CLIMATE ACTION PLAN
Implementation Progress Report
November 2013

OVERVIEW

Since 2000, Chula Vista has been implementing a Climate Action Plan to address the threat of climate change to the local community. Over the past 5 years, this original plan has been revised to incorporate new climate mitigation (2008) and adaptation (2011) measures to strengthen the City's climate action efforts and to facilitate the numerous community co-benefits such as utility savings, better air quality, reduced traffic congestion, local economic development, and improved quality of life. Based on available funding, staff has been implementing the 18 climate-related actions and their 57 associated components. Overall, 70% of the components have been successfully completed and/or are being implemented on an ongoing basis, which represents a 7% increase since the last reporting period. Another 26% are still being actively pursued, while only two components remain on-hold.

IMPLEMENTATION PROGRESS

The following report outlines the implementation progress for the 7 climate mitigation measures and the 11 climate adaptation strategies. In addition to background information and next steps, staff has highlighted whether the implementation is:

Completed – All required implementation steps have been completed

Ongoing – All required initial steps have been completed, but component is still actively being implemented

In Progress – Implementation steps are still being developed and pursued based on the original implementation plan

On-Hold **–** Implementation has not proceeded due to a programmatic barrier (such as funding)

As directed by City Council, staff has been implementing the 18 climate-related actions and their 57 associated components based on available funding. Out of the 27 mitigation-related components, 78% have been successfully completed and/or are ongoing programs. In addition, 19% of the mitigation components are still being actively pursued. The H Street Corridor Study (under Mitigation Measure #6) continues to be the only "on-hold" strategy due to the dissolution of the City's Redevelopment Agency. Out of the 30 adaptation-related components, 63% and 33% have been successfully completed/ongoing or are still being actively pursued, respectively. Only one component under Adaptation Strategy #9 still remains "on-hold." Overall, the number of mitigation and adaptation components, which are completed/ongoing, has increased by 7% since the last reporting period.

CLIMATE MITIGATION MEASURES

The following (7) measures are designed to reduce greenhouse gas or "carbon" emissions from municipal operations and the broader Chula Vista community. The measures complement one another as well as state and federal climate mitigation initiatives.

MITIGATION MEASURE #1
CLEAN VEHICLE REPLACEMENT POLICY FOR CITY FLEET

Overview

Measure #1 directs the City to require that 100% of the replacement vehicles purchased for the municipal fleet be high efficiency (hybrid) or alternative fuel vehicles (AFVs). However, factors such as the appropriateness for the vehicle task, fueling infrastructure, petroleum displacement, and the overall cost and environmental benefit must be considered prior to purchasing each replacement vehicle.

	#	COMPONENTS	STATUS	PROGRESS
CLIMATE MITIGATION MEASURE #1: 100% City-Fleet Replacement with AFVs	1	Design and construction of a 12,000-gallon biodiesel tank at PWC	Completed	City's 128 diesel-fueled vehicles (or 23% of the total fleet) have been converted to biodiesel.
	2	Replace City's-fleet with AFVs or hybrids	Ongoing	Four new Parks Division maintenance trucks utilizing biodiesel were recently ordered and will replace conventional fuel vehicles.

Next Steps

City vehicles will be replaced with hybrids or AFVs on an ongoing basis, as appropriate funding becomes available. By the end of Fiscal Year 2014, it is estimated that six additional alternative fuel vehicles will be purchased.

MITIGATION MEASURE #2
CLEAN VEHICLE REPLACEMENT FOR CITY-CONTRACTED FLEETS

Overview

Measure #2 directs staff to work with fleets under City authority to influence their expanded use of alternative fuels and high efficiency/alternative fuel vehicles (AFV) including electric, biodiesel, ethanol, hybrid, hydrogen, and compressed natural gas (CNG) based on appropriateness for vehicle task, fueling infrastructure, petroleum displacement, overall cost, and environmental benefit.

