



COUNTY OF SANTA CRUZ 0357

PLANNING DEPARTMENT

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KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR

April 4, 2014

AGENDA DATE: April 15, 2014

Board of Supervisors
County of Santa Cruz
701 Ocean Street
Santa Cruz, CA 95060

SUBJECT: ANNUAL REPORT ON IMPLEMENTATION OF CLIMATE ACTION STRATEGY

Members of the Board:

On February 26, 2013 your Board adopted a resolution approving the Climate Action Strategy (CAS). Your Board also directed the Departments of Planning, Public Works, Health Services Agency, General Services, Agriculture Commissioner, Agricultural Extension, Emergency Services, and other departments as necessary to prepare Annual CAS Work Program Reports, and directed the Planning Director to compile the annual reports for your consideration in April of each year. Your Board further directed staff to form an interdepartmental task force to oversee implementation of the CAS, to identify funding for a sustainability manager to lead implementation of the CAS, and to encourage the public to plant trees.

On April 23, 2013 your Board accepted the 2013/2014 annual report on implementation of the Climate Action Strategy, with direction to include in the next annual report a discussion of the County's overall success for meeting the greenhouse gas reduction goals, and further directed staff to return with information on where they intend to seek funding for the sustainability manager or what grants have been submitted. During 2013/2014 Budget Hearings and on December 17, 2013 staff reported to your Board on CAS implementation activities and funding opportunities. Further update on these issues is provided below.

Interdepartmental Climate Action Task Force

To assist the County to achieve the adopted emissions reduction targets of 80 percent below 1990 levels by 2050, an implementation plan was included in the CAS. The plan facilitates tracking and periodic evaluation of the activities that are being relied upon to reduce greenhouse gas emissions and prepare for the impacts of climate change. To that end, an Interdepartmental Climate Action Task Force has been formed to guide and coordinate implementation of the strategy, to ensure that all departments are part of the implementation process, and to ensure that the effort is coordinated across our various areas of expertise and function.

This year the Interdepartmental Climate Action Task Force has held one group meeting attended by department heads and/or representatives from Planning, Public Works, General Services (representing Office of Emergency Services and Fire Agencies), Health Services Agency (including Environmental Health Services), Human Services Department (Workforce Investment Board), and the Agricultural Commissioner (also representing University of

California Cooperative Extension), and the County Administrative Office. Additionally, Planning staff has met separately with two department heads to discuss the annual work program reports. As a result, the FY 2014/15 Annual Work Program Reports demonstrate that nearly all departments are part of the implementation process, and climate action is coordinated across our various areas of expertise and function (Attachment 1).

Annual Progress Report

Tables 3-1 through 3-3 in the CAS list a number of specific actions to implement each emissions reduction strategy. Table 7-1 in the CAS presents a set of possible adaptation actions, or strategies, for each of the vulnerabilities and impacts that have been recognized and evaluated. In order to assist the Departments with the task of preparing the Annual Work Program Report, Planning Department staff prepared worksheets customized for each department listing the strategies relevant to each department. The reports were completed by staff in the various departments. The reports include information on the ongoing programs and projects each department is pursuing, and new initiatives each department intends to pursue to implement the CAS in the coming fiscal year. Planning Department staff compiled the reports in Attachment 1, which is formatted to display information from the previous year's report and this year's report. While many of the programs and projects were not conceived specifically to implement the CAS, they are activities that address various aspects of emissions reduction and climate change adaptation and are included as strategies or actions in the CAS. Some highlights from Attachment 1 include:

Energy Efficiency and Renewable Energy

- Leading a regional collaboration to study Community Choice Aggregation for the Monterey Bay Area to reduce the use of fossil fuels to generate electricity (General Services, Planning)
- Adoption of updated building codes effective in 2014 that increase energy efficiency requirements for new and remodeled buildings (Planning)
- Evaluating solar for landfill, transfer station and County buildings (Public Works, General Services)
- Green Business Program: 14 new members recognized by the Board in 2013 (Public Works)
- Production of electricity with captured landfill gas, and improvements to gas capture systems (Public Works)
- Green government certification for all County facilities (Public Works, All Departments)
- Support of environmental education programs in local schools (Public Works)
- Energy efficiency retrofits completed at several major County facilities, and further audits and evaluations are underway with technical and financial assistance from PG&E (General Services)
- Evaluation of County Purchasing Policy for "green" factors, including, but not limited to: recycled content, sustainable wood content, energy star rating, "green" custodial products, and local food preference (General Services)
- Promote and facilitate the installation of greywater irrigation systems, require installation of water use efficiency measures as a condition of approval for large wells, and completed update of county water conservation ordinances (Environmental Health)
- Reduced the use of petroleum based mosquitocides (Agricultural Commissioner)
- Support green jobs by providing training funds, labor market information, career counseling, and job placement assistance to local job seekers who wish to explore a career in a Green Job occupation (Workforce Investment Board)

Transportation

- Development of the Sustainable Santa Cruz County Plan involving land use and transportation planning to reduce transportation related emissions, and integration of Climate Action strategies with Economic Vitality Strategies to promote innovative technologies and new thinking that can advance the goals of both strategies. (Planning)
- Incorporate multi-modal transportation elements (pedestrian, bike, transit) into all improvement projects, and implement Safe Routes to Schools projects (Public Works)
- Programs to promote alternative commuting by bicycle, bus, and vanpool, and upgraded and expanded bike lockers at Government Center (General Services)
- Promote pedestrian and bicycle safety programs (Health Services)
- Upgrading the County fleet with low emission vehicles, fleet management systems, and additional electric vehicle charging facilities (General Services)

Solid Waste

- Award winning waste reduction and recycling programs, and long range planning for implementation of a Zero Waste Eco Park to meet the County's long term zero waste goal (Public Works)

Climate Change Adaptation

- Updating General Plan Safety Element policies and related ordinances to address a range of planning issues related to sea level rise (Planning)
- Working with the U.S. Army Corps of Engineers, County of Monterey, and City of Watsonville to develop a feasible flood control alternative to reduce the potential overtopping of the Pajaro River levees (Public Works)
- Reducing storm water runoff through development policies and ordinance requirements (Public Works)
- Ongoing outreach and education to assist growers to adapt to climate change (University of California Cooperative Extension)
- Cooperative fire protection and fire prevention agreements with other agencies, improved communications for all county emergency services partners (Fire Agencies, OES)
- Early notification/warning of hazardous weather conditions and heat events using technology based applications (Fire Agencies, OES, Health Services)
- Adopted updated fire codes to reduce fire related risks in the urban / wildland interface, and implemented fuel reduction projects to reduce fire risk (Fire Agencies)
- Promoting water supply security through long range groundwater basin management and water transfers and exchanges (Environmental Health)

Emissions Reduction

Monitoring progress on emissions reduction, and adaptation strategies and actions is a way of demonstrating the County's overall success for meeting the greenhouse gas reduction goals for 2020, 2035, and 2050. The strategy tables in Chapter 3 of the CAS and the Monitoring Program summarized in Table 4-2 outline the performance indicators that will be monitored to measure success for each strategy. The emission inventories and the estimates of emissions reduction will be periodically updated as well. Staff is planning to update the emissions inventory in 2014. Future monitoring reports will evaluate the overall effectiveness of the mitigation portion of the CAS, and may make recommendations to modify the CAS for greater effectiveness. Based on a variety of factors, including the wide array of actions the County as a whole is taking to reduce greenhouse gas emissions and prepare for climate change, it is anticipated that the

updated emissions inventory will demonstrate a reduction in greenhouse gas emissions associated with County operations.

