



TO: Butte County Board of Supervisors

FROM: Tim Snellings, Development Services Director

SUBJECT: June 14, 2011 Progress Report #91

This memo is the 91st in a series of updates provided to the Board of Supervisors at the beginning of each meeting to assist Board members in staying apprised of the progress on the Butte County General Plan 2030 process. I have the following developments to report:

1. Final Draft Zoning Ordinance Schedule –Planning Commission Meetings

The following table shows the schedule concerning the release of the Second Draft Zoning Ordinance and Map, and the final Planning Commission meeting schedule. The Planning Commission will make final recommendations to the Board of Supervisors on the Draft Zoning ordinance and Map. All meetings will be held at the Board Chambers, 25 County Center Drive, Oroville.

Meeting Series #8 – Draft Zoning Ordinance		
DRAFT ZONING ORD. TASK		Timing
1.	Publish 2 nd Draft Zoning Ordinance and Map	7/8/11
2.	30-Day Public Review Period Concludes on 2 nd Draft Z.O.	8/8/11
3.	Planning Commission Meetings -focused on 2 nd Draft Zoning Ordinance Map	8/18/11, 9:00 am – 4:00 pm 8/25/11, 11:00 am – 4:00 pm
4.	Planning Commission Meetings -focused on 2 nd Draft Zoning Ordinance Text	9/15/11, 9:00 am – 4:00 pm 9/22/11, 11:00 am – 4:00 pm

2. Memo Concerning Process for Addressing Corrections in General Plan 2030 and the Draft Zoning Map

Development Services staff provides the attached memo describing the process for addressing corrections to General Plan 2030 and the Draft Zoning Map. This memo will be posted online at www.buttegeneralplan.net to assist members of the public in understanding the corrections process.

3. Memo Concerning the Butte County General Plan 2030 Climate Change Preparedness Plan

During the May 10, 2011, the Board instructed Development Services staff to provide information concerning the Climate Change Preparedness Plan, which is one of the policies and mitigations under General Plan 2030. The attached memo has been prepared for the Board's reference and provides background and information relative to this policy and mitigation.

Butte County Department of Development Services

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TO: Honorable Chair and Board of Supervisors

FROM: Tim Snellings, Director, Development Services

SUBJECT: Process for Addressing Corrections in General Plan 2030
and the Draft Zoning Map

DATE: April 28, 2011

On April 26, 2011, during a workshop on the Draft Zoning Ordinance, the Board of Supervisors requested the preparation of a memo describing the criteria and process necessary to consider corrections related to the General Plan and the Draft Zoning Map. The following information is presented to address this request.

Corrections Related to the Adopted General Plan and General Plan Land Use Map

A “Post General Plan 2030 Adoption Strategy” was incorporated into the General Plan 2030 Action Plan per Board direction provided at the September 14, 2010, Special Meeting. This strategy provides constructive knowledge to the public concerning the correction of errors in the General Plan 2030 document and/or Land Use Map.

Recognizing that the adoption of General Plan 2030 legally sets land use policy throughout the unincorporated area of Butte County, a strategy is set forth below to address the need for corrections that may arise from time to time after General Plan 2030 adoption.

General Plan 2030 is intended to be a living, dynamic, and comprehensive document. Given all the parcels, as well as goals, policies, and actions, covered by General Plan 2030, it is possible that there are errors that may need to be corrected from time to time. In cases where an individual believes that inconsistencies, text corrections or mapping errors warrant adjustments to the General Plan 2030 Land Use map, or various elements of General Plan 2030, the individual should inform Planning Division staff, and the matter will be presented to the Board of Supervisors to determine whether Butte County should initiate an amendment to General Plan 2030.

If the Board directs, the County would be responsible for preparing and initiating a General Plan Amendment for consideration by the Planning Commission and Board of Supervisors, in accordance with Section 65358 of the Government Code. To help the County determine whether a General Plan Amendment should be County-initiated, an individual must present all the relevant facts and information to clearly demonstrate that a County-initiated correction is warranted.

The Planning Division shall be responsible for scheduling any General Plan Amendments for adoption. The County will take all measures necessary to ensure that no mandatory element of the General Plan shall be amended more frequently than four times during the calendar year in accordance with Government Code Section 65358 (b).

Corrections Related to the Draft Zoning Map

Corrections to the Draft Zoning Map may be considered during the review process, since the Draft Zoning Map has not yet been adopted. In some cases, a correction to the Draft Zoning Map may require an amendment to the General Plan Land Use Map as well. The Planning Commission will review all proposed corrections and make its recommendation to the Board of Supervisors.

