Climate Action and Adaptation Plan (CAAP)

County of Santa Cruz

December 2022

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1. EXECUTIVE SUMMARY

[Placeholder. Content will be developed after feedback received.]

2. INTRODUCTION

The scale and pace of climate change has increased in the decade since the first Climate Action Strategy was drafted in 2012 and approved by the Santa Cruz County Board of Supervisors in 2013. State agencies and local governments now have a better understanding of the impacts of climate change on the built and natural environment. Local impacts of climate change have occurred in form of storms and wildfire and their impacts have been experienced throughout the county. Most notably, there was the 2017 Winter Storms which caused over $100 million in damage to local roads, the 2020 CZU Lightning Complex Fire, which burned over 80,000 acres and destroyed nearly 1000 homes, and more recently, there was the 2021 Winter Storm event, which resulted in millions more in road damages. Existing conditions, combined with predictive modeling, indicate that the impacts of climate change will continue to be significant, will increase over time and will impact all aspects of our local climate, from natural lands to the built environment, and the impacts will be felt by all residents, both human and non-human.

In earlier California climate change projections, addressing sea level rise and implementing strategies to mitigate, or reduce, the flow of heat-trapping greenhouse gases into the atmosphere were the primary focus. Now, due to recent extreme weather and wildfire events, we have a glimpse of how climate change will impact this county. These events, along with the COVID-19 global pandemic and the CZU fire, reveal the disproportionate impacts experienced by lower income residents, the elderly, and other marginalized or medically vulnerable populations. The CAAP addresses this inequity by identifying at-risk groups and proposing strategies to lessen or remove the impact of climate change.

The Climate Action and Adaptation Plan (CAAP) was designed under the premise that the effects of human-caused global warming are occurring now, are irreversible on the time scale of current generations and will worsen in the decades to come without focused action. This perspective underlies the development and design of this CAAP as a response to a climate crisis.

Santa Cruz County

Santa Cruz County is located in the traditional tribal territory of the Awaswas peoples, one of eight divisions of the Ohlone American Indians of Northern California, who were known for their acorn-based diets and basket making and occupied present-day Davenport to Aptos for approximately 10,000 years (Dunn 2013). The only remnants of their spoken language are three local place names: Aptos, Soquel and Zayante; and the name of a native shellfish – abalone. At the time of colonization, the Indigenous people belonged to the Uypi tribe of the Awaswas-speaking dialectical group. They called the area Aulinta.

Santa Cruz County encompasses nearly 607 square miles of rugged coastline, mountains, and fertile farmland in the northwestern mountains of California (U.S. Census Bureau 2012), with a total population of 270,861 full-time residents as of 2020 (U.S. Census Bureau 2020).

Neighboring counties include San Mateo County to the northwest, Santa Clara County the north and east, and Monterey and San Benito counties to the south. Steep mountainous elevations reach nearly 3,800 feet and descend into river valleys and beaches at sea level (Luther and Barrows 2010).

The county comprises four incorporated cities, the largest being the City of Santa Cruz with a population of 62,956, followed by Watsonville (52,739), Scotts Valley (12,272), and Capitola (9,966). More than half of all county residents live within the boundaries of these incorporated cities (137,933), the other half live in the unincorporated county (132,927). The urban unincorporated population is roughly the population size of Watsonville, with over 50,000 residents.

The county has four watersheds: the Pajaro River watershed, the San Lorenzo River watershed, the Soquel Creek watershed, and the Aptos Creek watershed. The San Lorenzo Valley watershed provides potable water supply to a majority of the county's population.

Economic drivers include agricultural food production (primarily berries), healthcare, the University of California, Santa Cruz, tourism, water-related recreation, local government, timber, and small private businesses, generating a $75,957 per capita income for the county in 2020.

3. FRAMEWORK FOR THE COUNTY OF SANTA CRUZ CLIMATE ACTION AND ADAPTATION PLAN

Santa Cruz County approved a comprehensive 2013 Climate Action Strategy (CAS) that focused on both reducing greenhouse gas (GhG) emissions and mitigating, or lessening, the impacts from climate change. The CAS included GhG goals and targets for 2020 and 2035. The CAAP sets forth a comprehensive set of goals, strategies, and measurable objectives to mitigate (reduce) GHG emissions and respond to climate change by building adaptive capacity. This CAAP is a response to the current climate crisis and was developed using a rapid engagement process with county and community stakeholders. The intention is to produce the strategic foundation for a plan that will be implemented over two years, at end of which time, the strategies and objectives will be updated and refined for another two-year period. The goal is to align with the work of community stakeholders to implement strategies and objectives equitably across the county.

Another aspect of the CAAP will be an online site in the form of a story map for sharing critical data and maps related to climate change and vulnerable populations. Presented through this tool, the CAAP will provide accessible, nimble, and flexible information about climate change impacts and the strategies and objectives to address them.

The CAAP will be developed in Year 1 and implementation will occur in Year 2 and 3.