Funding

As reported to your Board in December 2013, staff has been monitoring the availability of opportunities for grant funding to implement strategies identified in the County's Climate Action Strategy. Staff has kept the Commission on the Environment informed of these efforts and has worked with individual members of the Commission on several grant opportunities. Additional information on staffing will be presented in conjunction with budget hearings.

Two grant applications in which the County is involved have been approved for funding. The World Wildlife Fund recently announced that Santa Cruz County is the recipient of an Earth Hour City Challenge grant in the amount of \$30,000 to study community choice aggregation. The grant application was submitted by the General Services Department and the Planning Department provided technical assistance to the General Services Department in the preparation of the grant application.

The County partnered on a grant application with Monterey County as the lead, for funding to study sea level rise on the Monterey Bay coast co-sponsored by the Ocean Protection Council, California Coastal Commission and State Coastal Conservancy. The Ocean Protection Council has approved funding in the amount of \$150,000 to Monterey County to collaborate with the City of Capitola and the County of Santa Cruz to compile data to complete a regional vulnerability assessment and evaluate adaptation responses to sea level rise.

Two other grant applications have been submitted to study community choice aggregation, and we are waiting to hear back on the applications. A grant application in the amount of \$35,000 has been submitted by the General Services Department to the Well Fargo Environmental Grant program, and GSD submitted a grant application in the amount of \$350,000 to the State of California Strategic Growth Council Round 3 Sustainable Communities Planning Grant Program. The CCA technical study is the top priority in the CAS and is aimed at quickly reducing significant amounts of greenhouse gas emissions (GhG) in the Monterey Bay area over the next two decades. The project is being led by staff in Supervisor McPherson's office, with additional leadership and technical assistance from the General Services Director and Planning Department staff. The proposed project budget, as submitted in the grant application, includes a 0.5 FTE Senior Departmental Administrative Analyst as part of the County organization structure to administer the grant. The project's regional partners include the Counties of Santa Cruz, Monterey and San Benito, as well as 100% of the Cities therein, (Santa Cruz, Watsonville, Capitola, Scotts Valley, Salinas, Monterey, Marina, Sand, Seaside, Del Rey Oaks, Pacific Grove, Carmel, Gonzales, Soledad, King, Greenfield, Hollister, and San Juan Bautista.) There are 14 active partners participating on the Project Development Advisory Committee as well as contributing in-kind staff time to assure the project's success. A number of community members are volunteering their time and expert resources to the project, as well. Based on this level of participation and organization it is believed the grant application has a good chance for success in this competitive grant program.

The County is also continuing to work on a FEMA Disaster Recovery Initiative (DRI) grant that was obtained in 2011 to update the Safety Element of our General Plan to address sea level rise. Some of the polices being considered include increased flood protection levels, bluff and beach setback requirements, sea wall requirements, and others.

Conclusion

As part of implementation the CAS, the Interdepartmental Climate Action Task Force has helped guide and coordinate implementation of the strategy, and ensure that the effort is coordinated across our various areas of expertise and function. The annual work program report demonstrates that the County is engaged in a wide variety of activities by many County departments that are addressing the issues of greenhouse gas emissions reduction in preparation for the anticipated impacts of climate change.

It is therefore RECOMMENDED that your Board accept and file the Annual Climate Action Strategy Report.

Sincerely,


Kathy M. Previsich
Planning Director

RECOMMENDED:

SUSAN A. MAURIELLO
County Administrative Officer

Attachments:

1. Emissions Reduction and Adaptation Strategies Annual Work Program Report

Cc: Department of Public Works
General Services Department
Office of Emergency Services
Environmental Health Services
Health Services Agency
Human Services Department (W.I.B.)
Agricultural Commissioner
University of California Cooperative Extension

**Attachment 1 Santa Cruz County Climate Action Strategy
2014 / 2015 Work Program Report**

Department: Planning

Emissions Reduction

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Strategy:	E-1 Community Choice Aggregation
Action:	E-1.1 & 1.2 Seek funding to perform a study of the feasibility of Community Choice Aggregation (CCA); Form a steering committee composed of the County, cities, water districts, waste management districts, and other stakeholders to provide input and guide the CCA feasibility study.
2014/2015:	Planning Department staff will continue to participate in the regional effort to seek funding to complete a technical study of CCA for the Monterey Bay Area. This includes leading a technical working group (TWG) that is scoping the study, and participation in the project development advisory committee (PDAC). In conjunction with the General Services Department (GSD), Planning will continue to identify grant opportunities for the regional effort and will work with GSD to submit applications, where appropriate. GSD, on behalf of the regional effort and with the assistance of Planning, has submitted several grant applications. Funding decisions are expected in spring of 2014.
2013/2014:	Resolution adopted by the Board of Supervisors (BOS) on 3/5/13 confirming County's participation in inter-jurisdictional effort to investigate feasibility of CCA.
Strategy:	E-2 Energy Efficiency
Action:	E-2.5 Consider time-of-sale energy efficiency program that encourages energy retrofit, supplies information about energy use and conservation opportunities. May be used to implement state energy "benchmarking" policies.
2014/2015:	Continue to evaluate options for ordinance development as staff resources allow.
2013/2014:	Evaluate options for ordinance development
Strategy:	E-5 Education
Action:	E-5.2 Create a Climate Action web site with access to tools for calculating and tracking energy use, emissions, and carbon footprint, and information to promote low carbon lifestyles, including information about rebates and other available incentives.
2014/2015:	Update our website as staff resources allow.
2013/2014:	Planning staff to update our website to provide information and tools to help the public with energy efficiency and renewable energy initiatives
Strategy:	E-6 Green Building
Action:	E-6.1 During each code adoption cycle consider exceeding Cal Green mandatory measures by adopting all or some elements of Cal Green Tier 1 and 2 voluntary elective measures to increase energy efficiency in new buildings, remodels and additions. Specifically consider requiring solar generation facilities on new buildings and pre-wiring of buildings to accommodate photovoltaics and electric vehicle charging. Consider local amendments to remove code obstacles to the use of photovoltaic systems
2014/2015:	The County has adopted the 2013 State building code, which includes significant new energy efficiency requirements, requirements for pre-wiring of buildings to accommodate future photovoltaics; Adopted local amendment making new code provisions applicable to a broader class of projects; Local solar permitting has been streamlined.

2013/2014:	Adopting the State building code (CalGreen) on the regular code adoption cycle (2014) and adopt local amendments that exceed State standards for energy efficiency and renewable energy.
Strategy:	T-1 Vehicle Miles Traveled Reduction
Action:	T-1.4 Participate in Regional planning efforts, including the Regional Traffic Model Improvement Plan, Regional Sustainable Communities Plan, and the Regional Housing Needs Assessment (AMBAG), and the Regional Transportation Plan (SCCRTC) with a focus on climate action goals and emission reduction (ongoing).
2014/2015:	Drafts of these plans have been completed by AMBAG and RTC.
2013/2014:	Planning staff participate in regional efforts to improve the Regional Traffic Model, Regional Sustainable Communities Plan, Regional Housing Needs Assessment with a focus on climate action goals
Strategy:	T-1 Vehicle Miles Traveled Reduction
Action:	T-1.3 Complete the Santa Cruz County Sustainable Communities and Transit Corridor Plan (underway).
2014/2015:	The Sustainable Santa Cruz County Plan (updated title) is on schedule.
2013/2014:	Planning currently working on the Sustainable Communities and Transit Corridors Plan
Strategy:	T-1 Vehicle Miles Traveled Reduction
Action:	T-1.7 Prepare a County Economic Vitality Strategy and promote economic development activities that create local jobs to reduce employee commute trips out of the County (ongoing).
2014/2015:	A draft Strategy is expected to be ready for Board consideration in spring 2014.
2013/2014:	A County Economic Vitality Strategy is being developed
Strategy:	T-1 Vehicle Miles Traveled Reduction
Action:	T-1.6 Develop a reuse plan for the Davenport cement plant property that incorporates public transit, pedestrian and bicycle access, and renewable energy elements.
2014/2015:	March 2014 Board approved contract in the amount of \$33,300 with Wahlstrom and Associates for the CEMEX Re-Use and Economic Stabilization Plan
2013/2014:	The county has obtained grants funds to study issues and opportunities surrounding reuse of the Davenport cement plant

