For the third year, an AmeriCorps CivicSpark Fellow was also hired to support priority CARP implementation efforts, including adaptation, equitable building decarbonization, and the Urban Forest Plan. The Sustainability and Resilience Division also partnered with Community Action for Sustainable Alameda (CASA) to host two college and one high school summer interns in 2023. These interns focused on supporting the urban forest plan and sea level rise adaptation projects.

GRANTS

Sustainability staff aggressively pursued state and federal grant opportunities to take advantage of new monies available through the Bipartisan Infrastructure Bill and Inflation Reduction Act. The table below shows grants awarded, applied for and those currently in process. In 2024, staff will continue to seek grant funding for CARP priorities.

PROJECT	FUNDING AGENCY	GRANT SOURCE	AMOUNT REQUESTED/ RECEIVED	STATUS
Sub-regional Long-term Adaptation Plan	NFWF	National Coastal Resilience Fund	$540,000	City Council accepted grant funds on June 6, 2023
Sub-regional Long-term Adaptation Plan	SFEP	SFEP	$300,000	City Council accepted grant funds on June 6, 2023
Estuary Park Phase II	CRNA	Urban Greening Grant	$1.92 million	Applied
Soft-Story Retrofit Program	FEMA	Hazard Mitigation Grant Program	$6.1 million	Applied
Bay Farm and OAK Adaptation	WRDA	BRIC	$55 million	Applied
Oakland-Alameda Estuary Adaptation Project	FEMA	WRDA	$89 million	Applied
SB 1383 Local Assistance Grant Program	Cal Recycle	SB 1383 Local Assistance Program	$107,107	Applied. Anticipate funds to be awarded April 2024
Veterans Memorial Hall Electrification	IRA	Energy Efficiency and Conservation Block Grant (EECBG)	$133,500	Applied. Application under review.
Building Electrification and Mode Shift	EPA	Climate Pollution Reduction Act	TBD	Application in Process, BAAQMD lead
Public EV Charging	US DOT	Charging and Fueling Infrastructure Grant Program	$4.75 million	Applied, Not Awarded
Urban Forest Program	USFS	Urban and Community Forestry Grant	$3.96 million	Applied, Not Awarded
Electrify Alameda	US DOE	Buildings Upgrade Prize	$400,000	Applied, Not Awarded

APPENDIX A:

+ PRIORITY CLIMATE ADAPTATION & HAZARD MITIGATION STRATEGIES

The priority climate adaptation and hazard mitigation strategies were adopted in the 2022 Climate Adaptation and Hazard Mitigation Plan. These strategies align with those in the General Plan Safety and Climate Conservation Elements. This appendix serves as the annual report for the plan, as required by FEMA.

CLIMATE ADAPTATION AND HAZARD MITIGATION STRATEGIES

STRATEGY	HAZARD(S) ADDRESSED	LEAD DEPARTMENT	RELATED POLICY/ PLAN	2023 STATUS
Buildings				
B1. Encourage installation of solar panels and energy storage equipment in existing and new development and on public property such as the former Doolittle Landfill.	Earthquake Ground Shaking Wind/Storms	AMP	General Plan Policy CC-14	» Starting November 1, 2022, AMP began waiving the $300 interconnection fee for residential customers installing new PV systems or new PV systems with battery storage in buildings built before January 1, 2020. This fee waiver does not apply to commercial solar projects or installations greater than 50 kilowatts. » AMP now offers a $500 rebate for income-qualified customers who are installing solar. » The Doolittle solar project is currently on hold.
B2. Water Efficiency and Conservation. Minimize water use in existing and new construction and landscaped areas to make Alameda more resilient to drought and generate less wastewater.	Drought	Planning, Building and Transportation Public Works Recreation and Parks	General Plan Policy CC-16	Completed conversion of City Hall's lawn to drought tolerant landscape. Planning conversion at City Hall West.
B3. Rising Groundwater. Prepare for the impacts of rising groundwater levels on private and public property.	Sea Level Rise	Planning, Building and Transportation Public Works	General Plan Policy CC-23, HS-35	Staff is evaluating needed building code updates to respond to rising groundwater and incorporating groundwater considerations into shoreline adaptation projects. Staff is evaluating the need to update its groundwater data and modeling and planning to incorporate it into a CARP update in 2024.
B4. Seismic Retrofit for Private Buildings. Require owners of vulnerable structures, to the extent feasible, to retrofit existing structures to withstand earthquake ground shaking, and require retrofitting when such structures are substantially rehabilitated or remodeled	Earthquake Ground Shaking Earthquake Liquefaction	Planning, Building and Transportation	General Plan Policy HS-13, Municipal Code Section 13-80.1 to 13-80.16 and 13-70.1 to 13-70.6	» Staff completed a cost-benefit analysis of a typical soft-story seismic retrofit and scope of work and applied for a FEMA hazard mitigation grant program (HMGP) in 2023 to provide financial support to soft-story building owners to complete a retrofit of their building. » Staff have also been conducting outreach to the public to encourage participation in the California Brace and Bolt program which provides $3,000 grants for seismic retrofit of single-family homes. Households with incomes under $72,080, may also qualify for a supplemental grant that could help pay 100% of the cost of a seismic upgrade.