Criteria Used by Staff Regarding the Correction of Errors on the General Plan 2030 Land Use Map and Draft Zoning Map

Staff must rely on a set of criteria to determine whether a correction to the General Plan Land Use Map and/or Draft Zoning Map is warranted. This criteria is outlined below:

1. The correction must be consistent with General Plan 2030.
2. The correction must be consistent with the Preferred Land Use Alternative selected by the Board of Supervisors and included in General Plan 2030. **Please Note: Disagreements by property owners over the Board's previous decisions made during the General Plan adoption process are not considered to be errors or mistakes needing correction.**
3. The correction must be consistent with the Final Environmental Impact Report (FEIR) for the General Plan.
4. The purpose and need for the correction must be supported by verifiable information.

An individual request that is not considered an error in need of correcting may be considered pursuant to Section 65358 of the Government Code (Amendments to General Plan). Such requests must comply with all rules contained within the Zoning Ordinance, the making of all applications necessary under County rules to consider a General Plan Amendment and/or Rezone, payment of all associated fees and compliance with the California Environmental Quality Act (CEQA).



TO: Honorable Chair and Board of Supervisors

FROM: Tim Snellings, Director Development Services

SUBJECT: Board Questions Concerning Butte County General Plan 2030
–Climate Change Preparedness Plan

DATE: June 14, 2011

During the May 10, 2011, Board meeting, Supervisor Wahl requested that staff provide further information concerning the Climate Action Plan (Conservation and Open Space Action COS-A1.1), specifically concerning sub-section j. regarding the development of a Climate Change Preparedness Plan.

COS-A1.1

Within one year of adoption of General Plan 2030, coordinate with regional agencies to develop a Climate Action Plan, regulations by other agencies and business sectors of the economy, would achieve reduction consistent with State guidelines using methodology deemed appropriate at the time of quantification. Include the following as components in the Climate Action Plan:

- a. Establish a detailed inventory of current (2006) GHG emissions in Butte County, including, but not limited to, residential, commercial, industrial and agricultural emissions.
- b. Forecast GHG emissions for areas within the jurisdictional control of the County for “business as usual” conditions in 2020.
- c. Identify methods to reduce GHG emissions to a level that would achieve reduction consistent with State guidelines at the time of quantification.
- d. Quantify the 2030 reductions in GHG emissions from the identified methods.
- e. Require monitoring and reporting of GHG emissions.
- f. Establish a schedule of actions for implementation through 2020.
- g. Identify funding sources for implementation through 2020.
- h. Identify a process to set a reduction goal for 2030 by 2020.
- i. Update the Climate Action Plan by 2020 to include reduction measures to achieve the adopted 2030 reduction goal.
- j. Develop a Climate Change Preparedness Plan that will prepare for the impacts of climate change on the county’s economic and natural ecosystems and promote a climate resilient community.

This particular Action is required as a means to mitigate environmental impacts pursuant to the General Plan 2030 Program EIR, certified by the Board of Supervisors on October 26, 2010.

Proposed General Plan 2030 policies and actions provide a comprehensive framework for reducing GHG emissions in the county. In particular, the Climate Action Plan requirements under

Action COS-A1.1 would assist California in meeting the reduction goals for the year 2020 embodied in AB 32, and would ensure that GHG emissions in Butte County would not contribute considerably to cumulative GHG emissions and associated climate change effects.

As discussed in the General Plan 2030 Program EIR, development allowed by General Plan 2030 could subject property and persons to additional risk of physical harm from climate change related to agriculture, public health and safety, wildfire risk, hydrology and flooding, water supplies, and natural ecosystems. However, Action COS-A1.1 directs the County to prepare a Climate Action Plan within one year of adoption of General Plan 2030, and requires that the Climate Action Plan include a Climate Change Preparedness Plan that will prepare for the impacts of climate change on the county's economic and natural ecosystems and promote a climate-resilient community.

Development Services staff asked General Plan 2030 EIR consultant Richard Walter, Principal with ICF International, to elaborate on Climate Change Preparedness Plans. Mr. Walter indicated that if it can be shown that fire hazards or flooding will increase in a given area for example, then the CEQA document must analyze the potential impacts on the project (e.g. will it be flooded or at higher risk of fire with future expected climate change or not).

For these reasons, climate change was included as a potential impact in the General Plan 2030 EIR and a Preparedness Plan was recommended as a way to address the impact. According to Mr. Walter, the goal of a preparedness plan is not to avoid all potential impacts – it is to take prudent action to account for expected impacts over time. Mr. Walter provides an example concerning floodway planning. If current data exists or future data is developed showing that today's 200-year floodplain will become the 100-year floodplain in 2040, and a planned community will be located in that future 100-year floodplain, then a preparedness plan could address how to prepare for that flood impact.