Adaptation

Strategy:	Develop a forum for ongoing engagement with coastal private property owners and the California Coastal Commission to discuss frameworks for land use policies that respond to expected future losses. Topics would include post-disaster reconstruction, policies regarding engineered protective structures and legal instruments that would allow property owners to acknowledge and accept responsibility for future losses.
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2014/2015:	Planning staff provided comments on the recently published Coastal Commission Sea-Level Rise Policy Guidance document, and participates in quarterly meetings with the Central Coast District Office. Planning staff is participating in multiple sea level rise vulnerability studies currently underway for the Monterey Bay; Updated General Plan Safety Element policies are being developed for future discussion with coastal private property owners.
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing seal level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.
Strategy:	Consider a program to identify areas where high priority wetlands will be inundated, and evaluate options to allow wetland areas to migrate with the shoreline.
2014/2015:	Planning staff has provided comments on the Coastal Commission Sea-Level Rise Policy Guidance document, and is participating in multiple sea level rise vulnerability studies currently underway for the Monterey Bay; Evaluate options following mapping and identification of these areas.
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing seal level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.
Strategy:	Consider relocating coastal development away from areas that will be inundated to eliminate the risk of damage and the need for coastal protection. This concept is known as “managed retreat” and may only be technically, financially and legally feasible in limited situations.
2014/2015:	Evaluate this option following mapping and identification of these areas, and during development of updated General Plan Safety Element policies and discussions with coastal private property owners.
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing seal level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.
Strategy:	Consider limiting new engineered protection structures to infill in locations where the back beach is currently fixed.
2014/2015:	Updated General Plan Safety Element policies are being developed which will address this issue.
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing seal level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.
Strategy:	Consider a program to identify those areas where managed retreat should replace engineered protection structures, based on public benefit.
2014/2015:	Updated General Plan Safety Element policies are being developed which will address this issue.
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing seal level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.

Strategy:	Work with the engineering community to define a standard increment of additional height that should be added to the FEMA 100 year wave run up, storm surge, and flood levels when analyzing hazards in specific locations.
2014/2015:	Updated General Plan Safety Element policies are being developed which will address this issue.
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing seal level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.
Strategy:	In consultation with the California Coastal Commission, consider revising regulations that address rebuilding structures that are repeatedly damaged by sea level rise and coastal storms.
2014/2015:	Updated General Plan Safety Element policies and ordinance revisions are being developed which will address this issue.
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing seal level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.
Strategy:	Consider relocating coastal development away from hazardous areas to eliminate the risk of damage and the need for coastal protection. This concept is known as “managed retreat” and may not be technically, financially or legally feasible in many situations.
2014/2015:	Updated General Plan Safety Element policies are being developed which will address this issue.
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing seal level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.
Strategy:	Amend the Safety Element of the General Plan and revise implementing regulations to increase the efficacy of the damage prevention and flood protection aspects of the National Flood Insurance Program. This would include revising the method of calculating “Substantial Improvement” in the floodplain, maintaining participation in the Community Rating System to improve floodplain management and reduce insurance costs for residents, and creating an online database of elevation certificates
2014/2015:	Updated General Plan Safety Element policies and flood hazard ordinance are being developed which will address this issue.
2013/2014:	This work is being completed under the existing DRI grant.
Strategy:	Work with the County Office of Emergency Services to refine FEMA flood hazard mapping to account for climate change, as maps are the basis for evacuation notification in the event of anticipated flooding and/or a tsunami.
2014/2015:	FEMA is in the process of updating flood hazard mapping for our area, but the maps will not address sea-level rise.
2013/2014:	Pursue this strategy following completion of the Monterey Bay Sea Level Rise Vulnerability Study and update by FEMA of flood hazard mapping.

Strategy:	Consider evaluating unprotected developed coastal bluff areas subject to future erosion, and develop plans and timeline for either armor placement, or retreat and relocation of existing public structures and/or infrastructure.
2014/2015:	Evaluate this issue during development of updated General Plan Safety Element policies
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing sea level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.
Strategy:	Consider evaluating areas that are presently armored to determine whether additional armor or managed retreat is the most practical long-term approach.
2014/2015:	Evaluate this issue during development of updated General Plan Safety Element policies
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing sea level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.
Strategy:	Continue to require that the County Geologist review development in areas of suspected landsliding and require engineering geology reports when landsliding is identified or suspected.
2014/2015:	Ongoing
2013/2014:	Ongoing
Strategy:	Continue to require that an engineering geologist and/or geotechnical engineer investigate the site of any proposed construction near landsliding and require mitigation of landslide hazards before issuing any building or grading permits.
2014/2015:	Ongoing
2013/2014:	Ongoing
Strategy:	Continue to require that an engineering geologist and/or a geotechnical engineer investigate any landslide damage to homes or roadways before repair of the landslide and reuse of the homes or roadways.
2014/2015:	Ongoing
2013/2014:	Ongoing
Strategy:	Consider increasing the freeboard above the projected 100 year flood level that is required for new development, in order to account for sea level rise and increased winter storms.
2014/2015:	Updated General Plan Safety Element policies and flood hazard ordinance are being developed which will address this issue.
2013/2014:	Pursue this strategy following expected publication by the Coastal Commission of a guidance document for addressing sea level rise in Local Coastal programs, and completion of the Monterey Bay Sea Level Rise Vulnerability Study.

Strategy:	Review site design standards for new development, the Urban Forestry Master Plan, and Parks Department plans for public spaces for opportunities to increase tree canopy in the urban area and for continued emphasis on increasing the number of trees in the built environment.
2014/2015:	Planning staff continues to implement the Significant Tree Protection ordinance, and the Design Review ordinance. Both ordinances require replacement trees for trees removed as a result of development, and permits are typically conditioned to require increasing the number of trees compared to the number of trees removed.
2013/2014:	Additionally, County Code parking standards require tree plantings in new parking lots Low priority
Strategy:	Work with State and Federal natural resources agencies to standardize environmentally appropriate fuel reduction practices in sensitive habitats.
2014/2015:	Pursue potential grant opportunities to fund this work as staff resources allow.
2013/2014:	Pursue potential grant opportunities to fund this work
Strategy:	Reduce fire risks in the urban/wildland interface (WUI) through improved building materials and appropriate code enforcement including defensible space programs (<i>LHMP and Calgreen building code</i>).
2014/2015:	Updated fire code adopted effective in 2014
2013/2014:	Address in regular code adoption cycle
Strategy:	Consider protecting, and/or assisting non-profit organizations to protect habitat that is essential to facilitating species adaptation to changing climate. This would include protecting potential refuge areas and large, interconnected habitat patches that achieve multiple conservation benefits. Areas to consider include buffer areas around existing protected habitat, areas that facilitate connectivity between populations, representative areas of the County's diverse local climates, and areas that are more likely to be climatically stable or support species in the predicted hotter and drier climate, including streams, ponds, lakes, wetlands, springs, and north-facing slopes.
2014/2015:	As needed
2013/2014:	As needed
Strategy:	Consider revising the Conservation and Open Space element of the General Plan to address the challenges of climate change and to update conservation policies, working with local scientists, conservation and environmental organizations.
2014/2015:	Pursue potential grant opportunities to fund this work as staff resources allow.
2013/2014:	Pursue potential grant opportunities to fund this work.
Strategy:	Support private and non-profit organizations efforts to promote community awareness of Santa Cruz County's rich biological systems and their vulnerability to climate change, as well as their role in mitigating climate change, and to track indicators of the effects of climate change on important biological systems.
2014/2015:	As needed
2013/2014:	As needed