CLIMATE MITIGATION MEASURE #2: 100% City-Contracted Clean Fleets	#	COMPONENTS	STATUS	PROGRESS
	1	Convert Chula Vista Transit to alternative fuels and/or high efficiency vehicles	Completed	100% of Chula Vista Transit fleet have been converted to AFV.
	2	Convert Solid Waste Hauler to alternative fuels and/or high efficiency vehicles	Completed	100% of Allied Waste fleet have been converted to AFV.
	3	Convert Street Sweeper to alternative fuels and/or high efficiency vehicles	In Progress	Staff will incorporate AFV requirements in the bid solicitation process when the current Street Sweeping contract expires in June 2016.
	4	Convert City-contracted Tow Trucks to alternative fuels and/or high efficiency vehicles	In Progress	A new RFP for Tow Truck service, which includes hybrid/AFV requirements, has been finalized and is scheduled to be released in the near future.
	5	Open publicly-available CNG dispenser at PWC	Completed	The new public CNG fuel station has dispensed over 115,000 gallons (equivalent) since October 2011.

Next Steps

The City continues to work with contractors and community partners to promote local alternative fuel use and infrastructure, as outlined in the Chula Vista Clean Transportation Energy Roadmap. As such, staff is currently developing a Chula Vista-specific alternative fuel infrastructure map to distribute to community members and local car dealerships, who sell alternative fuel vehicles.

MITIGATION MEASURE #3
BUSINESS ENERGY EVALUATIONS

Overview

The measure, as revised by City Council, states that businesses with storefronts or offices need to participate in a no-cost energy and water evaluation of their premises when a new business license is issued or once every 3-5 years for a renewed business license. The measure helps businesses identify efficiency opportunities at their facilities, access rebates and financing for efficiency improvements, and lower their monthly utility costs. Businesses are not required to implement any of the identified energy or water efficiency opportunities and are not required to complete evaluations for facility areas beyond their operational control (ex. whole-building systems operated and maintained by a Property Manager/Landlord).

CLIMATE MITIGATION MEASURE #3: Business Energy Evaluations	#	COMPONENTS	STATUS	PROGRESS
	1	Develop ordinance integrating energy & water evaluations into business licensing process	Completed	CVMC Chapter 20 was revised to include the evaluations, known as the "Free Resource & Energy Business Evaluations" (FREBE) program.
	2	Complete onsite energy & water evaluations for businesses annually	Ongoing	To date, 687 on-site evaluations have been completed in 2013 to identify utility cost saving opportunities.
	3	Link businesses, who are interested in pursuing efficiency improvements, to available rebates, incentives, & financing	Ongoing	The City's CLEAN Business Program is being revamped to better recognize and assist participants interested in efficiency improvements.
	4	Report to City Council on collected fines from non-compliant businesses	Ongoing	In 2013, no businesses were out of compliance with the energy evaluation ordinance.

Next Steps

As part of the South Bay Energy Action Collaborative (SoBEAC), Chula Vista is working with neighboring jurisdictions, SANDAG, and SDG&E to launch a new business engagement effort in 2014 to facilitate no and low-cost energy efficiency improvements. In addition, a Chula Vista-specific PACE program is expected to be available by April 2014 to help commercial property-owners finance energy efficiency, renewable energy, and water conservation upgrades.

MITIGATION MEASURE #4
GREEN BUILDING STANDARD

Overview

Measure #4 directed staff to adopt regulations mandating new and renovated residential and non-residential projects to incorporate early the requirements of the Housing and Community Development's California Green Building Standards Code (CalGreen) and to be more energy efficient than the 2008 Building Energy Efficiency Standards (Title 24) by a specific percentage. In addition, the measure directed staff to implement a green building awareness program and update/establish design and regulatory provisions that incorporate sustainable practices at a community-scale.