Year 1 (2022) will serve as the baseline analysis for reducing Greenhouse Gas (GhG) emissions. The GHG emission inventories from year 2005, 2010, 2015, 2018 have been analyzed for consistency and informative historic trends. A GhG emission forecast projects the County's emissions through 2045 based on current state programs and regulations relative to climate planning. Expected growth has been modeled, providing an understanding of future residual emissions that will need to be reduced. The CAAP provides GhG emission reduction targets and initial objectives to reach those targets. Mitigation and adaptation objectives will be implemented over the next two years by County departments.

Year 2 and 3 (2023-2024) will consist of implementation, monitoring, and recalibration. Year 2 and 3 will include implementation of both the mitigation and adaptation strategies and objectives. This two-year phase will include monitoring and evaluation of the objectives and results will be available on the public CAAP website. Based on the monitoring results, areas for process or strategy improvement will be adjusted in 2025, when the CAAP is updated.

This approach with phased elements will allow for an iterative process grounded in continuous process improvement and focused on achieving results. The process also allows overlap between mitigation and adaptation elements to ensure a cohesive approach to climate change.

County Collaborative Engagement

The CAAP was developed by an internal County staff team consisting of three work groups focused on three areas: Built Environment, Natural Environment and Community and Economy. Each workgroup comprised of 28 subject matter experts from the following departments:

- Agricultural Commissioner
- Agricultural Extension
- Community Development and Infrastructure (CDI)
- County Administrative Office (CAO)
- Health Services Agency (HSA)
- Information Services (ISD)
- Parks
- Personnel
- Probation
- Sheriff

This team, along with the additional support of 5 CAAP interns, worked collaboratively to develop CAAP strategies and objectives.

REGIONAL APPROACH

The CAAP is also taking a regional approach to climate resilience wherever possible. Goals, Strategies and Objectives from the City of Watsonville and the City of Santa Cruz plan are incorporated where possible to support alignment of efforts.

4. GHG EMISSIONS IN THE COUNTY OF SANTA CRUZ

California considers greenhouse gas (GhG) emissions and the impacts of climate change to be a serious threat to public health, the environment, economic well-being, and natural resources of the state, and has taken an aggressive stance to mitigate (reduce) the impacts of climate change. A GhG emission inventory identified the major sources and quantities of GhG emissions produced by community-wide activities within the unincorporated area during 2019. The GhG emission inventory established an emissions baseline, showed emissions trends, identified the greatest sources of GhG emissions within the unincorporated county and set targets for future reductions.

Data Sources and Assumptions

GhG emissions inventories are developed based on the activity data and emissions factors associated with each emission sector. Data for GhG emissions inventories is typically acquired from primary data sources, third-party verification bodies, or models depending on data availability.

Table 1 below provides a summary of data sources referenced for conducting Santa Cruz County's 2019 GHG emissions inventory.

Table 1. 2019 Community Data Sources and Emissions Factors by Sector

Sector	Utility Providers	Activity Source	Emissions Factor Source
Electricity Usage	PG&E	Energy use data by category provided by PG&E 2019 Utility Data	The Climate Registry
	3CE	3CE provided Residential use and Direct Access PG&E 2019 Utility Data	3CE reported Emissions Factor (Estimated by Rincon from AMBAG provided data)
Natural Gas Consumption	PG&E	Energy use data by category provided by PG&E 2019 Utility Data	Community Protocol Default
Transportation	N/A	2021 EMFAC	2021 EMFAC
Wastewater	N/A	Population data sourced from the State of California Department of Finance	ICLEI (EQ WW.8.; WW.12.)
Solid Waste	N/A	Tonnage data from 2014 CalRecycle	ICLEI (EQ SW.4.1)

Assumptions

A list of key assumptions is provided to clarify the activity data included and how it was allocated for each sector.

Energy

- PG&E reported Direct Access usage represents total 3CE supplied electricity.
- PG&E reported commercial electricity use includes industrial electricity usage.
- Water-related conveyance emissions are included in total electricity consumption for the community.

Transportation

- The portion of Santa Cruz County On-Road vehicle miles traveled (VMT) attributable to the unincorporated County is based on the proportion of households in the area.
- The portion of Santa Cruz County Off-Road fuel consumption attributable to the unincorporated County may be approximated based on demographic indicators in the area such as:
    - Population
    - Number of Jobs
    - Service Jobs
    - Number of Agricultural Jobs
- The unincorporated County does not have jurisdiction on the following Off-Road categories:
    - Airport land use

    - Military Tactical Support
    - Ocean Going Vessels (Non-pleasure craft)
    - Oil Drilling
- Residential electric vehicles are charged at home.
- All electric vehicles are charged within unincorporated County boundaries.
- Transmission and distribution losses from electric vehicle charging are negligible.

Wastewater

- Cogeneration of electricity in the Santa Cruz County Sanitation District eliminates most wastewater methane emissions in the county.
- Potential methane emissions from smaller sanitation districts are negligible.