Strategy:	Consider how climate-related goals and strategies can be incorporated into an amendment of the General Plan. This may be coordinated with policies that flow from the Transit Corridors Plan for Sustainable Communities and the Disaster Recovery Initiative funded update of the Safety Element (underway). In addition, consider how to integrate strategies presented in the CAS document with the County's Economic Vitality Strategy in order to promote innovative technologies and new thinking that will advance the goals of both strategies.
2014/2015:	Underway
2013/2014:	Underway

Department: Public Works

Emissions Reduction

Strategy:	E-2 Increase energy efficiency in new and existing buildings and facilities
Action:	E-2.8 Continue the Green Government Certification program for County facilities, and enhance the program by expanding it to all County facilities and improving the standards for recertification (ongoing).
2014/2015:	Recertification for County buildings due in 2015.
2013/2014:	Completed in 2012. Staff is working on solar funding for County buildings. Still in the feasibility process

Strategy:	E-2 Energy Efficiency
Action:	E-2.9 Amend County street lighting standards to require LED streetlights as feasible, in coordination with PG&E.
2014/2015:	Ongoing.
2013/2014:	Incorporate LED streetlights in all new projects; continue to submit grant applications to retrofit existing streetlights

Strategy:	E-3 Enhance and expand the Green Business Program
Action:	E-3.1 Consider additional capacity to expand the Green Business Program in Santa Cruz County with additional staff resources, and through the use of the County website.
2014/2015:	County obtained a 2-year, \$10k grant from PG&E to assist w/energy audits and overall program coordination. Ongoing.
2013/2014:	Ongoing.

Strategy:	E-3 Green Business Program
Action:	E-3.2 Create and promote a program similar to the Green Business Program, for use by individual residents, households, and neighborhoods.
2014/2015:	Ongoing.
2013/2014:	Ongoing.

Strategy:	E-3 Green Business Program
Action:	E-3.3 Consider enhancing the Green Business awards program to recognize and rate exceptional achievements.

2014/2015:	Ongoing.
2013/2014:	Ongoing.
Strategy:	E-3 Green Business Program
Action:	E-3.4 Continue to enhance standards for Green Business certification and recertification to foster increasing levels of achievement (ongoing). Consider enhancing the Green Business checklist to incorporate benchmarks related to vehicles miles traveled per employee.
2014/2015:	Ongoing.
2013/2014:	Ongoing.
Strategy:	E-4 Increase local renewable energy generation
Action:	E-4.9 Support the Santa Cruz County solar energy project to install photovoltaic panels and associated equipment at the former Ben Lomond landfill.
2014/2015:	Work is currently in progress.
2013/2014:	DPW and GSD are working together on solar for landfill, transfer station and County buildings
Strategy:	E-5 Public education about climate change and individual actions
Action:	E-5.1 Promote climate change education programs in local schools by maintaining energy conservation curriculum in the green schools program.
2014/2015:	Ongoing.
2013/2014:	The County contracts with O'Neill Sea Odyssey, Save Our Shores and Coastal Watershed Council to bring environmental education to Countywide schools. This education ranges from marine debris education, resource conservation and carbon footprint education.
Strategy:	T-1 Reduce vehicle miles traveled (VMT) through County and regional long range planning efforts
Action:	T-1.2 Study and consider adjusting transportation and roadside impact fees to promote multimodal transportation infrastructure improvements.
2014/2015:	Currently studying and evaluating several major transportation corridors which will provide the necessary datum to evaluate the need for Transportation Improvement Area (TIA) fees throughout the County unincorporated area. Continue to incorporate multi-modal (ped, bike, transit) into all improvement projects.
2013/2014:	Continue to incorporate multi-modal (ped, bike, transit) into all improvement projects
Strategy:	T-1 VMT Reduction
Action:	T-1.4 Participate in Regional planning efforts, including the Regional Traffic Model Improvement Plan, Regional Sustainable Communities Plan, Regional Transportation Plan, and the Regional Housing Needs Assessment, with a focus on climate action goals and emission reduction (ongoing).
2014/2015:	Continue to meet goals and follow policies of the Regional Transportation Plan.
2013/2014:	Continue to meet goals and follow policies of the Regional Transportation Plan.

Strategy:	T-1 VMT Reduction
Action:	T-1.9 Incorporate complete streets concepts into the Zoning Ordinance and into developments (ongoing with Planning).
2014/2015:	Continue to utilize this tool when evaluating needed improvements.
2013/2014:	Continue to utilize this tool when evaluating needed improvements.
Strategy:	T-2 Increase bicycle ridership and walking through incentive programs and investment in bicycle and pedestrian infrastructure and safety programs
Action:	T-2.1 Consider funding an infrastructure network using development fees that is dedicated to bicycle and pedestrian infrastructure.
2014/2015:	Continue to collect developer fees and budget for specific bike and roadside improvements.
2013/2014:	Continue to collect developer fees and budget for specific bike and roadside improvements.
Strategy:	T-2 Bicycle and Pedestrian Infrastructure
Action:	T-2.3 Increase the effectiveness of the County Bicycle Plan by seeking funding to develop bicycle infrastructure prioritized in the Plan.
2014/2015:	Continue to work with the RTC Bicycle Committee to prioritize bicycle infrastructure projects for grant opportunities.
2013/2014:	Requires an update every five years to qualify for BTA grants. Coordinate updates with the RTC Bicycle Committee.
Strategy:	T-2 Bicycle and Pedestrian Infrastructure
Action:	T-2.6 Work with the RTC and Public Works to implement the recommendations of the RTC's Safe Paths of Travel report regarding pedestrian travel.
2014/2015:	Ongoing.
2013/2014:	Developed brochure for sidewalk repair. Continue to respond to complaints regarding broken sidewalks and work with owners to ensure repair is performed per Design Criteria.
Strategy:	T-2 Bicycle and Pedestrian Infrastructure
Action:	T-2.4 Continue to seek opportunities to implement the Safe Routes to School Program locally by seeking grant funding under the Program for applicable projects (ongoing).
2014/2015:	Currently awaiting new program policies and procedures to be released by CALTRANS.
2013/2014:	Continue to submit grant applications for area school improvements – State and Federal programs.
Strategy:	T-5 Reduce County Fleet Emissions
Action:	T-5.4 Upgrade the Public Works diesel fleet as required to comply with state and federal mandates for more fuel efficient diesel engines (ongoing).
2014/2015:	Ongoing.
Strategy:	T-5 Reduce County Fleet Emissions
Action:	T-5.5 Consider incorporating more biodiesel in diesel vehicles as equipment and state law permits.