To put it another way, the Preparedness Plan would include a list of strategies to reduce Butte County's vulnerability to expected local climate change impacts. By minimizing the risks associated with climate impacts now, future costs and public health concerns can be avoided and/or minimized.

Two references are attached that serve as examples for the contents of Preparedness Plans. The first is titled "Preparing for Climate Change, A Guidebook for Local, Regional, and State Governments", written by the University of Washington, in association Local Governments for Sustainability (ICLEI). This provides an example of preparedness actions needed to fulfill each goal. The second reference "Climate Adaptation Strategies" comes from the City of Chula Vista and provides their recommendations for climate preparedness strategies.

Further work on the Climate Action Plan and the Climate Preparedness Plan will result in more refinement of the strategies needed to address the impact of climate change on Butte County and would be subject to further Board review and approval.



CLIMATE ADAPTATION STRATEGIES

Implementation Plans

May 2011

SUMMARY

The City of Chula Vista has long understood the threats of climate change to its community and has established itself as a leader amongst municipalities in planning to reduce or “mitigate” citywide greenhouse gas emissions. However, despite efforts both locally and globally to mitigate emissions, some level of climate change will still occur and have noticeable impacts on the San Diego region. In order to manage these likely climate change impacts and to reduce future risks and costs, the City of Chula Vista’s Climate Change Working Group - comprised of residents, businesses, and community representatives - recommended 11 strategies to “adapt” the community to these impacts within energy and water supply, public health, wildfires, ecosystem management, coastal infrastructure, and the local economy sectors.

List of Climate Adaptation Strategies

#	Strategy Focus	#	Strategy Focus
1	Cool Paving	7	Extreme Heat Plans
2	Shade Trees	8	Open Space Management
3	Cool Roofs	9	Wetlands Preservation
4	Local Water Supply & Reuse	10	Sea Level Rise & Land Development Codes
5	Storm Water Pollution Prevention & Reuse	11	Green Economy
6	Education & Wildfires		-----

At City Council’s direction, staff has developed more detailed implementation plans for these *Climate Adaptation Strategies*. For each strategy, the plans outline specific implementation components, critical steps, costs, and timelines. In order to limit the necessary staffing and funding required to implement the strategies, the plans were also designed to build upon existing municipal efforts rather than create new, stand-alone policies or programs. Initial implementation of all 11 strategies will be phased in over the next 3 years and will cost approximately \$554,000. Of these initial costs, existing funding sources will allow at least 8 of 11 strategies to be fully or partially implemented. Ongoing implementation of the 11 strategies will cost approximately \$337,000 annually and will be partially covered through existing funding sources as well. If the *Climate Adaptation Strategies’* plans are approved by City Council, staff will partially implement the measures based on available funding and pursue additional external funding sources to support full, long-term implementation. Therefore, approval of the *Climate Adaptation Strategies* will not create a new impact to the General Fund.

CLIMATE CHANGE WORKING GROUP

Recommendations on Climate Adaptation Strategies

SUMMARY

Below are the Climate Change Working Group's final recommendations on climate adaptation strategies that the City of Chula Vista should implement to reduce the community's future risk from climate change-related impacts (numbering does not reflect priorities):

1. Develop an ordinance **incorporating reflective paving (or "Cool Paving") into all municipal paving projects (parking lots & streets) and new private parking lot projects** (over a specific size).
2. Develop an ordinance **incorporating shade trees into all municipal projects (parking lots & streets) and new private parking lot projects** (over a specific size). The new ordinance should include a deviation for solar carports (or other shade structures), be complementary to existing free tree programs, and potentially be incorporated into the existing Landscape Water Conservation regulations.
3. Require and provide incentives (such as contributing to City's enhanced energy code requirements) for new residential development with air-conditioning systems to install **ENERGY STAR cool roof technology**.
4. Educate residents and businesses about the benefits and appropriate uses of **local water supplies (including recycled water, groundwater desalination, and onsite water reuse systems)** and further integrate recycled water (if available) and onsite water reuse systems into new development and redevelopment plans.
5. Revise the City's Stormwater regulations and applicable landscape/building codes to efficiently **manage higher concentrations of pollutants in runoff** by minimizing water waste, using natural landscapes which help drain or reuse runoff, and by ensuring that irrigation systems are properly installed/maintained.
6. Actively **educate the general public and the business community** (through community newsletters, websites, public events, and signage) about the impacts of climate change and what the community is doing to address impacts. In close coordination with the Fire Department, special emphasis should be given to using existing outreach mechanisms (Southwestern College's Services Learning program, Americorps/CERT training, and City environmental outreach programs) to expand public education on making homes more resilient to wildfires.
7. Include **"extreme heat" events as a significant emergency** in Chula Vista's Emergency Response Plan (short term) and its portion of the County's Multi-Jurisdiction Hazard Mitigation Plan (long term), and redefine "extreme heat" events with a special emphasis on serving vulnerable populations, supporting a robust network of "Cooling Centers", incorporating poor air quality day notifications, educating businesses about employee heat illness risks, and integrating renewable energy sources into emergency/cooling centers.
8. In order to assess and reduce impacts associated with climate change on parks and open space and their associated ecosystems, seek opportunities to partner with the Resource Agencies, non-profit organizations, and/or adjacent public land managers **to monitor and manage/restore ecosystems** (as funding becomes available) to ensure long-term habitat connectivity, species resilience, and community recreational opportunities