Waste

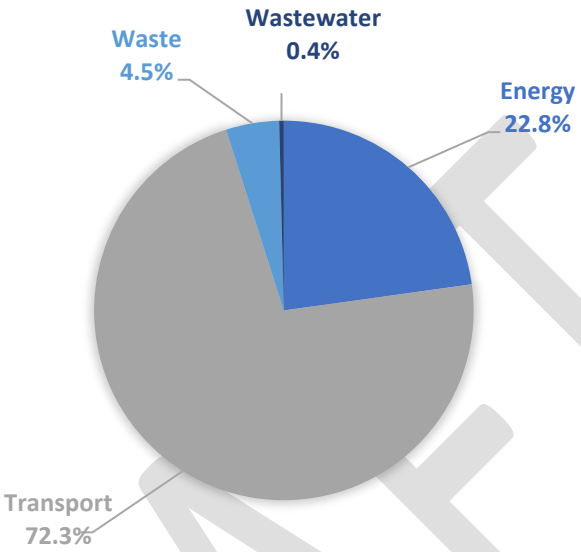
- Waste processing uses CNG as fuel source.
- Landfill Gas collection efficiency is 75% and Oxidation Rate is 10% (ICLEI defaults).
- California's CalRecycle 2014 Waste Characterization Study is representative of Santa Cruz County waste.

GhG Inventory Results

A GhG inventory was prepared for the CAAP using a baseline year of 2019. The GhG inventory focused on community-wide emissions from residents and businesses operating within the unincorporated area of the County and is organized by sectors (Transportation, Energy, Waste, Wastewater). The inventory includes sources within each sector that are under jurisdictional control of the County, in accordance with the established US Community Protocol and state guidance. A 2019 baseline year was selected based on the availability of data and the intention to avoid data associated with anomalous operations during the COVID-19 pandemic.

The total community-wide emissions for the unincorporated area in 2019 were approximately 728,429 metric tons (MT) of carbon dioxide equivalent (CO_2e) GhG emissions. The GhG emission sectors and the percentage contribution of each sector to total emissions is shown in Figure 1.

Figure 1- 2019 GHG Emissions by Sector



2019 Baseline GHG Inventory	
Sector	**GHG Emissions (MT CO2e)**
Energy	166,057
Transport	526,509
Waste	32,989
Wastewater	2,874
TOTAL	**728,429**

CLIMATE CHANGE IMPACTS

Changes in temperature and precipitation patterns are expected to amplify the frequency, duration, and magnitude of several climate hazards. Climate change models project that Santa Cruz County is expected to experience the following by the end of the century.

- **Extreme Heat.** In Santa Cruz County, an extreme heat day occurs when the maximum temperature is above 90°F. The annual number of extreme heat days is projected to increase from 3 days to 19 days.
- **Drought.** The average length of dry spells will increase from 99 days to 112 days.
- **Wildfire.** The decadal probability of a wildfire (the chance a wildfire will occur in a ten-year period) is projected to increase by 20 percent. A recent example of note is the CZU Lightening Complex Fire, which burned 85,509 acres and 1,490 structures across Santa Cruz and San Mateo Counties in August-September 2020, making it the twelfth most destructive Californian wildfire on record.
- **Landslides.** Susceptibility of landslides in Santa Cruz County is projected to increase as precipitation variability increases and wildfires increase in frequency, area, and severity.
- **Riverine and Stormwater Flooding.** Changes in precipitation patterns, may result in low-lying areas throughout Santa Cruz County experiencing more frequent and/or intense flooding, with the area of flooding potentially expanding.
- **Sea Level Rise.** The County is projected to experience up to 6.9 feet of sea level rise by 2100 with coastal storm impacts posing risk to multiple assets, including residences, commercial infrastructure, natural resources, and agricultural lands.
- **Air Quality.** Air quality within Santa Cruz County is projected to worsen due to increases in wildfires across the Western United States and average maximum temperature. Longer periods of drought may also contribute to worsening air quality.

Populations, Assets, and Services at Risk

Climate change impacts sensitive populations, assets, and services. **Sensitivity** is the degree to which a species, population, natural system, community, asset, or other associated system may be affected by changing climate conditions. Sensitive assets, populations, and services are identified as those that are most susceptible to climate change hazards. Below is a summary of the vulnerable populations, assets, and services with detail indicating the highest potential impacts for each group. **Vulnerability** is based on the combination of potential impacts and adaptive capacity.

Climate change will impact vulnerable community members, natural resources, managed resources, critical facilities, buildings, services, and infrastructure in Santa Cruz County and a brief description of each is below.