2014/2015:	Monitoring technologies within industry/Ongoing.
2013/2014:	Using 5% blend at BV and BL landfills; Roads Maintenance considering implementing similar usage.
Strategy:	W-1 Pursue "waste to energy" capacity at County landfill through improving existing capacity and investigating new technology
Action:	W-1.1 Pursue installation of "waste-to-energy" technology that meets environmental standards, and supports and enhances recycling efforts.
2014/2015:	Ongoing.
2013/2014:	Actively following developments in Waste to Energy Technology and participating in Statewide planning efforts.
Strategy:	W-1 Waste to Energy
Action:	W-1.2 Utilize the electric power produced by landfill gas at the Buena Vista landfill for the County of Santa Cruz instead of the current scenario in which the electricity production is purchased by other jurisdictions.
2014/2015:	Future Plan. Currently in 7th year of existing 20-year contract.
Strategy:	W-2 Improve existing landfill gas capture system to increase percentage capture of landfill gases
Action:	W-2.1 & 2.2 Seek funding for design and installation of improved landfill gas capture system at Buena Vista Landfill & install system by 2020.
2014/2015:	Ongoing.
2013/2014:	Continue planning upgrades to landfill methane gas capture system as funding becomes available.
Strategy:	W-3 Reduce the amount of solid waste, and recyclable and compostable materials in the commercial and residential waste stream
Action:	W-3.1 Continue planning for implementation of a Zero Waste Eco Park to meet the County's long term zero waste goal (ongoing).
2014/2015:	Ongoing long-range planning underway.
Strategy:	W-3 Waste reduction & recycling
Action:	W-3.2 Continue to advocate for Extended Producer Responsibility (EPR) through membership in the California Product Stewardship council and other actions that encourage and achieve EPR (ongoing).
2014/2015:	Ongoing.
Strategy:	W-3 Waste reduction & recycling
Action:	W-3.3 Continue to partner with and support other local and regional waste reduction programs, and consider enhancements that would further the zero waste goals of the County (ongoing).
2014/2015:	Ongoing regional planning with Integrated Regional Waste Management Local Task Force.

Adaptation

Strategy:	Table 7-1 Section 1 Consider designing and siting all future County projects and infrastructure to account for sea level rise projections, considering projected life span of project.
2014/2015:	Ongoing .
2013/2014:	Continue to maintain and replace existing infrastructure as current resources allow.
Strategy:	Table 7-1 Section 1 Consider developing a plan to elevate E. Cliff Drive at Twin Lakes State Beach, Corcoran Lagoon, and Moran Lake to alleviate frequent coastal flooding and potential inundation.
2014/2015:	No longer proposed as part of Twin Lakes Beachfront project due to funding limits.
2013/2014:	Proposed to be elevated as part of the Twin Lakes Beachfront project.
Strategy:	<p>Table 7-1 Section 1 Consider securing federal grant funding for the following drainage improvements within the Rio Del Mar Esplanade necessary to protect against a 10-year storm:</p> <ul style="list-style-type: none"> • Construct pump station to include a new concrete vault at the southeast end of the parking lot centerline equipped with multiple pumps and associated control panels; establish new discharge outfall, provide new piping to connect to the existing storm drain systems and install a water quality treatment unit. • Install a closed gravity pipe system along Winfield Way that intercepts runoff along the ramped section of Aptos Beach Drive. Install a closed gravity pipe system near the Esplanade frontage that intercepts runoff flowing down the ramped section of Rio Del mar Boulevard. • Replace the undersized 12-inch pipes along Aptos Beach Drive with 24-inch diameter PVC, HDPE or RCP piles. Relocate and replace the Esplanade parking lot storm drain system with 18-inch pipes. • Rebuild the 12-inch storm drain lateral from the downstream end of the main storm drain up Venetian Road to Lake Court. Provide several inlet locations and a point of connection at Sand Street. • Construct a new seawall within the Esplanade parking lot on County property rather than State Parks property. Alignment would likely divide the parking lot into two halves, with the interior side offering year-round use, and the beach side closed in the storm season only.
2014/2015:	Grant application in final review by FEMA. Approved by State OES. The grant amount does not cover the extensive list in the strategy but only accomplishes what was described in last year's summary
2013/2014:	DPW applied for a FEMA Flood Hazard Mitigation Grant. The application is currently being reviewed. The improvements as proposed by the grant will address smaller storms and will provide some benefits for all storms. However, for cases of the less frequent, over 10-year frequency storms, the flooding will still be an issue in the Rio Del Mar flats area. The proposed drainage improvements, while will provide additional protection to flood events, were not conceived to address the Climate Action Plan.

Strategy:	Table 7-1 Section 1 Continue to improve wastewater collection system to reduce infiltration by groundwater or surface water. Monitor groundwater and increase efforts as necessary.
2014/2015:	Ongoing.
2013/2014:	Continue to replace collection system as part of annual CIP.
Strategy:	Table 7-1 Section 1 Consider coordinating with the City of Santa Cruz on programs to minimize vulnerabilities at the Neary Lagoon plant.
2014/2015:	Ongoing.
2013/2014:	Working with stakeholder of plant regularly.
Strategy:	Table 7-1 Section 2 Develop a priority list for addressing public infrastructure that has been identified as vulnerable to storm surge and wave run up associated with 16.5–65.7 inches of sea level rise in 2100, and consider developing retreat or retrofit plans for high priority public infrastructure. This list should be updated periodically to reflect new information about the extent and timing of sea level rise.
2014/2015:	Ongoing.
2013/2014:	Continue prioritizing vulnerable infrastructure such as roads, bridges, and drainages structures.
Strategy:	Table 7-1 Section 3 Continue to work with the U.S. Army Corps of Engineers, County of Monterey, and City of Watsonville to develop a feasible flood control alternative to reduce the potential overtopping of the Pajaro River levees within both Santa Cruz and Monterey counties, including construction of setback levees to reclaim a portion of the floodplain while increasing the flood capacity.
2014/2015:	Ongoing.
2013/2014:	The General Re-evaluation Report and the EIS/EIR for the Pajaro River Flood Reduction Project is currently scheduled for public release in Jan. 2014.
Strategy:	Table 7-1 Section 3 Evaluate the effectiveness of current policies and ordinances designed to limit storm water runoff and flooding and, if needed, recommend revisions to improve the effectiveness of these policies and codes. Specifically, evaluate the effectiveness of current drainage plan requirements for new development to ensure that runoff from impervious surface does not contribute to flooding, and revise development permit conditions of approval if needed (LHMP).
2014/2015:	Ongoing

2013/2014:	Evaluate current Policies and Ordinances to limit stormwater. The County adopted the Runoff and Pollution Control Ordinance in March 2012. The County Planning, Environmental Health and Public Works Departments are continuously working on addressing the impacts of impervious areas and reviewing its policies to identify gaps to minimize impervious area impacts, including studying the allowable percentage of parcels' impervious areas coverage by different land uses. There is still much to be worked on regarding different County Code sections such as the Riparian ordinance, Geologic/flood Hazard Ordinance, zoning regulations and other related county policies and regulations to address the Climate Action Plan to protect natural areas, restore water courses to their natural conditions and daylight water courses or not allow open water courses to be piped or hard lined. Additional work is necessary to limit impervious area coverage by unroofed structures, which is now not addressed in the County Code.
Strategy:	Table 7-1 Section 3 Prepare a "Storm Water Facilities Master Plan" for Flood Control Districts 5 & 6, which includes portions of Live Oak, Soquel, Aptos, Seacliff and Rio Del Mar. This will include an inventory of existing facilities, development of hydraulic and hydrologic modeling of these facilities, development of a prioritized Capital Improvement Program list, hydromodification analysis and development of generic best management practices and design standards (LHMP).
2014/2015:	The Storm Drain Facilities Drainage Master plan has been completed. The list of recommended improvements has been identified. Based on when funding becomes available, the County will start implementing the recommended improvements identified by the Master Plan. The county continues to require mitigations from land development project to address increase in site runoff and impacts to ground water resources resulting from the increased impervious areas associated with development.
2013/2014:	The County is in the process of completing an update to the Santa Cruz County Flood Control and Water conservation District-Zone 5 Master Plan as well as develop a new Drainage Master Plan for Zone 6. The Master Plans will be completed by June 30, 2013. Like the first item above, the Master plan was not conceived to address the Climate Action Plan. Issues identified in the second item above have more relevance to the Climate Action Plan, for stormwater management issues.