STRATEGY	HAZARD(S) ADDRESSED	LEAD DEPARTMENT	RELATED POLICY/ PLAN	2023 STATUS
Buildings				
B5. Flood Insurance. Continue the City's participation in the National Flood Insurance Program and the Community Rating System as a Class 8 community. Identify ways to increase Alameda's Community Rating to reduce flood insurance costs.	Flooding Sea Level Rise	Public Works	General Plan Policy HS-14, Municipal Code Section XX - Floodplain Management	The City continued to participate in NFIP and recertified its CRS status as a Class 8 community in 2022.
B6. Flood Proofing for Existing Buildings. Implement programs to encourage flood-proofing retrofits to existing buildings and redevelopment in flood-prone areas.	Flooding	Planning, Building and Transportation	General Plan Policy HS-19	Staff is evaluating needed building code updates for flood mitigation.
B7. Design for Flooding. Implement programs and amend regulations to require and incentivize flood-proofing retrofits to existing buildings in flood-prone areas, and require all new development to design for sea level and associated groundwater rise based on the most current regional projections.	Flooding Sea Level Rise	Planning, Building and Transportation	General Plan Policies HS-22, LU-30, CC-20, CARP	Staff is evaluating needed building code updates for flood mitigation.
B8. Building Codes for New Development. Encourage existing properties to minimize the risks of fire and include adequate provisions for emergency access and appropriate firefighting equipment.	Earthquake Caused Fires Earthquake Ground Shaking	Planning, Building and Transportation	General Plan Policy HS-29	The City adopted the 2022 California Building Code with local amendments requiring fire sprinklers in new and substantially modified buildings and requiring that new and substantially modified buildings be all-electric with no gas hookups to reduce the risk of fires following earthquakes, as well as meet GHG reduction goals; However, the all-electric requirements are no longer enforceable in certain instances following a Federal Appeals Court decision.
B9. Fire Prevention in Existing Properties. Encourage existing properties to minimize the risks of fire and include adequate provisions for emergency access and appropriate firefighting equipment.	Earthquake Caused Fires	Fire	General Plan Policy HS-29	» The City adopted the 2022 California Building Code with local amendments requiring fire sprinklers in new and substantially modified buildings and requiring that new and substantially modified buildings be all-electric with no gas hookups, however the all-electric requirements are no longer enforceable in certain instances following a Federal Appeals Court decision. » Staff also developed an Existing Building Decarbonization Plan which recommends exploring policies requiring electrification of existing buildings to reduce greenhouse gas emissions and prevent fires following earthquakes.