Vulnerable Populations are identified as the following:

- Individuals with high outdoor exposure
- Under-resourced individuals
- Individuals facing societal barriers
- Individuals with chronic health conditions or health related sensitivities

Managed Resources highly vulnerable to extreme heat, drought, wildfire, riverine and stormwater flooding, and poor air quality:

- Agriculture
- Timber
- Forestry
- Rangelands

Natural Resources highly vulnerable to extreme heat, drought, wildfire, and sea level rise:

- County Parks
- Open Space
- Rivers and streams
- Waterbodies
- Forested land
- Critical habitat
- Wetlands
- Wildlife

Buildings and Critical Facilities highly vulnerable to wildfire, landslides, riverine and stormwater flooding, and sea level rise:

- County buildings
- Education facilities
- Hospital
- Residential and commercial development
- Fire stations
- Sheriff/Ranger stations
- Airports
- Roadways and transportation facilities

Services and Infrastructure highly vulnerable to extreme heat, wildfire, and sea level rise:

- Water services
- Wastewater
- Storm drainage and flood protection
- Solid and hazardous waste and recycling
- Transit facilities and services
- Roadways and highways
- Fire services
- Emergency services
- Medical services
- Utilities and major utility corridors
- Active transportation routes

5. EQUITY SCREENING TOOL

The CAAP Strategies and supporting Objectives will advance equity by serving all communities, by identifying disproportionate impacts and achieving equitable results in historically underserved and vulnerable communities.

The Climate Action and Adaptation Plan (CAAP) includes mitigation and adaptation objectives that have been evaluated for potential negative outcomes for vulnerable and disadvantaged community members. Equity Guardrails are specific criteria designed to ensure that CAAP Objectives address socioeconomic and racial equity concerns. The Guardrails formulate and

sequence the Objectives necessary to ensure mitigation or adaptation strategies do not result in disproportionate burdens, inequities or discrimination.

Table 1 Santa Cruz County CAAP Equity Guardrails

Equity Guardrail	Criteria
1. Improves Health and Safety	Each strategy must be supported by an objective that either mitigates potential negative outcomes, or improves the following for disadvantaged communities (DAC) and populations with disproportionate vulnerabilities to climate change: • individual and population health • Life and property safety • Quality of life
2. Includes Appropriate Financial Options	The strategy must be supported by objectives that: • do not place additional disproportionate financial burdens or hardships on disadvantaged communities and • are designed with funding and financing options that address their specific needs.
3. Aligns with Social and Cultural Needs and Values	Each strategy must be supported by objectives that address the following for disadvantaged communities: • culturally relevance • needs of the community • values of the community [1] • Include partnership with community-based organizations that are equipped with the valuable relationships, knowledge, and trust to succeed
4. Reduces potential for displacement	Each strategy must be supported by objectives that: • protect disadvantaged communities from potential financial or environmental displacement

[1] Values of the Community are identified through dialogue with community participants.

Equity Guardrail	Criteria
	• support adaptive capacity and resilience for disadvantaged community members • protect disadvantaged communities from cost-of-living increases.
5. Continues Investment and Engagement	Each strategy must be supported by objectives that: • continue engagement with Disadvantaged Communities over the course of implementation • include engagement with Disadvantaged Communities during implementation to address unforeseen barriers and constraints
6. Provides local and accessible green job development	Each strategy must be supported by objectives that: • support local and accessible green job development • support green job employment for people experiencing barriers to employment.

6. STRATEGIES AND OBJECTIVES

Strategies are focused on opportunities for the County to lead by example while putting in place the steps necessary to achieve a long-term transition to carbon neutrality and increased resilience.

The objectives are not a complete set of steps to successfully complete all strategies - this is intentional. Some (if not all) may take more than two years to complete. These objectives are intended to serve as the initial actions required to begin the process of realizing a decarbonized and more resilient County for all members of the community.

Table 1 Energy Strategies

Energy Strategies	Objective Type	Objective	Supporting County Department(s)
1. Construct disaster-resilient community evacuation	*Feasibility Plan*	• Initiate a Feasibility Plan analysis for resilience hubs by identifying buildings, including libraries, which have the capacity to act as resilience hubs and	Library JPA; Real Property; H.S.A. (inventory of cooling centers)

Energy Strategies	Objective Type	Objective	Supporting County Department(s)
centers across the County		are proximate to disadvantaged communities to provide consistent coverage across the county. • Conduct an energy study of identified buildings to determine the infrastructure necessary to install resilient air filter and heat pump systems and decarbonize the hubs and make them resilient to power shut offs and climate extremes	
Lead Department: OR3	*Engagement/ Education Plan*		
	Code Adoption		
	Partnership Plan	Explore micro-grid pilot opportunities with 3CE to expand distributed grids into surrounding areas	
	Funding Plan	Identify and apply for funding opportunities to supply resilience hubs with renewable energy installed by local businesses.	
2. Eliminate Fossil fuel use in new buildings	*Feasibility Plan*		
	Engagement/ Education Plan	Develop educational materials and host events for local contractors, developers, and service providers to understand the benefits of all new electric construction	
Lead Department: CDI	*Code Adoption*	Develop and adopt the ordinances. Steps to be completed to adopt the ordinance(s) are as follows using a tiered or phased approach: STEP 1: Work with interested parties in developing an idea for a reach Code Adoption electrification ordinance(s)	Chief Building Official/Inspection Team