Department: General Services

Emissions Reduction

Strategy:	E-1 Develop a Community Choice Aggregation (CCA) Program
Action:	E-1.1 Seek funding to perform a study of the feasibility of Community Choice Aggregation.
2014/2015:	GSD will continue to identify appropriate grant opportunities for the regional effort and submit applications. Following an assessment of where funding is at the end of the fiscal year, further strategic efforts to fundraise by the team will be discussed.

2013/2014:	GSD, on behalf of the regional effort, has submitted several grant applications; funding decisions will be made in spring of 2014. To date, the fundraising efforts have been managed by the volunteer team.
Strategy:	E-1 CCA
Action:	E-1.2 Form a steering committee composed of the County, cities, water districts, waste management districts, and other stakeholders to provide input and guide the CCA feasibility study.
2014/2015:	General Services Director will continue to serve/chair the regional effort as it seeks funding and implementation of the study.
2013/2014:	Resolution adopted by BOS on 3/5/13 confirming County's participation in inter-jurisdictional effort to investigate feasibility of CCA. General Services Director elected to chair the regional Project Development Advisory Committee (PDAC).
2012/2013:	General Services Director was appointed by BOS to represent the County on the CCA discussions
Strategy:	E-1 CCA
Action:	E-1.3 Consider formation of a Joint Powers Authority (JPA) composed of the County with partner cities and special districts in order to consider actions necessary to implement a CCA program, if a CCA is determined to be feasible.
2014/2015:	Further action to be determined following identification of funding and completion of the feasibility study.
Strategy:	E-2 Increase energy efficiency in new and existing buildings and facilities
Action:	E-2.7 Continue the program of upgrading lighting (LEDs), heating and cooling systems, appliances, equipment and control systems by seeking funding sources to complete projects at County facilities (ongoing).
2014/2015:	Investment Grade Audit approved by BOS on 12/3/13. A detailed analysis of 1080 and 1020 Emeline mechanical, boiler, chiller equipment and lighting will be performed to determine the technical and financial feasibility of implementing, operating and maintaining the recommended energy conservation measures.
2013/2014:	General Services currently working with PG&E and their Sustainable Solutions Turnkey program to identify appropriate buildings and projects to reduce energy use.
2012/2013:	Received grant from Federal Govt ARRA funds through CEC to perform five retrofit projects at various County buildings. Received loan from CEC to perform outdoor lighting retrofit projects.
Strategy:	E-2 Energy Efficiency
Action:	County Purchasing Policies
2014/2015:	Ongoing. County Purchasing Policy reviewed and recommendations made twice per year as needed to update "green" preferences.
2013/2014:	Ongoing. County Purchasing Policy requires evaluation of "green" factors, including, but not limited to: recycled content, sustainable wood content, energy star rating, "green" custodial products, and local food preference; County paper use is tracked closely to ensure declining use; recycling is integral part of warehouse operations

Strategy:	E-4 Increase local renewable energy generation
Action:	E-4.10 Increase renewable energy generation on other County facilities, as feasible (ongoing).
2014/2015:	Discussions with Public Works regarding solar feasibility are on-going.
2013/2014:	General Services working with Public Works to determine feasibility of solar installations at various County buildings (currently on hold at request of Public Works Director pending department reorganization).
2012/2013:	Began discussions regarding which County buildings would be appropriate for solar installation
Strategy:	T-2 Increase bicycle ridership and walking through incentive programs and investment in bicycle and pedestrian infrastructure and safety programs
Action:	T-2.8 Install and continue to upgrade bike lockers at County facilities.
2014/2015:	Expansion of bike locker at Government Center complete. GSD will investigate grant opportunities for bike lockers at other County buildings.
2013/2014:	General Services will apply for grant from MBUAPCD in Spring 2013 for bike locker funding.
2012/2013:	Received grant from MBUAPCD to install 16 dual capacity bike lockers at County Government Center. Upgraded existing bike lockers and installed better lighting and security measures.
Strategy:	T-2 Increase bicycle ridership and walking
Action:	T-2.9 Install and upgrade shower and changing facilities at County facilities.
2014/2015:	Once move of Sheriff's office is complete, GSD will begin discussions with CAO as part of building space assignments for repurposing/remodeling/upgrading shower areas in basement.
Strategy:	T-2 Increase bicycle ridership and walking
Action:	T-2.10 Support loan programs administered by GSD to promote bicycle ridership.
2014/2015:	General Services will continue to look for grant opportunities that support alternative modes of transportation and the participants who utilize them.
Strategy:	T-3 Provide infrastructure to support zero and low emission vehicles (plug in electric, hybrid plug in vehicles)
Action:	T-3.3 Support the goals of the Monterey Bay Electric Vehicle Alliance (MBEVA) through pursuit of funding for installation of publicly-available EV charging stations; supportive policies, including streamlined EV charging station permit processing, and increased number of EVs in the county fleet; attracting electric vehicle businesses to the County.
2014/2015:	General Services investigating other potential sites for electric vehicle charging stations including the County Fire station in Felton, Simpkins Swim Center, Behavioral Health Center and Center for Public Safety.
2013/2014:	Currently there are three charging stations at County locations. General Services will look for funding to install additional stations. Grant applications to be submitted by spring 2014.
2012/2013:	Installed 24/7 charging stations at 701 Ocean, 1080 Emeline and 1430 Freedom

Strategy:	T-4 Increase employee use of alternative commute modes.
Action:	T-4.3 Continue to provide alternative commute programs for County employees including vanpools, emergency ride home voucher, fleet bikes, bus passes, and bike lockers for County employees who commute to work using alternative modes (ongoing).
2014/2015:	Continue to be member of TRIP (Transportation Reduction Initiative Program). This program provides emergency ride home vouchers to employees and discounted bike loans. Continue to provide bus passes, bike lockers and offer vanpool services to County employees.
2013/2014:	General Services is a member of Ecology Action's TRIP program for 2013.
2012/2013:	As member of Ecology Action's TRIP program, provided zero interest bike loans and emergency ride home vouchers to County employees
Strategy:	T-4 Alternative commute modes
Action:	T-4.4 Look for funding sources to implement commuter options, with incentives for choosing alternative commute modes (ongoing).
2014/2015:	General Services will re-apply for grant from the MBUAPCD and possibly partner with Cabrillo College on grant application for commuter ride support opportunities.
2013/2014:	General Services will consider applying for grant from MBUAPCD in Spring 2013 to fund commuter program.
Strategy:	T-5 Reduce County Fleet Emissions
Action:	T-5.1 Continue to follow through on results of the pilot program (Networkfleet) to improve fleet fuel efficiency through improved vehicle maintenance and fuel efficient driving habits.
2014/2015:	Continue to investigate fleet management systems that target improved fleet fuel efficiency through improved maintenance and driver education.
2013/2014:	Continue to seek grant funding for telematics system for fleet management as fleet vehicles are updated.
Strategy:	T-5 Reduce County Fleet Emissions
Action:	T-5.2 Continue to upgrade the County fleet with strategic purchases of fuel efficient vehicles, including zero and low emission vehicles (ongoing).
2014/2015:	Continue to upgrade the County fleet with fuel efficient vehicle purchases as funding permits.
2013/2014:	Awarded Air Resources Board Grant for \$115, 000 for pool vehicles purchase. Alternate fuel vehicle capacity at 91 flex fuel, 19 electric/hybrids, and 5 CNG.
Strategy:	T-5 Reduce County Fleet Emissions
Action:	T-5.3 Look for opportunities to expand the use of compressed natural gas (CNG) (ongoing).
2014/2015:	Investigate grant opportunities to upgrade compressed natural gas fueling facility.