STRATEGY	HAZARD(S) ADDRESSED	LEAD DEPARTMENT	RELATED POLICY/ PLAN	2023 STATUS
Buildings				
B10. Building and Infrastructure Standards. Maintain up-to-date building codes and encourage or require new and existing buildings and infrastructure to be designed or retrofitted for timely restoration of service (functional recovery) following an earthquake, with particular attention on the effects of liquefaction on buildings and infrastructure.	Earthquake Ground Shaking Earthquake Liquefaction	Planning, Building and Transportation	General Plan Policy HS-10	The City adopted the 2022 California Building Code and is evaluating needed building code updates for earthquakes and functional recovery standard.
B11. Cool/Green Buildings. Incentivize and consider requiring the installation of cool roofs, green roofs, and/or other energy-efficient cool building methods to mitigate heat impacts and reduce runoff.	Heat	Planning, Building and Transportation	General Plan Policy CC-34	City Council approved revisions to the Design Review ordinance in 2019 exempting green roof, cool roofs, and similar roof treatments from design review, provided the installation does not require modifying the existing roof form or pitch.
B12. Sea Level Rise Protection. Reduce the potential for property damage and loss, and loss of natural habitat resulting from sea level rise.	Flooding Sea Level Rise	Planning, Building and Transportation Public Works	General Plan Policy CC-19	Launched Bay Farm Island and Estuary Adaptation Projects in 2023. Received funding, consultants developed existing conditions analyses. Staff is planning to apply for the FEMA Building Resilient Infrastructure and Communities (BRIC) grant program in 2024 to advance the bay Farm Island Adaptation Project in partnership with the City of Oakland, Port of Oakland, EBRPD and Caltrans to address flooding on Doolittle Drive and within the FEMA Community Disaster Resilience Zone (CDRZ).
Infrastructure				
I1. Critical Public Assets. Ensure resilience and long-term functionality of critical public assets threatened by earthquakes, sea level rise or rising groundwater.	Earthquake Ground Shaking Liquefaction Flooding Sea Level Rise	Public Works AMP	General Plan Policy CC-22 and HS-12	Launched Bay Farm Island and Estuary Adaptation Projects in 2023. Received funding, consultants developed existing conditions analyses. Continue to seek funding for pump station upgrades and green infrastructure improvements to respond to sea level rise.
I2. Water Retention. Develop and maintain large and small areas to retain water within the city that may serve as areas of "retreat" during large storm events.	Flooding Sea Level Rise	Public Works	General Plan Policy CC-24	Staff is evaluating additional opportunities for water retention, including the Alameda Nature Reserve, Corica Golf Course, and through the Green Infrastructure Plan.
I3. Urban Forest. Take actions to maintain and expand the number of trees in Alameda on public and private property to improve public health, reduce pollution, and reduce heat island effects.	Heat	Public Works Recreation and Parks	General Plan Policy CC-26, CARP	Urban Forest Plan in development with public review and adoption by City Council in 2024.

STRATEGY	HAZARD(S) ADDRESSED	LEAD DEPARTMENT	RELATED POLICY/ PLAN	2023 STATUS
Infrastructure				
I4. Lagoons. Continue to preserve and maintain all lagoons as natural habitat as well as an integral component of the City's green infrastructure network and flood control system.	Flooding	Public Works	General Plan Policy CC-32	Received $1.5 million funding from Congressional Community Program with $500,000 match from city for Bay Farm Island project. This project will include preserving/maintaining lagoons.
I5. On-Island Generation. Support development of on-island solar power generation and on-island wind power with appropriately sized generation, storage, and microgrid distribution infrastructure to be able to provide power for a range of uses, including essential functions. Permit renewable energy generation facilities by right in zones with compatible uses and remove financial disincentives associated with the installation of clean energy generation and storage equipment.	Earthquake Ground Shaking Wind/Storms	AMP	General Plan Policy CC-4	» The cumulative generation for all solar systems on the island is 3,029.7 KW energy. » AMP now waives the $330 interconnection fee for residential customers installing new PV systems or new PV systems with battery storage in buildings built before January 1st, 2020. » AMP offers income qualified solar rebate for $500 to customers whose annual household income is less than $106,000. This rebate covers the cost of City and application administrative fees. » The City launched a new streamlined solar permitting process using SolarApp+ in December 2022 that works in conjunction with the building department's new expedited same day permitting process for electrical service upgrades, heat pumps and EV chargers. With the new online permitting program, the time to get a solar permit in Alameda will be reduced from a month or more to about an hour.
I6. Public Infrastructure Priorities. Identify public transportation, streets, electric facilities, stormwater and wastewater facilities, open space, shoreline assets, and other public assets vulnerable to sea level and groundwater rise and flooding hazards, and prioritize projects for adaptation funding.	Earthquake Ground Shaking Flooding Liquefaction Sea Level Rise	Planning, Building and Transportation Public Works	General Plan Policy HS-17, CARP	Launched Bay Farm Island adaptation project, Estuary adaptation project, and Long-term sub-regional adaptation project. Consultants have developed existing conditions analysis and Community Partners have developed Community Engagement Strategy.
I7. Green Infrastructure. Require the use of "green infrastructure", landscaping, pervious surfaces, green roofs, and on-site stormwater retention facilities to reduce surface runoff and storm drain flooding during storm events.	Flooding Sea Level Rise	Public Works	General Plan Policy HS-23, CARP	Green Infrastructure Plan includes requirements for green infrastructure.