Energy Strategies	Objective Type	Objective	Supporting County Department(s)
		STEP 2: Complete a cost effectiveness study and develop guidance on electricity efficiency requirements STEP 3: Develop and draft the ordinance(s) and go through the public process, incorporating revisions as necessary for all new construction, major remodels, and end of life replacement STEP 4: Go through the formal adoption process STEP 5: Apply for approval by the California Energy Commission.	
	Partnership Plan		
	Funding Plan		
3. Eliminate Fossil fuel use in new and existing County facilities with efficient electric equipment **Lead Department: GSD**	*Feasibility Plan*	Initiate building and equipment electrification plans for the county that analyses cost efficiency and a prioritized schedule for updates based on time of replacement and identifies local contractors and developers.	OR3
	Engagement/ Education Plan		
	Code Adoption		
	Partnership Plan		
	Funding Plan	Identify and apply for Funding Plan opportunities	
4. Eliminate Fossil fuel use in existing residential buildings by tailoring	*Feasibility Plan*		OR3

Energy Strategies	Objective Type	Objective	Supporting County Department(s)
solutions to different building ownership, systems, and use types			
	Engagement/ Education Plan	Engage the community on the benefits and value of building electrification and obtain implementation feedback from CBOs	CDI/ OR3
Lead Department: CDI	*Code Adoption*	Develop and Code Adoption the ordinances after equitable finance options are in place. Steps to be completed to Code Adoption the ordinance(s) are as follows: STEP 1: Work with interested parties in developing an idea for a reach Code electrification ordinance(s) STEP 2: Complete a cost effectiveness study STEP 3: Develop and draft the ordinance(s) that include tenant protections and energy efficiency requirements, go through the public process, and incorporate revisions as necessary STEP 4: Go through the formal Code Adoption process STEP 5: Apply for approval by the California Energy Commission.	CDI
	Partnership Plan	Explore opportunities to expand the supporting workforce, with targeted support to disadvantaged workers	3CE/OR3
	Funding Plan	Develop and implement the Funding Plan options for equitable Code Adoption in advance of the electrification ordinance(s)	OR3
5. Eliminate Fossil fuel use in existing commercial buildings by	*Feasibility Plan*	Develop a cost effectiveness study based on existing permit data	CDI, Small Business Development, CAO – Economic Development

Energy Strategies	Objective Type	Objective	Supporting County Department(s)
tailoring solutions to different building ownership, systems, and use types			
	Engagement/ Education Plan	Engage the commercial community on the benefits of building electrification, Funding Plan options, and local developers and contractors used for County electrification to support the transition	CDI
Lead Department: CDI	*Code Adoption*	*[Tentatively completed by Q1, 2023]*	
	Partnership Plan		
	Funding Plan		
6. Equitably disconnect the County from PG&E's natural gas infrastructure by 2040.	*Feasibility Plan*		
	Engagement/ Education Plan	Lobby the CEC and State to develop a pathway to prune unused NG infrastructure and fully disconnect	CDI
Lead Department: OR3	*Code Adoption*		
	Partnership Plan	Partner with PG&E to develop a clear pathway to reach county wide electrification by x and disconnect from the NG system	
	Funding Plan		
7. Maintain countywide enrollment with	*Feasibility Plan*	Establish an annual analysis and reporting program to keep the county and the board of supervisors informed of the	

Energy Strategies	Objective Type	Objective	Supporting County Department(s)
3CE at 98% or greater		decarbonation of Santa Cruz County energy	
	Engagement/ Education Plan	If opt out levels exceed 2%, engage local communities to identify reasons for increased opt out.	
Lead Department: OR3	*Code Adoption*		
	Partnership Plan	If opt out level exceed 2%, partner with 3CE to initiate an engagement/education campaign for the community to help the community regain opt-in rates, work with 3CE to promote energy efficiency programs to offset cost increases	3CE, BOS, CAO
	Funding Plan		
8. Achieve equitable implementation and benefits of energy strategies.	*Feasibility Plan*		
	Engagement/ Education Plan		
Lead Department: OR3	*Code Adoption*	Establish an annual analysis and reporting program to keep the county informed on the equity concerns of electrification and use of local businesses for implementation	
	Partnership Plan	Establish a partnership with CBOs to design and activate the energy equity program	CDI-Planning, RCPWG
	Funding Plan		