CLIMATE MITIGATION MEASURE #4: Green Building Standard	#	COMPONENTS	STATUS	PROGRESS
	1	Adopt a citywide Green Building Standard	Completed	In fall 2009, the City adopted the 2010 CA Green Building Standards Code early with local amendments. In fall 2011, a voluntary Green Building Plus program offering expedited permitting was launched.
	2	Adopt a citywide Enhanced Energy Efficiency Standard	Completed	In fall 2009, the City adopted an Enhanced Energy Efficiency Code. This "reach" code will expire in July 2014, when the new statewide Energy Code becomes effective.
	3	Launch a Green Building Awareness program for builders, permit applicants, & the general public	Ongoing	In the last 6 months, two workshops were organized for developers and City staff to better understand opportunities to incorporate LEED-ND concepts into new projects.
	4	Develop design guidelines for sustainable development	Completed	In 2011, the City incorporated sustainability criteria into its updated Air Quality Improvement Plan Guidelines and Design Manual for large and small-scale development, respectively.

Next Steps

City staff continues to investigate options for revising Chula Vista's Enhanced Energy Efficiency standard in July 2014, when the new statewide Title-24 code is updated. The City has determined that the cost-effectiveness analysis software (which is required for proposing increased standards) has only recently become available and is still pending California Energy Commission approval. Therefore, staff expects to bring forward recommendations to City Council on a new Enhanced Energy Efficiency standard in the next 6 months.

MITIGATION MEASURE #5
SOLAR & ENERGY EFFICIENCY CONVERSION PROGRAM

Overview

The "Solar & Energy Efficiency Conversion" program was recommended to help facilitate energy efficiency and renewable energy retrofits in the community and at municipal facilities. The community component, called the *Home Upgrade, Carbon Downgrade* program, is intended to help the average resident and small business overcome common institutional barriers, upfront capital costs, complicated application processes, and time constraints. The program also strives to promote local job creation and economic development by linking community participants with local contractors and vendors. Finally, Measure #5 included the implementation of a pre-wiring and pre-plumbing requirement for solar photovoltaic (PV) and solar hot water systems, respectively, in all new residential units.

CLIMATE MITIGATION MEASURE #5: Solar & Energy Efficiency Conversions	#	COMPONENTS	STATUS	PROGRESS
	1	Implement a Solar & Energy Efficiency Conversion program for the community	Ongoing	In August, City Council approved a contract with Ygrene Energy Fund to develop a Property-Assessed Clean Energy (PACE) financing district for Chula Vista residents and businesses.
	2	Upgrade municipal facilities with energy efficiency & solar energy technologies	Ongoing	The City has completed installing almost 4,000 LED street lights along arterial roadways, which will generate over 1.7 million kWh in annual energy savings.
	3	Link conversion program to local economic development	Ongoing	A public workshop was held in September to identify opportunities to leverage and link the future PACE financing program to local retailers and contractors.
	4	Adopt pre-wiring and pre-plumbing standards for solar pv & solar hot water, respectively	Completed	In 2009, the City adopted the "solar ready" ordinances. To date, over 1,500 new residential units have complied with the new code.

Next Steps

The City Council will be holding a public hearing in December in order to create a new "Clean Energy Community Facilities District," which would be the legal mechanism for a local PACE program and would provide financing to residential and commercial property-owners, who are interested in energy efficiency, renewable energy, and water conservation improvements.

MITIGATION MEASURE #6
SMART GROWTH AROUND TROLLEY STATIONS

Overview

Measure #6 is intended to accomplish the remaining planning groundwork necessary to support realization of the "Smart Growth" development densities and intensities envisioned in both the General Plan and the Urban Core Specific Plan (UCSP). Specifically, the measure's four components are focused on the areas surrounding the E Street, H Street, and Palomar Street trolley stations.

CLIMATE MITIGATION MEASURE #6: Smart Growth Around Trolley Stations	#	COMPONENTS	STATUS	PROGRESS
	1	Implementation of UCSP around E Street Trolley Station	In Progress	Staff is continuing to work with property owners and other interested parties towards project options for E Street parcels, and will apprise the City Council when viable prospects are identified.
	2	Initiate a H Street Corridor Study to better define redevelopment opportunities around the Trolley Station	On-Hold	Due to the dissolution of redevelopment agencies statewide, the H Street Corridor Study is on-hold indefinitely until alternative funding sources are identified.
	3	Develop a specific plan for the Palomar Gateway area, including the Palomar Trolley Station	Completed	The Palomar Gateway specific plan was approved by City Council in August 2013 and emphasizes multi-modal, mixed-use development patterns.
	4	Pursue trolley grade separation along the I-5 corridor	In Progress	The City and SANDAG have hired a consultant to complete environmental documents analyzing grade separation options at the Palomar Trolley Station, which should be completed in the next 18 months.