STRATEGY	HAZARD(S) ADDRESSED	LEAD DEPARTMENT	RELATED POLICY/ PLAN	2023 STATUS
Infrastructure				
I8. Underground Utilities. Require new development to underground utilities to minimize disruption by fire or other natural disasters.	Earthquake Caused Fires	AMP	General Plan Policy HS-30, Underground Utility District Policy	AMP plans to award a construction contract for undergrounding a 1.1-mile section along Otis Drive and Broadway. AMP plans to recommend that the City Council approve additional undergrounding projects from the list of recommendations received from the District Nominating Board (DNB). This list includes the following areas: - Webster Street - all crossings - Central Avenue to Pacific Avenue including Eagle Avenue - West of Constitution Way; and along Central Avenue from Eighth Street to Webster Street. - Broadway - Buena Vista Ave to Clement Ave - Fernside Boulevard from Encinal Avenue to High Street, - Park Street - San Jose Avenue to Otis Drive.
I9. Lifeline Standard Estuary Crossing. Work with Caltrans, Alameda County, and other regional agencies to retrofit and improve at least one estuary crossing to meet a lifeline standard to ensure access to the larger region for emergency access, equipment supplies, and disaster response and recovery shortly after a major seismic event.	Earthquake Ground Shaking Liquefaction	Public Works	General Plan Policy HS-11	As a first step, the City is working with the U.S. Coast Guard and U.S. Army Corps of Engineers to seek funds for a feasibility study to potentially demolish or move the adjacent former rail bridge that is at risk of collapse in an earthquake.
I10. Collaboration. Work collaboratively with other jurisdictions and agencies to reduce fire hazards in Alameda, such as post-earthquake fire hazards, with an emphasis on mutual aid agreements.	Earthquake Caused Fires	Fire	General Plan Policy HS-27	» Owners of identified soft-story buildings are required to install an earthquake-actuated gas shut-off valve on the building to reduce the likelihood of natural gas fire ignitions in earthquakes. » Automatic gas shut-off valves are required any time a permit is issued for gas piping, whenever a property is sold or has a transfer of title. To date, approximately 2,794 permits have been issued for gas shut-off valves in the city. » Alameda has purchased two water tenders to use Bay water for firefighting. New tenders should be purchased every 8-10 years.
Land Use				
L1. Groundwater Rise. Review remediation timelines for contaminated sites based on a groundwater model with projected sea level rise impacts. Work with applicable agencies to adjust remediation, as applicable.	Sea Level Rise	Public Works	General Plan Policy HS-35	» Published "The Response of the Shallow Groundwater Layer and » Contaminants to Sea Level Rise in Alameda" report in 2020. Implementing priority actions in the report.

STRATEGY	HAZARD(S) ADDRESSED	LEAD DEPARTMENT	RELATED POLICY/ PLAN	2023 STATUS
Land Use				
L2. Land Development. Require that new development reduce the potential for property damage, and loss of natural habitat, which results from groundwater and sea level rise.	Sea Level Rise	Planning, Building and Transportation	General Plan Policy CC-20	» Floodplain ordinance requires special design requirements for new construction in the floodplain and in coastal high hazard areas. » 2040 General Plan recommends following California's Ocean Protection Council 2018 Sea-Level Rise Guidance. » Green Infrastructure Plan includes requirements for low impact development. » Future updates of the General Plan will explore and consider more fully this 50-year climate scenario and its implications for Alameda.
L3. Resilient Rights-of-Way and Open Spaces. Design street rights-of-way, parks, other public spaces, street trees and landscaping to be resilient to temporary flooding.	Flooding	Planning, Building and Transportation	General Plan Policy HS-19	Seeking funding for green infrastructure improvements at intersections when completing paving projects.
L4. Easements. Require the creation and maintenance of easements along drainage ways necessary for adequate drainage of normal or increased surface runoff due to storms.	Flooding	Planning, Building and Transportation Public Works	General Plan Policy HS-23	No update.
Emergency Response				
E1. Heat and Wildfire Smoke Emergencies. Create a network of clean air and cooling emergency shelters throughout Alameda.	Heat Wildfire Smoke	Library Public Works Recreation and Parks	General Plan Policy CC-25, CARP, Emergency Operations Plan	West End Library was upgraded in 2021 with new A/C and air filtration to serve as a Cooling and Clean Air Center in addition to the Main Library and Mastick Senior Center. No further centers have been determined to be needed at this time.
E2. Emergency Preparedness. Maintain emergency management and disaster preparedness as a top City priority.	All Hazards	Fire	General Plan Policy HS-1	» Completed Environmental Emergency Plan Annex draft. Draft plan added as an Annex to the Basic Emergency Operation Plan (EOP). » EOC training exercises on a City, County, Regional and State level. Training for emergency repair, traffic control, evacuations, shelter in place, crowd control, emergency medical aid, grant reimbursement, etc. Education of City Employees about personal emergency preparedness and mitigation.
E3. Tsunami Preparedness. Prepare Alameda for tsunamis and prepare for a timely evacuation with a focus of access and functional needs populations.	Tsunamis	Fire Planning, Building and Transportation	General Plan Policy HS-20	Hired a consultant to help with tsunami evacuation planning. The work scope includes creating evacuation scenarios and meeting with stakeholder partners to improve coordination. Staff will continue with tsunami awareness. The next step is for the City to become a designated Tsunami Ready Community, which will be possible with the City's planned on-going mitigation, preparedness, and response steps. www.AlamedaCA.gov/DisasterPreparedness