Table 2 Waste & Wastewater Strategies – Natural Environment

Waste & Wastewater Strategies	Objective Type	Objective	Supporting Department
1. Reduce the carbon footprint of the food system by reducing waste, promoting climate friendly diets, and getting excess food to communities in need.	*Feasibility Plan*	Assess the sustainability of existing food recovery organizations to remove food from the waste stream and deliver it to people in need.	CDI – Solid Waste Division
	Engagement/ Education Plan	Develop a tips and tricks education program in locations such as places of community gatherings, which highlights how waste reduction benefits the community and how to improve the experience. Develop relationships with food recovery organizations and increase participation of restaurants, bakeries. Develop an education program to encourage buying local and promote locally grown food.	
	Code Adoption	Continue staff support for these efforts.	
Lead Department: Dept. A	*Partnership Plan*	Create closer relationships between the food donors and the food recovery organizations that want prepared foods. Develop local Partnership Plan with organizations for local producers.	
	Funding Plan	Continue to participate in the community-wide solid waste task force to pursue additional Funding Plan for organic waste	

Waste & Wastewater Strategies	Objective Type	Objective	Supporting Department
		infrastructure to help achieve the organic waste diversion target	
2. Reduce carbon footprint of landfill	*Feasibility Plan*	Evaluate technologies to improve energy efficiency, cost effectiveness, and reduce the carbon footprint of county waste handling facilities using local contractor and developer services.	CDI – Solid Waste Division
	Engagement/ Education Plan	Investigate waste to energy opportunities for landfill wastes and identify alternative fuels for heavy equipment used to haul county waste.	
Lead Department: Dept. A	*Code Adoption*		
	Partnership Plan		
	Funding Plan		
3. Reduce, reuse, repair, and recovery of goods and materials for packaging	*Feasibility Plan*	Evaluate opportunities to reduce the use of non-reusable/single use in county facilities, and commercial and institutional sectors. Identify partners whose objectives align with county policy.	CDI – Solid Waste Division
	Engagement/ Education Plan	Provide information on existing services and businesses that support reuse.	
Lead Department: Dept. A	*Code Adoption*		
	Partnership Plan	Continue to support repair and reuse of durable goods through community clinics.	[Partner Organizations]
	Funding Plan		
4. Develop a reuse solution to Increase the demand for organic waste products	*Feasibility Plan*	Assess the opportunities and barriers for the community, institutional, agricultural and commercial use of compost, mulch and biofuels through surveys and community outreach	CDI – Solid Waste Division

Waste & Wastewater Strategies	Objective Type	Objective	Supporting Department
Lead Department: Dept. A	*Engagement/ Education Plan*		
	Code Adoption		
	Partnership Plan	Work with ag/farmworker organizations to increase the use of compost across the county. Partner with Resource Conservation District of Santa Cruz County, landscape companies and community gardening groups to advertise and increase capacity to distribute products if necessary.	
	Funding Plan		
5. Increase the use of reclaimed wastewater and stormwater for irrigation and general use	*Feasibility Plan*	Determine the initial project list and develop conceptual designs. Determine financial and economic impacts on cost of service and local employment.	GSD/Parks
	Engagement/ Education Plan	Strengthen community understanding of the importance of wastewater and storm water as a resource such that community values are reflected	
Lead Department: Dept. A	*Code Adoption*		
	Partnership Plan	Partner with CBOs to understand community barriers to Code Adoption of use of recycled water	SC City Water, Soquel Creek Water, [others?]
	Funding Plan	Identify and apply for Funding Plan	

Table 3 Transportation Strategies

Transportation Strategies	Objective Type	Objective	Supporting Department
1. Reduce vehicle miles traveled through higher density and more affordable housing development along transit corridors **Lead Department:** CDI – Sustainability and Advanced Planning	*Feasibility Plan*		
	Engagement/ Education Plan	Incorporate OPR's SB 743 guidance into the citing selection criteria for the housing element to reduce VMT consistent with the requirements of SB 743	
	Code Adoption	Update county policies, such as reduced fees tax credits or exemptions, graduated density bonuses, and reduced parking requirements for redevelopment, affordable housing, or mixed use in Opportunity Areas	
	Partnership Plan	Support the incorporation of "15-minute neighborhoods" and other high density and transit connected solutions in the 2023 county Housing Element update process. Develops Partnership Plan with local disadvantaged community groups to help identify appropriate housing locations and evaluate citing and VMT reduction potential in those locations. Work with community groups to encourage local business and contractor involvement in new housing development.	
	Funding Plan		
2. Eliminate fossil fuel use from the county passenger vehicle fleet	*Feasibility Plan*	Prioritize transition based on time of replacement schedule and evaluate marginal cost difference between electric vehicles and available	HAS

Transportation Strategies	Objective Type	Objective	Supporting Department
		charging stations. Identify opportunities for local contractor employment for charging station installation	
	Engagement/ Education Plan		
Lead Department: General Services	*Code Adoption*	Replace vehicles using a phased approach by vehicle type: passenger fleet, light and medium duty fleet. Create a trade-in program for disadvantaged community members to trade less fuel-efficient personal vehicles for retired County fleet	
	Partnership Plan		
	Funding Plan	Pursue grant Funding Plan for charging infrastructure and submit Low Carbon Fuel Standard application for building out charging infrastructure	
3. Eliminate fossil fuel use from passenger and commercial vehicles	*Feasibility Plan*	Identify key areas to install new EV infrastructure throughout a selection of county properties	GSD, Parks
	Engagement/ Education Plan		
Lead Department:	*Code Adoption*	Update the county Code to include residential family and commercial building owners to include 20% of parking be designated as EV charging stations using local contractors and developers where possible. Install EV charging infrastructure for the public at select County facilities.	
	Partnership Plan	Pursue Partnership Plan with affordable EV charging companies to install	