Next Steps

The City will continue to pursue "Smart Growth" development surrounding Chula Vista's three Trolley Stations. SANDAG's 2050 Regional Transportation Plan shows various grade separation projects for the Blue Line corridor, which includes E Street, H Street, & Palomar Street. With support through an EPA Smart Growth Technical Assistance grant and the SDG&E Local Government Partnership, the City expects to complete the development of the new "Climate Neighbor" tool by June 2014, which helps local developers implement sustainably designed and constructed projects using the LEED-ND framework.

MITIGATION MEASURE #7
TURF LAWN CONVERSION PROGRAM

Overview

Because water movement and treatment requires a large amount of energy (leading to GHG emissions), Measure #7 helps residents and businesses replace turf lawn areas with "WaterSmart" landscaping. Specifically, the program's components include (1) continuation and expansion of the NatureScape program to promote water conserving and nature-friendly landscaping, (2) coupling of residential and business turf lawn replacement with the solar and energy efficiency conversion program (Measure #5), (3) converting select municipal facilities to low water use plantings and irrigation, and (4) updating various municipal landscape regulations and guidelines to comply with new state requirements and further promote outdoor water use efficiency.

CLIMATE MITIGATION MEASURE #7: Turf Lawn Conversion	#	COMPONENTS	STATUS	PROGRESS
	1	Expand the NatureScape outreach program	Ongoing	Through the program, over 520 properties in the community have incorporated sustainable landscape practices and been certified "Backyard Wildlife Habitats."
	2	Include turf lawn replacement in *Home Upgrade, Carbon Downgrade* program (Measure #5)	In Progress	In August, City Council approved a contract with Ygrene Energy Fund to develop a Property-Assessed Clean Energy (PACE) financing district, which would also support water conservation efforts.
	3	Convert municipal facilities to low water use plantings & irrigation	Ongoing	The City is pursuing water-saving irrigation upgrades, such as rotating nozzles and "smart" controllers, at 42 locations.
	4	Update landscaping ordinances to emphasize water use efficiency	Completed	In 2010, a revised Landscape Water Conservation Ordinance was approved by City Council that creates a water budget for new or renovated landscapes and promotes water-efficient design.

Next Steps

City staff continues to pursue funding sources to support turf conversions. For municipal facilities, staff continues to develop a resource reinvestment fund, in which a portion of utility savings from energy and water retrofit projects can be reinvested in similar projects. In the community, a PACE program to help finance water conservation upgrades at homes and businesses will be formally considered by City Council in December.

CLIMATE ADAPTATION STRATEGIES

The following (11) strategies are designed to reduce Chula Vista's future risks and costs from expected climate change impacts such as sea level rise, more frequent wildfires and extreme heat days, and increased stress on energy and water supplies. The measures complement one another as well as state and federal climate adaptation initiatives.

ADAPTATION STRATEGY #1
COOL PAVING

Overview

To address climate change impacts related to the urban heat island effect (hotter ambient air temperatures), Strategy #1 is intended to incorporate reflective (or "cool paving") into all municipal projects (parking lots and streets) and new private parking lot projects over a specific size. Cool pavements refer to a range of established and emerging paving materials, which store less heat and have lower surface temperatures compared with conventional products. Specifically, the strategy's components include performing a comprehensive study to evaluate and test multiple reflective pavement technologies and developing options (based on the study's results) for incorporating cool pavement technologies into municipal standards.

CLIMATE ADAPTATION Strategy #1: Cool Paving	#	COMPONENTS	STATUS	PROGRESS
	1	Conduct a "cool paving" study to evaluate options	Completed	A final Cool Pavement Report has been completed by external consultants and presented to City Council.
	2	Develop formal standards for incorporating "cool paving" into municipal and development projects	In Progress	Dependent on the outcome of component #1, staff will present recommendations to City Council for consideration.