Department: Environmental Health Services

Emissions Reduction

Strategy:	E-8 Reduce energy use for water supply through water conservation strategies
Action:	E-8.1 Consider adoption of water conservation ordinance to update and expand the County's water conservation measures. Explore the possibility of including a water conservation impact fee on new development to mitigate additional water demand and fund conservation programs.
2014/2015:	Continue to implement water conservation programs requiring installation of water conservation devices at time of property transfer and prohibiting wasteful water use.
2013/2014:	<ul style="list-style-type: none"> Completed update of county water conservation ordinances (Chapters 7.69, 7.74, and 7.75) The possibility of including a water conservation impact fee on new development to fund conservation programs was not pursued because most new development is served by water agencies that already fund effective water conservation programs.
2012/2013	Updated Water Conservation Ordinance has been prepared and reviewed by the Water Advisory Commission
Strategy:	E-8 Water Conservation
Action:	E-8.3 To reduce demand for potable water, promote the use of residential greywater irrigation in a manner that is protective of public health and safety and the environment. Work with the Greywater Alliance to establish procedures and to conduct trainings.
2014/2015:	Continue to promote and facilitate the installation of greywater irrigation systems. Work with Ecology Action to evaluate and promote the use of rainwater catchment systems.
2013/2014:	Staff worked with water agencies and Greywater Alliance on public outreach and training to promote installation of 100 greywater systems.
2012/2013	Brochures and procedures have been developed to allow and promote the use of greywater reuse for irrigation
Strategy:	E-8 Water Conservation
Action:	Promote irrigation efficiency for large water users as a condition of well permit approval.
2014/2015:	Continue to require installation of water use efficiency measures as a condition of approval for large wells (using more than 2 acre-feet/year).
2013/2014:	Required installation of water use efficiency measures as a condition of approval for large wells (using more than 2 acre-feet/year). Referred some growers to Natrual Resource Conservation Service and Resource Conservation District for technical assistance on water conservation.
2012/2013	Required installation of water use efficiency measures as a condition of approval for 15 large wells (using more than 2 acre-feet/year).

Adaptation	
Strategy:	Table 7-1 Section 3 Incorporate findings of the Integrated Regional Water Management Plan (IRWMP) into county water policy
2014/2015:	<ul style="list-style-type: none"> • Complete the update of the IRWMP. • Recommend adoption of the IRWMP by the Board of Supervisors as the County water policy
2013/2014:	<ul style="list-style-type: none"> • Worked on the update of the IRWMP. Supporting technical studies and plan update are 75% complete.
2012/2013	Secured Prop 84 to update IRWMP. Update is 50% complete.
Strategy:	Table 7-1 Section 3 Consider implementing additional water conservation programs, regulations and policies to conserve water supplies in the unincorporated area (See also E-8.1, Strategy for Emissions Reduction).
2014/2015:	<ul style="list-style-type: none"> • Convene a private well user group to discuss groundwater management and ways that private well users can reduce their impact on overdrafted groundwater basins. • Consider formation of a groundwater replenishment district to provide for improved basin management.
2013/2014:	<ul style="list-style-type: none"> • Worked with Soquel Creek Water District and other agencies to pursue a supplemental water supply with water conservation strategies to bring groundwater extraction into balance with sustainable yield. • Adopted and implemented updated water conservation ordinance.
Strategy:	Table 7-1 Section 3 Support the Pajaro Valley Water Management Agency in continuing efforts to conserve groundwater supplies and mitigate salt water intrusion in the Pajaro Valley.
2014/2015:	<ul style="list-style-type: none"> • Support completion of the EIR, refinement and adoption of the updated BMP, and establishment of funding mechanisms. • Work with the Resource Conservation District and other stakeholders to complete the College Lake management plan.
2013/2014:	<ul style="list-style-type: none"> • Supported development of the EIR, refinement and review of the updated Basin Management Plan. • Worked with the Resource Conservation District and other stakeholders to complete the Watsonville Slough hydrologic model.
2012/2013	<ul style="list-style-type: none"> • County staff served on the Basin Management Plan Ad Hoc Advisory Committee. • County staff worked with the Resource Conservation District to secure Prop 84 grant funding for the College Lake Management Plan and Watsonville Slough Hydrology Model
Strategy:	Table 7-1 Section 3 Support the development of additional water supplies that meet environmental standards (LHMP).
2014/2015:	<ul style="list-style-type: none"> • Complete Water Exchange Feasibility study and support approval of short term water transfers. • Continue to work with Scotts Valley and Pasatiempo to promote completion of Pasatiempo recycled water use project.

2013/2014:	<ul style="list-style-type: none"> Developed draft Water Exchange Feasibility report and evaluated potential for short term water transfers. Worked with Pasatiempo golf course to develop potential for use of recycled water instead of potable water for golf course irrigation
Strategy:	Table 7-1 Section 3 Promote more effective use of groundwater storage through increased groundwater recharge and conjunctive use among agencies (LHMP).
2014/2015:	<ul style="list-style-type: none"> Implement Prop 84 stormwater grant to finance groundwater recharge projects in mid-county and Scotts Valley. Continue to implemented stormwater management policies to require infiltration of stormwater for new development and remodels. Work with water agencies, Resource Conservation District and others to develop and implement large scale and small scale recharge/infiltration projects
2013/2014:	<ul style="list-style-type: none"> Secured Prop 84 stormwater grant to finance groundwater recharge projects in mid-county and Scotts Valley. Implemented stormwater management policies to require infiltration of stormwater for new development and remodels.
Strategy:	Table 7-1 Section 3 Water supply plans should incorporate potential increases in water demand and reduced availability of supply that is projected as a result of climate change.
2014/2015:	Continue to work with water agencies to incorporate projected increases in irrigation demand and reduced recharge into long range plans.
2013/2014:	Commented on Desal and Pajaro Basin Management Plan EIRs that plans should incorporate expected declines in groundwater recharge and increase in irrigation demand
2012/2013	County staff contracted with USGS to complete an assessment of climate change impacts on groundwater recharge, and water supply
Strategy:	Table 7-1 Section 3 Promote drought planning by 130 small water systems under County jurisdiction (LHMP).
2014/2015:	<ul style="list-style-type: none"> Disseminate information on drought planning and improving water use efficiency to small public water systems. Consider amending water system ordinance to require metering and drought planning.
2013/2014:	<ul style="list-style-type: none"> Secured grant from state to enhance small water system oversight programs

Department: Agricultural Commissioner and University of California Cooperative Extension

Emissions Reduction

Strategy:	Reduce use of petroleum based mosquitoicides
Action:	Evaluate mosquito breeding sources, and use biological pesticides when possible
2014/2015:	Replace "Golden Bear" larvicide (99% mineral oil) with "CocoBear" larvicide (90% coconut oil; 10% mineral oil).
2013/2014:	Ongoing

Strategy:	T-5 Reduce County fleet emissions
Action:	T-5.2 Continue to upgrade the County fleet with strategic purchases of fuel efficient vehicles, including zero and low emission vehicles (ongoing).
2014/2015:	The newly purchased hybrid vehicle is being used for transportation to conferences, and for routine travel within the county. Make a priority of the replacement of at least one conventional vehicle of our fleet with a hybrid vehicle.
2013/2014:	Replace surveillance truck with a hybrid vehicle. Vehicle is on order.

