



ALAMEDA

Climate Action and Resiliency Plan (CARP) 2020 Annual Report

Overview and Project Updates

Overview

The Climate Action & Resiliency Plan (CARP) was adopted by the City Council on September 3, 2019, after a year and a half plan development process that included significant community and stakeholder engagement. To guide implementation, Annual Reports will be presented to City Council, Boards and Commissions, and community partners to share information and evaluate and set priorities. CARP annual reports are presented to the City Council in March in order to align with the presentation of annual reports for the Transportation Choices Plan, which has significant implications for climate.

Introduction

2020 was a challenging year for the city and community. However, despite the COVID-19 pandemic, staff was still able to meet key implementation milestones for the CARP. Staff evaluated the highly understudied risk of groundwater rise through a region-leading study of emergent groundwater in Alameda. The General Plan chapter on Conservation was rewritten to focus on Climate Action and Conservation. Alameda Municipal Power (AMP) introduced a variety of rebates related to electric vehicles (EVs) and electric appliances, including a rebate for used EVs. The De-Pave Park Vision Plan, created with community partners, was adopted and a grant submitted for fund design and planning. Departments across the City completed near-term CARP actions and laid the groundwork medium-term implementation actions in 2021 and beyond.



*Alameda Point.
Credit: Richard Bangert*



*Alameda's Eastshore Drive neighborhood.
Credit: Maurice Ramirez*

Vision & Goals

By promoting both greenhouse gas (GHG) reduction and climate adaptation measures, the CARP is helping Alameda increase resilience to climate change and ensure a sustainable and healthy environment, improved social equity, and a vibrant economy.

The CARP outlines a path to achieve eight targeted goals in support of the overarching vision. These include an ambitious goal for GHG reduction, a set of specific goals for increasing resilience to climate hazards, and a final goal for the City to effectively implement the plan and build capacity.

Vision for the *Climate Action & Resiliency Plan*

Alameda is an innovative leader in achieving net zero carbon emissions and community resilience as soon as possible, and serves as a model for similarly impacted cities to do the same. Our community members are a vital part of this ongoing process.

1. **GHG Reduction:** Reduce GHG emissions to 50 percent below 2005 levels by 2030 and achieve net zero GHG emissions as soon as possible.
2. **Sea level rise and storm surges:** Protect assets from sea level rise and storm surges, plan future land use to avoid impacts, and enhance natural shoreline habitat to mitigate impacts.
3. **Inland flooding:** Increase the resilience and capacity of Alameda's stormwater system to prevent flooding of assets during extreme precipitation events.
4. **Drought:** Reduce water consumption and increase drought-resistant landscaping.
5. **Extreme heat:** Reduce the heat island effect and protect vulnerable populations from heat impacts during heat waves.
6. **Wildfires:** Protect public health from unhealthy air quality during wildfire events, especially vulnerable populations.
7. **Earthquakes/liquefaction:** Ensure that building and infrastructure retrofits and new design standards in areas at high risk of liquefaction consider both seismic risk and sea level rise impacts.
8. **Effective implementation and capacity building:** Develop financial and human resources and increase transparency, community engagement, social resilience, and support for effective CARP implementation.

Future Annual Reports may include proposed modifications to the CARP.

Implementation Progress

The CARP contains 13 actions related to Transportation, six actions related to Energy Use in Buildings, four Sequestration actions, and 12 high priority Adaptation actions. Of these 35 actions, five have been completed. One project, using goats or sheep to manage vegetation in public landscapes, was found to be cost-prohibitive. Some projects, such as an update to the Street Tree Master Plan, were delayed due to COVID-19. Others, such as the CARP's goal to increase telecommuting, got an unexpected boost.

The most significant greenhouse gas reduction implementation successes of 2020 include:

- Launching the used EV rebate program;
- Adopting a time-of-use rate for AMP customers; and
- Increasing the size of heat pump water heater rebates.

Though not included in the CARP, City staff is also implementing a major LED streetlight and park pathway replacement project that is projected to save an estimated \$100,000 per year in utility costs and a significant amount of energy, and is scheduled to be completed in the Spring of 2021.

The most significant sequestration implementation successes of 2020 were:

- ARPD collaborated with 100K Trees to host the first Volunteers in Parks events with a tree planting day and mulching in three parks; and
- ARPD planted nearly 200 trees in parks.

The most significant adaptation implementation successes of 2020 were:

- Completing a study of emergent groundwater vulnerability;
- Concept level planning for DePave Park;
- Updating the Master Infrastructure Plan for Alameda Point to incorporate CARP goals and projects; and
- Completing a preliminary design for the flood protection project at Veteran's Court.

An important aspect of successful implementation is tracking key metrics. To that end, the City partnered with OpenGov to create a CARP dashboard: www.alamedaca.gov/dashboard. The dashboard presents information on each of the CARP's major topic areas, including maps and charts that visualize the CARP's progress and planned actions.

Alameda was awarded the Helen Putnam Award for Excellence in Planning & Environmental Quality by the League of California Cities for the City's work developing and implementing the CARP.

Priorities for 2021

Staff have identified 10 priorities for CARP implementation in 2021.

GHG Reduction

1. All-electric new buildings. In November of 2019, the City Council directed staff to seek all-electric development on City-owned lands. In early 2021, staff intend to bring forward an ordinance that will require all-electric development, with limited exceptions, for all new buildings citywide. Constructing new buildings that use fossil fuels locks in new sources of GHG emissions that must be mitigated later.
2. Parking ordinance amendments. In 2021, staff intends to bring forward a comprehensive update to the City of Alameda Off-Street Parking Ordinance.