Next Steps

Chula Vista will continue to pursue possible funding sources for a cool paving demonstration site. As such, the City is awaiting a response from the State Water Resources Control Board on whether it has been invited to submit a full grant application for its proposed "Green Alleys" project, which would repave a number of Chula Vista alleys with permeable and reflective paving materials. Staff also plans to return to City Council in 2015 with a formal cool paving policy for consideration as recommended in the recently-completed Cool Pavement Report.

ADAPTATION STRATEGY #2
SHADE TREES

Overview

To address climate change impacts related to the urban heat island effect and energy demand, Strategy #2 is intended to incorporate shade trees into all municipal improvement projects and all private development parking lot projects. Shade trees contributing to a robust urban forest act as a natural cooling mechanism for urban areas. In addition, canopy-forming trees help reduce storm water runoff, provide habitat for wildlife, and increase property values. Specifically, the strategy's components include (1) developing a shade tree policy for future City Council consideration, (2) amending the Municipal Landscape Manual to be consistent with the new policy, and (3) ensuring that the recently-updated Design Manual is consistent with the new policy.

	#	COMPONENTS	STATUS	PROGRESS
CLIMATE ADAPTATION Strategy #2: Shade Trees	1	Develop a formal shade tree policy	Completed	A new City Council policy promoting the use of shade trees along streets and within municipal and private parking lots was approved in May 2012.
	2	Amend the Municipal Landscape Manual to be consistent with the new shade tree policy	Completed	Staff has determined that updating the Municipal Landscape Manual is not necessary, because the new Shade Tree Policy and Design Manual changes are sufficient to effectively integrate shade trees into new projects.
	3	Ensure that the Design Manual is consistent with the new shade tree policy	Completed	As part of the new Council-approved Design Manual, new development projects must incorporate shade trees and provide at least 50% shade coverage for paved areas.

Next Steps

City staff continues to implement the City Council-adopted Shade Tree Policy, as well as the related provisions of the Design Manual, to ensure that all new development projects meet the necessary shade tree coverage standards.

ADAPTATION STRATEGY #3
COOL ROOFS

Overview

Strategy #3 is intended to address climate change impacts related to the urban heat island effect and energy demand by promoting "cool roofs." Cool roofs, which are made of highly reflective and emissive material, can remain approximately 50 to 60°F cooler compared to traditional materials, thus helping to lower ambient temperatures inside and outside of buildings. This creates a more comfortable and healthy environment for building occupants and reduces energy use for air-conditioning. To accomplish Strategy #3, City staff will further evaluate cool roofing options and propose amendments to the municipal building codes for City Council consideration.

	#	COMPONENTS	STATUS	PROGRESS
CLIMATE ADAPTATION Strategy #3: Cool Roofs	1	Conduct a "cool roof" study to evaluate options	Completed	With the assistance of SDG&E, staff has completed a cost-benefit analysis of cool roof options, which was used to inform proposed building code revisions (component #2).
	2	Develop standards for incorporating "cool roofs" into building codes	Completed	Since City Council adopted the cool roof ordinance in March 2012, all new residential buildings in Climate Zone 10 have had to meet the new standard.

Next Steps

The City will continue to implement its new cool roof requirements under the City's broader green building standards. Local amendments to building codes expire when new California building codes take effect. As such, staff will evaluate the 2013 California Green Building Standards Code and propose local amendments for City Council consideration, when the necessary cost-effectiveness analysis software is available from the California Energy Commission.

ADAPTATION STRATEGY #4
LOCAL WATER SUPPLY & REUSE

Overview

Expected climate change impacts could limit imported water availability, increase utility costs for residents and businesses, and lead to higher demand for local water sources. As such, Strategy #4 is intended to educate the community about the benefits and appropriate uses of local water supplies and further integrate recycled water/onsite water reuse systems into new development. Specifically, components include (1) evaluating municipal building code options to incorporate single-source graywater "stub-outs" in new residential buildings and indoor recycled water in new commercial buildings, (2) developing an educational guide about proper graywater use, (3) creating an incentive (using external funding sources) to promote onsite water reuse, and (4) updating the City's water-related plans to reference and promote recycled water and onsite water reuse systems.