STRATEGY	HAZARD(S) ADDRESSED	LEAD DEPARTMENT	RELATED POLICY/ PLAN	2023 STATUS
Emergency Response				
E4. Emergency Coordination. Coordinate local emergency preparedness efforts with the Federal Emergency Management Agency, California Office of Emergency Services, Coast Guard, United States Maritime Administration Ready Reserve Fleet, the San Francisco Bay Area Water Emergency Transportation Authority, Alameda County, East Bay Municipal Utility District, the Port of Oakland, adjacent jurisdictions, CalWARN, the Alameda Unified School District, the various private schools in Alameda, local hospitals, housing facilities for seniors or individuals with disabilities, and other local and regional police, fire and public health agencies in preparation for natural and man-made disasters, and ensure that the City's disaster response communication technologies are compatible with other agency communication technologies.	All Hazards	Fire	General Plan Policy HS-3	» Alameda Municipal Power is a signatory on two mutual aid agreements: California Utility Emergency Association (CUEA) and Northern California Power Agency (NCPA). The City maintains agreements with adjoining jurisdictions for cooperative response to fires, floods, earthquakes, and other disasters. » Working Relationships and Lifeline Committee Meetings with Caltrans, County, Coast Guard, Ready Reserve, Port of Oakland, San Leandro, Utilities, FEMA, and Other Agencies. » Membership in CalWARN Mutual Aid for City-run and independent utilities that provide water and wastewater.
E5. Wildfire Smoke. Prepare for future wildfire smoke events.	Wildfire Smoke	Fire	General Plan Policy HS-61	» Adopted and implemented new air quality / smoke response protocols for City staff and employees. » West End Library was upgraded in 2021 with new A/C and air filtration to serve as a Cooling and Clean Air Center in addition to the Main Library and Mastick Senior Center. » Utilize AC Alert to notify residents about unsafe air quality. » Ensure equitable access from all neighborhoods and populations, especially the homeless, elderly, disabled.
E6. Emergency Response and Disaster Preparedness. Preserve access for emergency response vehicles to people and property and for evacuation.	Earthquake Ground Shaking Liquefaction Tsunamis	Planning, Building and Transportation Public Works	General Plan Policy ME-9	» Coordinated with AC Transit on the locations of vulnerable populations in the City of Alameda including skilled nursing facilities, adult day care and childcare facilities. Participated in Bay Area Urban Areas Security Initiative trainings. » Continue working with the United States Army Corps of Engineers (Army Corps) to address the public safety hazard posed by the adjacent abandoned Fruitvale rail bridge. Draft letter to Alameda County requesting upgrade to Miller-Sweeney Bridge. Continue coordination with WETA and AC Transit and will participate in Bay Area emergency response training exercises.