Transportation Strategies	Objective Type	Objective	Supporting Department
		chargers on select county properties. car share to support affordable housing in frontline neighborhoods	
	Funding Plan	Pursue Funding Plan for solar charging stations (free of charge) at county facilities	
4. Increase wildfire mitigation capabilities across the county by establishing a network of fire breaks that also provide community benefits **Lead Department:** OR3	*Feasibility Plan*	Determine where priority locations are for development of firebreaks and compare to bike/hiking path locations identified in the county's Active Transportation Plan (ATP)	GSD, County Fire, CalFire
	Engagement/ Education Plan		
	Code Adoption		
	Partnership Plan	Partner with CalFire and local fire departments to align fire suppression needs with active transportation opportunities. Partner with local community groups to identify and develop mitigation strategies addressing disproportionate quality of life effects on disadvantaged communities as a result of regional clearcutting prior to and during implementation	
	Funding Plan	Identify Funding Plan opportunities that align with developing fire prevention and bike/hiking paths and allow employment of local service providers.	
5. Implement County of Santa Cruz Active	*Feasibility Plan*		

Transportation Strategies	Objective Type	Objective	Supporting Department
Transportation Plan finalized in 2022 to achieve active transportation mode share of 15% of total trips by 2040			
	Engagement/ Education Plan		
Lead Department:	*Code Adoption*	Develop criteria based on GHG reduction and equity to evaluate the ATP and bring forward a prioritized list of projects	CDI – Transportation Division
	Partnership Plan		
	Funding Plan	Pursue Funding Plan of identified list of prioritized projects which address GHG reduction and equity	
9. Implement programs and policies which encourage use of a efficient and reliable multi-modal transit system that people prefer to use	*Feasibility Plan*		
	Engagement/ Education Plan		
Lead Department:	*Code Adoption*	Work with AMBAG to define and evaluate Opportunity Areas as areas for transit-oriented development (including per SB 375 for CEQA streamlining benefits)	CDI – Transportation Division, RTC, METRO
	Partnership Plan		

Transportation Strategies	Objective Type	Objective	Supporting Department
	Funding Plan	Prioritize Funding Plan opportunities for corridor investment projects along high-quality transit corridors that serve multiple modes of travel	
6. Facilitate county-wide and equitable broadband access to increase remote workforce access, employment opportunities, and emergency communications **Lead Department:**	*Feasibility Plan*	Conduct a broadband access analysis to identify gaps in broadband availability across the county. Analyze opportunities to develop a broadband district to establish an income tax to tackle income discrepancies and inequities in broadband structure.	Information Services Dept. (ISD)
	Engagement/ Education Plan		
	Code Adoption		
	Partnership Plan	Partner with broadband providers to highlight equity and resilience concerns associated with broadband access and identify a strategy to fill in broadband access gaps	
	Funding Plan		

Table 4 Government Operations Strategies

Gov. Ops. Strategies	Objective Type	Objective	Supporting Department
1. Plan ahead for natural disasters to better support impacted communities	*Feasibility Plan*	Prepare criteria/minimum requirements for the replacement of critical infrastructure and reforestation following a disaster event, and identify areas where local businesses and service providers can be employed in recovery efforts	

Gov. Ops. Strategies	Objective Type	Objective	Supporting Department
	Engagement/ Education Plan		
Lead Department:	*Code Adoption*		
OR3	*Partnership Plan*	Partner with utility providers to have disaster recovery plans that include more resilient infrastructure	
	Funding Plan	Work with HCD to develop a program to readily access HUD Funding Plan for disaster recovery to cover increased cost of rebuilding more resilient infrastructure	
2. Provide housing during a disaster for communities in need	*Feasibility Plan*	Identify appropriate existing unoccupied buildings, hotels, motels, and RV parks with sufficient capacity. Develop a voucher system or pathway to make accessible housing following natural disaster displacements. Develop a disaster displacement program with criteria for disaster displacement facilities and a contracting program so that there is a designated number of housing available for displaced residents	
	Engagement/ Education Plan		
Lead Department:	*Code Adoption*		
OR3/HCD	*Partnership Plan*		
	Funding Plan	Pursue FEMA and HUD Funding Plan to pay for program development and implementation	
3. Effectively monitor and evaluate progress to adapt	*Feasibility Plan*	Identify resourcing needs for climate action and adaptation program including administration, monitoring,	