	#	COMPONENTS	STATUS	PROGRESS
CLIMATE ADAPTATION Strategy #4: Local Water Supply & Reuse	1	Develop standards for incorporating graywater stub-outs (residential) and indoor recycled water use (commercial)	Completed	New graywater codes were adopted by City Council at their May 7, 2013 meeting.
	2	Develop a graywater educational guide to help ensure proper use	Completed	The City's WaterSmart Landscaping Guide & Checklist were updated to incorporate water reuse information such as rainwater harvesting and simple graywater systems.
	3	Create an onsite water reuse incentive program	In Progress	Graywater and rainwater harvesting systems have been included as eligible improvements under the proposed PACE financing program.
	4	Update water-related municipal guidelines & plans to promote graywater	In Progress	Based on the outcome of component #1, municipal guidelines will be updated to be consistent with new graywater and other water reuse policies.

Next Steps

City staff will work with the Otay Water District to further investigate the feasibility and to identify any health concerns regarding indoor use of recycled water. Based on the results, City staff will prepare recommendations for City Council's consideration.

ADAPTATION STRATEGY #5
STORM WATER POLLUTION PREVENTION & REUSE

Overview

Climate change will likely alter regional precipitation patterns, thus altering water runoff and sediment movement flows through local watersheds. Because of urbanization and its associated activities, pollutants are discharged with these flows into the City's storm drainage systems, creeks, rivers, San Diego Bay, and the ocean and reduce the beneficial uses of these water bodies for the Chula Vista community. Strategy #5 is intended to revise the City's storm water regulations and applicable municipal codes to efficiently manage higher concentrations of pollutants in urban runoff by minimizing water waste, using natural landscapes to help drain or reuse runoff, and by ensuring that irrigations systems are properly installed and maintained.

CLIMATE ADAPTATION Strategy #5: Storm Water Pollution Prevention & Reuse	#	COMPONENTS	STATUS	PROGRESS
	1	Develop revisions to the municipal code to prohibit excessive landscape over-irrigation resulting in urban runoff	Completed	Code revisions were adopted by City Council at their November 20, 2012 meeting.
	2	Encourage the beneficial reuse of pipe flushing water at construction sites	Completed	A brochure entitled "Guidelines for Water Conservation on Construction Sites" has been developed and is being distributed to developers and contractors working in Chula Vista.
	3	Develop incentives promoting Low Impact Development (LID) design concepts	In Progress	Non-monetary incentives to incorporate LID features into development projects are being considered through a collaboration between Land Development and Storm Water Management staff.
	4	Conduct a feasibility study for the beneficial reuse of dry weather flow sources	In Progress	A design has been created for the capture, treatment, and reuse of dry weather flow at Hilltop Park.

Next Steps

For component #4, staff will further develop the Hilltop Park Storm Water Reuse Project by investigating potential water right issues with the San Diego Regional Water Quality Control Board and by seeking funding to implement the project, if determined to be feasible.

ADAPTATION STRATEGIES #6 & #7
EDUCATION & WILDFIRES
EXTREME HEAT PLANS

Overview

The frequency and intensity of wildfires and extreme heat events is expected to increase due to local climate change impacts. These events could lead to greater public safety (loss of life and property) and health concerns (poor air quality and infectious disease transmittal). The strategies are designed to educate the general public and the business community about the impacts of climate change using existing City and community partner outreach mechanisms with a special emphasis on making homes more resilient to wildfires, incorporating poor air quality day notifications, and educating businesses about employee heat illness risks. In addition, extreme heat events will be added as a significant emergency to the City's public safety plans with a special emphasis on serving vulnerable populations and supporting a robust network of energy-secured "Cooling Centers."