Adaptation

Strategy:	Table 7-1 Section 4 Encourage efforts by agricultural organizations such as the Santa Cruz County Farm Bureau and the U.C. Agricultural Extension to assist the agricultural sector to identify and adjust to changes in pest management, cropping patterns, water management and other on farm practices that may be required as precipitation and temperature patterns change.
2014/2015:	The University of California Cooperative Extension develops and maintains tools to assist growers to adapt to climate change with ongoing outreach and education for growers and organizations. The continuing development of the "CropManage" online irrigation and nutrient management tool by UCCE Advisor Michael Cahn for a variety of locally grown crops is one such example.
2013/2014:	The University of California Cooperative Extension develops and maintains tools to assist growers to adapt to climate change with ongoing outreach and education for growers and organizations about available tools

Department: Fire Agencies

Adaptation

Strategy:	Table 7-1 Section 4 Establish and maintain cooperative fire protection and fire prevention agreements with other agencies (LHMP).
2014/2015:	<ul style="list-style-type: none"> • Area Fire Coordinator to maintain a cooperative working relationship with the Regional Fire Coordinator and Cal Fire to increase staffing during red flag warnings. • Area Fire Coordinator to maintain a cooperative relationship with the Office of Emergency Services, Public Works, Law Enforcement, the Red Cross and other emergency services partners to assure that effective communication and coordinated response. • Continue to work with the Fire Safe Councils to identify grant funding for fuel reduction projects.
2013/2014:	<ul style="list-style-type: none"> • Area Fire Coordinator to maintain a cooperative working relationship with the Regional Fire Coordinator and Cal Fire to increase staffing during red flag warnings. • Area Fire Coordinator to maintain a cooperative relationship with the Office of Emergency Services, Public Works, Law Enforcement, the Red Cross and other emergency services partners to assure that effective communication and coordinated response.

Strategy:	Table 7-1 Section 4 Maintain early notification/warning of residents by technology based applications (<i>LHMP</i>).
2014/2015:	<ul style="list-style-type: none"> • Monitor weather through the National Weather Service (NWS) to identify changes in weather in advance of events. • Monitor weather through the NWS to allow for time to prepare for storm response support efforts. • Use the Santa Cruz Regional automated notification system to warn residents of hazardous and/or changing weather conditions.
2013/2014:	<ul style="list-style-type: none"> • Monitor weather through the National Weather Service (NWS) to identify changes in weather in advance of events. • Monitor weather through the NWS to allow for time to prepare for storm response support efforts. <p><i>Reverse 911?</i></p>
Strategy:	Table 7-1 Section 4 Enhanced support for interoperability communications systems with local, state and federal emergency services both inside and around the County (<i>LHMP</i>).
2014/2015:	The narrow banding communications project has been completed for all county emergency services partners.
Strategy:	Table 7-1 Section 4 Increase visibility and reduce response times with proper road and address markings (<i>LHMP</i>).
2014/2015:	Ongoing.
Strategy:	Table 7-1 Section 4 Reduce fire risks in the urban/wildland interface (WUI) through improved building materials and appropriate code enforcement including defensible space programs (<i>LHMP and Building/Fire Codes</i>).
2014/2015:	The new 2013 fire and building code has been adopted by all County Fire agencies.
Strategy:	Table 7-1 Section 4 Implement additional fire prevention education programs, to include school and commercial business (<i>LHMP</i>)
2014/2015:	County Fire puts on education programs for schools and businesses in the unincorporated areas of the County.
Strategy:	Table 7-1 Section 4 Develop fuel reduction approaches in all areas. Work with State and Federal natural resources agencies to address sensitive habitats
2014/2015:	Working with fire safe council to identify grant funding for fuel reduction projects. Bonny Doon Fire Safe Council has completed a major fuel reduction project in their response area.

Department: Office of Emergency Services

Adaptation

Strategy:	Table 7-1 Section 4 Establish and maintain cooperative fire protection and fire prevention agreements with other agencies (LHMP).
2014/2015:	Attend Fire Chief Meetings and Fire Department Advisory Commission to maintain a cooperative agreement with all Fire Agencies to assure that staffing, training, exercise, planning and equipment needs are addressed.
2013/2014:	Maintaining a cooperative working relationship with the Area Fire Coordinator to address staffing needs during red flag warnings.
Strategy:	Update hazard mitigation plans addressing wildland fires.
2014/2015:	In progress. Update to be completed by September of 2015.
2013/2014:	In progress. Update to be completed by September of 2015.
Strategy:	Table 7-1 Section 4 Maintain early notification/warning of residents by technology based applications (LHMP).
2014/2015:	<p>Large Storm Events:</p> <ul style="list-style-type: none"> • Monitor weather and participate in weather conference calls with Cal EMA, county emergency services partners and the National Weather Service (NWS). • Notify the public through our public information officers and social media before large storm events occur. Utilize early warning notification systems in cooperation with SCR911. • Update the Emergency Operation Plan by December of 2014 to include weather conference call plans and implementation of early warning notification systems. <p>Heat Events:</p> <ul style="list-style-type: none"> • Monitor weather and participate in weather conference calls with Cal EMA, county emergency services partners and NWS. Identify cooling centers. <p>Ongoing during the summer months. Update EOP by December 2014 to reflect the opening of cooling centers.</p>
2013/2014:	<p>Large Storm Events:</p> <ul style="list-style-type: none"> • Monitor weather and participate in weather conference calls with Cal EMA, county emergency services partners and the National Weather Service (NWS). • Notify the public through our public information officers and social media before large storm events occur. Utilize early warning notification systems in cooperation with SCR911. • Update the Emergency Operation Plan by December of 2014 to include weather conference call plans and implementation of early warning notification systems. <p>Heat Events:</p> <ul style="list-style-type: none"> • Monitor weather and participate in weather conference calls with Cal EMA, county emergency services partners and NWS. Identify cooling centers. • Ongoing during the summer months. Update EOP by December 2014 to reflect the opening of cooling centers.

Department: Human Services Department	
Emissions Reduction	
Strategy:	E-7 Participate in collective action and cooperative agreements among local governments, educational institutions, non-governmental organizations, and private businesses as a cost-effective way to facilitate mitigation and adaptation
Action:	E-7.3 Continue to support the efforts of the Workforce Investment Board to promote green jobs and training for green jobs (ongoing).
2014/2015:	The WIB plans on continuing to promote Green Jobs to its participants in an effort to foster job creation opportunities that enhance the local environment. The role of the WIB in this effort is provide training funds, labor market information, career counseling, and job placement assistance to local job seekers who wish to explore a career in a Green Job occupation. Source of funding to support our role is Department of Labor Workforce Investment Act Adult and Dislocated Worker funds. This funding is secure for the next fiscal year.
2013/2014:	The WIB plans on continuing to promote Green Jobs to its participants in an effort to foster job creation opportunities that enhance the local environment. The role of the WIB in this effort is provide training funds, labor market information, career counseling, and job placement assistance to local job seekers who wish to explore a career in a Green Job occupation. Source of funding to support our role is Department of Labor Workforce Investment Act Adult and Dislocated Worker funds. This funding is secure for the next fiscal year.

Department: Health Services Agency	
Emissions Reduction	
Strategy:	T-2 Increase bicycle ridership and walking through incentive programs and investment in bicycle and pedestrian infrastructure and safety programs
Action:	T-2.5 Continue to support the Community Traffic Safety Coalition (CTSC) in the Health Services Agency with funding from the RTC (ongoing).
2014/2015:	Continued staff support of CTSC through funding by RTC
2013/2014:	Continued staff support of CTSC through funding by RTC

Adaptation	
Strategy:	Table 7-1 Section 4 Consider developing or updating existing public health plans that address the health needs of chronically ill people and other vulnerable groups during extreme heat events, including designating emergency cooling centers.
2014/2015:	Health Services Agency will work with the Human Services Department and the EOC to designate appropriate cooling centers.
2013/2014:	Cooling centers have previously been designated during extreme heat events. Met with County OES to commence review and update.

Strategy:	Table 7-1 Section 4 Consider a system for contacting home-bound or disabled residents and moving them to air conditioned shelters as needed.
2014/2015:	Reverse 911 System can be used to contact residents during an extreme heat event.
2013/2014:	Met with County OES & Commission on Disabilities to create survey to determine medical needs