STRATEGY	HAZARD(S) ADDRESSED	LEAD DEPARTMENT	RELATED POLICY/ PLAN	2023 STATUS
Communication, Community and Coordination				
C1. Public Communication. Maintain and promote community programs to train volunteers, support vulnerable community members like seniors and individuals with disabilities, coordinate with food banks and other local aid organizations, and assist police, fire, and civil defense personnel during and after a major earthquake, fire, or flood.	All Hazards	City Manager's Office Fire Police	General Plan Policy HS-4, Emergency Operations Plan	The City of Alameda in partnership with Alameda County Office of Emergency Services (OES) uses AC Alert as the County-wide mass notification system to alert community members of weather-related issues, as well as posting to social media, and the city website. The City encourages the public to opt-in to AC Alert and follow the City on social media.
C2. Air Quality Alerts. Continue to partner with BAAQMD to enhance awareness of air quality index alerts and related outreach and education to protect the health of residents.	Wildfire Smoke	Fire	General Plan Policy HS-65	The City encourages residents to sign up for AC Alert to receive emergency notifications
C3. Regional Partnerships. Actively participate in regional discussions on groundwater and sea level rise mitigation, infrastructure improvements, and adaptation strategies.	Drought Sea Level Rise	City Manager's Office Planning, Building and Transportation Public Works	General Plan Policy HS-16	Continued the Oakland Alameda Adaptation Committee (OAAC) with neighboring jurisdictions, agencies, and community-based organizations to coordinate flood and adaptation projects in the Oakland Alameda subregion to protect and restore water quality, habitat, and community resilience. Sub-groups are focusing on adaptation of Doolittle Drive and Northern Shoreline near Posey/Webster Tubes. Applied for BRIC and WRDA funding to support these sea level rise adaptation projects. Continuing seeking funding for development of a coordinated and inclusive future-looking sub-regional organizational structure and action plan with shared vision and needs assessment to accelerate sea level rise adaptation and exploring future governance options.
C4. Collaboration. Work collaboratively with other jurisdictions and agencies to reduce fire hazards in Alameda, such as post-earthquake fire hazards, with an emphasis on mutual aid agreements.	Earthquake Caused Fires	Fire	General Plan Policy HS-27	Maintain agreements with adjoining jurisdictions for cooperative response to fires, floods, earthquakes, and other disasters.
C5. Neighborhood Resilience Coordination. Consider piloting building electrification, water conservation and other climate initiatives at a block or neighborhood level to more cost effectively transition to climate friendly energy, water, and resource use.	All Hazards	City Manager's Office	General Plan Policy CC-15	In partnership with CASA and the Alameda Marketplace, staff piloted the Cool Blocks Program with a group of about 10 cool block leaders. The City and CASA are evaluating the program to determine if the program should be continued and expanded.

STRATEGY	HAZARD(S) ADDRESSED	LEAD DEPARTMENT	RELATED POLICY/ PLAN	2023 STATUS
Communication, Community and Coordination				
C6. Social Vulnerability. Prioritize the needs of frontline communities when prioritizing public investments and improvements to address climate change.	All Hazards	All Departments	General Plan Policy CC-2	City uses BCDC Community Vulnerability Analysis to prioritize funding for transportation projects and equity is centered in shoreline adaptation planning through the Estuary Working Group. The Urban Forest Plan also prioritizes equity when approaching increasing city-wide tree canopy cover.
Studies and Plans				
S1. Adaptation Pathway Master Plan. Develop an adaptation pathway master plan that includes additional vulnerability studies as needed, economic analysis, groundwater rise studies, and other data collection as needed to identify the range of shoreline protection, groundwater management and adaptation strategies over time from short- to long-term as well as land use, building and infrastructure design standards needed to help Alameda adapt to rising sea and groundwater levels.	Sea Level Rise	City Manager's Office Community and Economic Development Planning, Building and Transportation Public Works	General Plan Policy CC-21, CARP	The City, on behalf of the Oakland-Alameda Adaptation Committee, was awarded a $300,000 grant from SFEP and a $540,000 grant from the National Fish and Wildlife Foundation to establish a formal group structure and develop a long-term adaptation pathway master plan for the entire San Leandro operational landscape unit, including the City of Alameda. The Committee is working diligently to further develop plans and design of the adaptation projects.
S2. Rising Groundwater. Prepare for the impacts of rising groundwater levels on private and public property.	Sea Level Rise	City Manager's Office Planning, Building and Transportation Public Works	General Plan Policy CC-23, HS-24, Groundwater Study	The City is evaluating recommended building code amendments to address groundwater rise and seeking funding for green infrastructure projects that can mitigate groundwater rise. Sites will consider current and future groundwater levels in the design.
S3. Flood Hazard Maps. Prioritize the review and publishing for public discussion the latest and most up to date flood hazard and sea level rise forecasts from all trusted sources.	Flooding	Planning, Building and Transportation	General Plan Policy HS-15	The most up to date FEMA flood hazard maps are published and the General Plan includes guidance on planning for sea level rise, following the Ocean Protection Council's guidance.