CLIMATE ADAPTATION Strategy #6: Education & Wildfires Strategy #7: Extreme Heat Plans	#	COMPONENTS	STATUS	PROGRESS
	1	Expand community wildfire education	Ongoing	The City launched its new "Ready, Set, GO!" campaign, which is a comprehensive outreach program designed to promote wildifre prevention & preparedness.
	2	Revise emergency plans to include extreme heat events	In Progress	The City has begun working with the County's Office of Emergency Services on updating the Multi-Jurisdictional Hazard Mitigation Plan, as appropriate.
	3	Establish a procedure for notifying the community about poor air quality & extreme heat days	Completed	City staff now receives and forwards air quality notifications from the San Diego County Air Pollution Control District through the City's Nixle community messaging system.

Next Steps

City staff will continue to implement its community education and notification programs related to wildfires and extreme heat days. The City's Multi-Jurisdictional Hazard Mitigation Plan will be revised in 2015, as part of its regularly-scheduled update, to include extreme weather events.

ADAPTATION STRATEGY #8
OPEN SPACE MANAGEMENT

Overview

Chula Vista's open space areas include landscaped areas within developments, parks and recreation areas, and open space that has been set aside as a preserve for sensitive biological resources. In order to assess and reduce impacts associated with climate change on parks and open space and their associated ecosystems, Strategy #8 is intended to seek opportunities for the City to partner with the Resource Agencies, non-profit organizations, and/or adjacent public land managers to monitor and manage/restore ecosystems to ensure long-term habitat connectivity, species resilience, and community recreational opportunities.

	#	COMPONENTS	STATUS	PROGRESS
CLIMATE ADAPTATION Strategy #8: Open Space Management	1	Integrate climate change-related biological monitoring into Otay Ranch Preserve's Management Plan & Annual Work Plans	In Progress	Staff is working with the San Diego Foundation to review potential monitoring protocols to integrate into preserve management activities.
	2	Update the Otay Valley Regional Park (OVRP) Concept Plan to incorporate climate-resilient design & educational guidelines	In Progress	Chula Vista will be proposing to the OVRP Executive Mgmt Team to include climate-resilient updates to the OVRP Concept Plan as part of the FY14 Joint Staff Work Plan.
	3	Convert landscaped areas in open space districts to water-saving plants, mulch, & irrigation systems	Ongoing	The Open Space Division has installed 95 web-based, "smart" irrigation controllers with plans to install another 80 smart controllers by the end of fiscal year.

Next Steps

As funding is available, the City and its OVRP partners will implement the Concept Plan amendments, which would address climate change impacts and vulnerabilities.

ADAPTATION STRATEGY #9
WETLANDS PRESERVATION

Overview

Expected local climate change impacts include precipitation variability and sea level rise that will stress riparian wetlands and estuarine wetlands, respectively. As a result, the locations where the temperature, moisture, and other environmental conditions are suitable for wetlands and their associated species will shift. In order to reduce these impacts, Strategy #9 is intended to ensure that, when preserving or restoring coastal and riparian wetland, the City take steps to incorporate adequate upland or transition habitats to accommodate shifts in wetlands coverage and help ensure public access due to sea level rise and other climate change impacts. Specifically, components include (1) evaluating the feasibility of monitoring local wetlands species ranges and abundances in response to climate change impacts, (2) incorporate wetlands "migration" in habitat management and restoration design criteria in the future Bayfront Natural Resources Management Plan (NRMP), and (3) revise the OVRP Habitat Restoration Plan and Non-native Plant Removal Guidelines to include strategies for climate change adaptation issues.

	#	COMPONENTS	STATUS	PROGRESS
CLIMATE ADAPTATION Strategy #9: Wetlands Preservation	1	Evaluate potential to monitor local wetlands' biological health to assess climate change impacts	In Progress	Staff is working with the San Diego Foundation to review potential monitoring protocols to integrate into wetlands management activities.
	2	Incorporate climate change & sea level rise concepts in Bayfront NRMP	In Progress	The draft NRMP was released in June 2013 and includes strategies to ensure that bayfront habitats and species are resilient to climate change impacts such as sea level rise.
	3	Amend OVRP Habitat Restoration & Non-Native Plant Removal Plans to promote climate resiliency	On-Hold	The City and its OVRP Partners will continue to seek funding necessary to proceed with the proposed OVRP plans' amendments.