Gov. Ops. Strategies	Objective Type	Objective	Supporting Department
to changing community needs and legislative requirements.		outreach and engagement, local job creation, and evaluation and determine required staffing levels.	
	Engagement/ Education Plan	Develop a climate action portal to connect stakeholders and the community with actions and programs	
Lead Department: OR3/CAO	*Code Adoption*		
	Partnership Plan		
	Funding Plan	Pursue Civic Spark Fellows and identify available Funding Plan at next budget cycle to support monitoring and evaluation	
4. Incorporate resilient design features and contracting policies for new and rehabilitated county facilities.	*Feasibility Plan*	Include scoring criteria in county RFPs for construction projects that identify resilience features such as water and energy efficiency, reduced urban heat, and decrease their embodied carbon in alignment with recent law AB 2446	
	Engagement/ Education Plan		
Lead Department: GSD	*Code Adoption*		
	Partnership Plan		
	Funding Plan	Identify County budget max allocation for new construction project bids which utilize less GHG intensive materials	
5. Create regional mitigation and resilience programs funded by collective	*Feasibility Plan*	Explore the Feasibility Plan of aligning the climate planning cycle and sharing resources at the county scale	

Gov. Ops. Strategies	Objective Type	Objective	Supporting Department
funding opportunities.			
	Engagement/ Education Plan		
Lead Department: OR3/RCPWG	*Code Adoption*		
	Partnership Plan	Pursue joint Funding Plan opportunities with local jurisdictions	
	Funding Plan		
6. Educate and empower youth and families to engage effectively with community climate change efforts	*Feasibility Plan*	Determine if existing targeted programs and resources are leveraged (e.g., resilient neighborhoods program, etc.)	
	Engagement/ Education Plan	Develop continual sustainable community education and outreach efforts to foster community engagement and provide opportunities to get involved in government and community climate action activities as well as green job opportunities	
Lead Department: OR3/County Office of Education	*Code Adoption*	Partner with CBOs, non-profits and educators to develop and implement curricula	
	Partnership Plan	Work with partners to help secure Funding Plan for supporting programs and identify communities with greatest Funding Plan needs for participation in sustainable community education programs	
	Funding Plan	Develop plan for community outreach to inform the community of the curriculum's availability and provide opportunities to get involved	

Gov. Ops. Strategies	Objective Type	Objective	Supporting Department
7. Reduce the carbon footprint of the food system by reducing waste, promoting climate friendly diets, and getting excess food to communities in need. **Lead Department:** GSD/Sheriff (for facilities)	*Feasibility Plan*	Create a reference database of local food producers and vendors, their procurement methods, and their agricultural practices, and develop a strategy for database maintenance.	
	Engagement/ Education Plan		
	Code Adoption	Develop a procedure to be implemented in County procurement departments which provides guidance on sourcing from sustainable vendors identified in the database. Start with the Sheriff/Corrections Department for initial activities	
	Partnership Plan		
	Funding Plan		

Table 5 Natural Resources and Working Lands Strategies

Natural/Working Lands Strategies	Objective Type	Objective	Supporting Department
1. Better protect and manage local county aquifers	*Feasibility Plan*	Identify parcels owned or managed by the County that can used for recharge projects	
	Engagement/ Education Plan	Educate county departments on groundwater sustainability and identify possible project locations	
Lead Department: HSA – Environmental Health	*Code Adoption*	Develop a building ordinance that calls for a certain level of permeability for all new developments and conduct an analysis on all county owned facilities	

Natural/Working Lands Strategies	Objective Type	Objective	Supporting Department
		to increase permeability**.** Identify local contractors and developers and establish an incentive program for hiring local businesses in the ordinance	
	Partnership Plan	[partnership activities]	Santa Margarita Groundwater Agency, Santa Cruz Mid-County Groundwater Agency, Pajaro Valley Water Management Agency
	Funding Plan	Seek grant funds	
2. Support the implementation of carbon reduction strategies through conservation and restoration of natural habitats, sustainable farming practices, and sequestration technologies	*Feasibility Plan*	Work with AMBAG to implement key findings of the Monterey Bay Natural and Working Lands Climate Mitigation and Resilience Study	HAS – Environmental Health/ OR3
	Engagement/ Education Plan		
Lead Department:	*Code Adoption*		
Ag Extension	*Partnership Plan*	Establish Partnership Plan with agriculture organizations to include growers in the discussions on appropriate and achievable sustainability strategies and data sourcing improvements	
	Funding Plan		

Natural/Working Lands Strategies	Objective Type	Objective	Supporting Department
3. **Develop an Urban Forest Management Plan to increase carbon sequestration and reduce the urban heat island effect in urban areas of the county** **Lead Department: CDI**	*Feasibility Plan*	Conduct an urban canopy assessment identifying areas of inequity in urban forest developments, climate appropriate and resilient species, required vegetative management practices and opportunities for implementation	OR3 / HAS – Environmental Health, CalFire
	Engagement/ Education Plan		
	Code Adoption		