Adaptation

3. Groundwater adaptation strategies. In November of 2020, the City Council accepted a report detailing Alameda's vulnerability to flooding from emergent groundwater as sea level rise pushes up the water table. In 2021, staff will follow up on the implementation recommendations of that report to create more detailed strategies for addressing the risks of groundwater rise. Staff will

participate on the Technical Advisory Committee for the regional effort to characterize groundwater response to sea level rise and further consideration of viable strategy solutions.

4. Flood protection projects. City staff are in the process of assessing flood protection projects that would protect the northern shoreline near the Posey/Webster Tubes from current and future flood risks. In 2021, staff intend to submit grants that will fund design of these flood protection projects. Other opportunities might include options for Doolittle Drive, the East Shore neighborhood, and securing grant funding for master plan and detailed design of DePave Park.

Capacity Building

5. Reconvene inter-departmental Green Team. The CARP development process was guided by a group of staff from several departments. In 2021, a similar group will be convened, meeting quarterly in order to ensure that the CARP's 2021 implementation milestones are achieved.
6. Revenue measures and climate communication. In 2020, multiple new revenue measures were up for discussion, including an infrastructure bond. COVID-19 halted many of those discussions. In preparation for the 2022 ballot, staff intend to analyze revenue measures that could fund CARP implementation. Some of these measures will address the City's need for additional flood protection as the Bay rises due to sea level rise. Staff will also design communication strategies that help stakeholders and the public understand the issues at hand and the revenue measures that could address them.
7. Master Tree Plan update. In 2021, staff will launch the update of the Master Tree Plan that selects water efficient, shade-producing, fire-resistant tree species adapted to Alameda's changing climate.
8. Active Transportation Plan. In 2019, the City Council authorized work on the Active Transportation Plan. In 2020, major progress was made on the plan contents with the Alameda community. In 2021, staff intend to bring forward a final draft Active Transportation Plan for final Council approval. Improving walking and bicycling facilities in Alameda is essential to reducing the 70% of the City's greenhouse gas emissions that are attributed to the transportation system.
9. General Plan update. In 2020, the Planning Board and Alameda community held public forums to review the draft General Plan update and new Climate Action and Conservation Element to support and facilitate implementation of the Climate Action and Resiliency Plan. In 2021, staff intend to bring forward a final draft Climate Action Element for final Council approval.
10. Local Hazard Mitigation Plan Update. Alameda last updated its Local Hazard Mitigation Plan in 2016. The plan identifies and evaluates all natural and man-made hazards impacting Alameda and develops a strategy for reducing Alameda's risk to people and properties from current and future hazards. The plan update will be coordinated with the CARP to make Alameda eligible for federal funding to address priority climate adaptation projects identified in the CARP.

Legislation Update

The City of Alameda supported the following State bills related to climate action and resilience in 2020 and will continue to support additional resources to assist in the City's implementation of the Climate Action & Resiliency Plan.

AB 793 (Ting): Establishes a minimum recycled content for plastic beverage containers subject to the California Beverage Container and Recycling and Litter Reduction Act.

Status: The bill was signed by the Governor on September 24.

AB 1080 (Gonzalez)/SB 54 (Allen): Identical bills, also referred to as the California Circular Economy and Plastic Pollution Reduction Act, would have imposed a comprehensive regulatory scheme on producers, retailers, and wholesalers of single-use packaging and priority single-use products, to be administered by CalRecycle.

Status: Both bills failed to move forward in the 2019-20 legislative session, but may be re-introduced in 2021.

AB 1839 (Bonta): Referred to as the California Green New Deal, would have, among other things, created the Green New Deal Council appointed by the Governor and required the Council to submit a specified report to the Legislature by January 1, 2022.

Status: The bill was amended to relate to COVID-19 recovery spending and therefore, did not move forward in 2020. However, the City did express support for the bill as initially drafted.

Partnerships and Staffing

Partnerships

To adapt to the staff and budget constraints of COVID, City staff expanded partnerships in order to continue CARP implementation. Staff partnered with Community Action for Sustainable Alameda (CASA) to host nine interns from Brown University, Pomona College, and Seattle University who worked on a variety of research projects: electrification of existing buildings, an Alameda Climate Fund, neighborhood resilience hubs, sea level rise communication, upgrading Alameda's fiber-optic infrastructure, and increasing social equity through new mapping tools.

In order to continue to advance policy work necessary to implement the CARP, the City was able to provide staff support and funding for some of this work.

Staffing

A new full-time Sustainability and Resilience Manager was hired at the beginning of 2021 to lead implementation of the CARP. This new position reports to the Assistant City Manager and will add additional capacity and structure to Alameda's climate and resilience efforts.

Budget and Funding

As we head into the next two-year budget, staff will present CARP implementation options for the City Council's consideration within the context of other needs in the community. Also, as discussed earlier in the report, in the year ahead staff will also be contemplating longer-term and stable funding streams.

Next Steps

The status and next steps for each GHG reduction project and the top adaptation projects in the CARP are described in an appendix to this report. Staff continue to look for near-term wins while building momentum on longer-term, more complex projects.

There are over 150 actions related to resilience and climate adaptation in the CARP. The table listed in the appendix presents the highest priorities of these. The remainder can be viewed at https://www.alamedaca.gov/files/sharedassets/public/public-works/climate-action-page/alameda_carp_final_091119.pdf, or downloaded from www.alamedaca.gov/carp.