Next Steps

In coordination with the Port of San Diego and the Bayfront Wildlife Advisory Group, staff expects to finalize the NRMP and its associated climate adaptation strategies by early 2014. The City will also, as funding permits, continue working with its OVRP partners to amend the Plans and Guidelines used for trail planning to incorporate climate adaption strategies.

ADAPTATION STRATEGY #10
SEA LEVEL RISE & LAND DEVELOPMENT CODES

Overview

Over the next 40 years, sea level rise rates are expected to increase with local sea levels 12 to 18 inches higher than their current levels. Higher sea levels can result in increased erosion, more frequent flooding and property damage, loss of wetland habitats, and fewer waterfront public access options. As such, Strategy #10 directs the City to amend its land development codes and CEQA guidelines to incorporate climate change-related sea level rise into future development and municipal infrastructure projects' design and review. Specifically, the components include (1) revising the grading ordinance to consider a project's vulnerability to future sea level rise and flooding events, (2) modifying the Subdivision Manual to ensure that storm water/drainage infrastructure can address future sea level rise and flooding impacts, and (3) ensuring that environmental review and CEQA procedures are consistent with these changes.

CLIMATE ADAPTATION Strategy #10: Sea Level Rise & Land Development Codes	#	COMPONENTS	STATUS	PROGRESS
	1	Revise the grading ordinance to address increased rates of sea level rise	Completed	An ordinance revising Municipal Code 15.04 was adopted by City Council to address coastal development and sea level rise concerns.
	2	Modify Subdivision Manual to ensure proper drainage with higher sea levels	Completed	In March 2012, City Council approved revisions to the Subdivision Manual, which require 16" of sea level rise to be used for evaluating projects within tidally influenced areas.
	3	Ensure CEQA review procedures are consistent with new sea level-related land development guidelines	Completed	The new sea level rise requirements (components #1 & #2) have been incorporated into the environmental document preparation process.

Next Steps

At this time, the Governor's Office of Planning and Research (OPR) has not provided additional guidance on sea level rise issues under CEQA. However, OPR expects to begin updating the statewide CEQA Guidelines for sea level rise impacts in late 2013. As such, City staff will continue to monitor the development of statewide CEQA Guidelines to ensure that Chula Vista is consistent with any new requirements.

ADAPTATION STRATEGY #11
GREEN ECONOMY

Overview

Climate change impacts create new issues that local communities and, in particular, businesses need to address and prepare for in order to reduce future risks and costs. These issues can include higher insurance premiums due to greater flooding or wildfire risks, more expensive utility costs due to higher energy and water demand, and lower productivity due to more employee sick days from frequent extreme heat and poor air quality days. As such, Strategy #11 is designed to provide assistance and non-monetary incentives to help businesses manage climate change risks and to attract businesses that provide "green" products or services into Chula Vista. Specifically, the components include (1) revising the municipal purchasing policy to more robustly promote the procurement of "green" products and services, especially from local Chula Vista businesses, (2) revising existing business outreach programs to include recommendations on how they can reduce future climate change risks, and (3) continuing the recruitment and retention of "green" businesses and manufacturers in Chula Vista.

CLIMATE ADAPTATION Strategy #11: Green Economy	#	COMPONENTS	STATUS	PROGRESS
	1	Revise "green" procurement policy & process	Completed	The City's new office supply contract includes specifications for environmentally-friendly products and procurement liaisons in each department have been trained, as appropriate.
	2	Modify business outreach programs to include information on reducing climate change risks	Completed	Both the CLEAN Business and FREBE checklists have been updated to include info on business-related climate adaptation strategies.
	3	Continue recruiting & retaining "green" businesses	Ongoing	The City's CLEAN Business Program is being revamped to better recognize and assist participants interested in efficiency improvements.

Next Steps

In 2014, the Economic Development Division will begin implementing its Council-approved business recruitment plan, which includes strategies to better attract and retain clean technology-oriented companies.