9. When preserving or restoring coastal and riparian wetlands, **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 as informed by biological studies and Resource Agency consultation.
10. Use the outcome of the current San Diego Bay Climate Adaptation Study (being sponsored by the San Diego Foundation and ICLEI) to revise the City of Chula Vista's Land Development Ordinances (such as Grading Ordinance) and CEQA Guidelines to **incorporate climate change-related sea level rise & other flooding risks** into future development and municipal infrastructure projects' design and review.
11. **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.

If these recommendations are supported by City Council, City staff should develop more detailed implementation plans for the measures. Within these plans, staff should outline implementation steps, timelines, and cost estimates for each measure. These detailed implementation plans should be presented to City Council for a final decision on whether to move forward with specific measures.

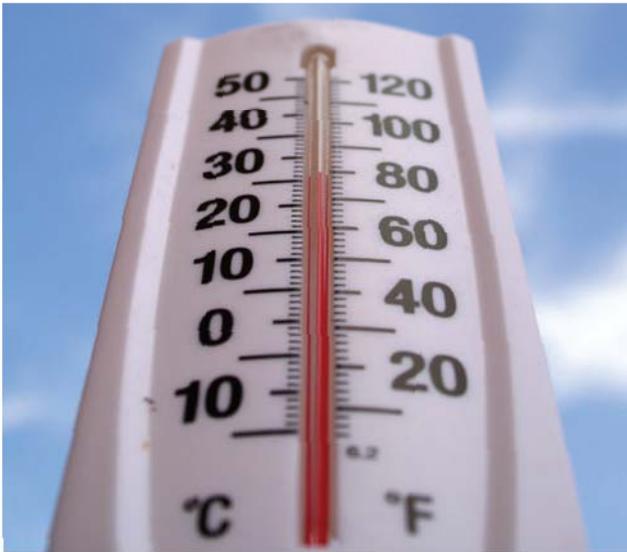
BACKGROUND

In October 2009, City Council directed staff to reconvene a Climate Change Working Group (CCWG) – comprised of residents, businesses, and community representatives – to develop a list of recommended strategies for the City to reduce vulnerabilities to expected local climate change impacts (known as “climate adaptation”). Expected impacts include hotter and drier weather, diminished imported water supplies, more poor air quality/heat wave days, more frequent wildfires, shifts in habitat and species distribution, and increased rates of sea level rise. The reconvened CCWG, which was established as a subcommittee of the City's Resource Conservation Commission (RCC), included some members from the previous working group augmented with additional members to reflect the group's new climate adaptation-related focus areas:

<i>Focus Area</i>	<i>Stakeholder Representatives</i>
Water Management	William Granger/Rhianna Pensa – Otay Water District Sue Mosburg – Sweetwater Authority
Energy Management	Robert Friar/Larry James – Chula Vista Electric Andrea Cook – CA Center for Sustainable Energy Julie Ricks – San Diego Gas & Electric
Infrastructure & Resources	Nick Lee – Corky McMillin Company Sean Kilkenny – Otay Ranch Company
Public Health, Education, & Wildfires	Lynda Gilgun (Chair) – Education/RCC Trish Axsom/Terry Davis – Southwestern College Ana Melgoza – Independent Public Health Representative
Ecosystems & Biodiversity	Serge Dedina/Katie Westfall – WiLDCOAST Harry Orgovan – Chula Vista Kayak
Business & Economy	Richard D'Ascoli – Pacific Southwest Assoc. of Realtors/Chamber of Commerce Sassan Rahimzadeh – Arya Cleaners/RCC
Planning Process	Brian Holland – ICLEI Nicola Hedge – San Diego Foundation

PREPARING FOR CLIMATE CHANGE

A Guidebook for Local, Regional, and State Governments



Written by

Center for Science in the Earth System (The Climate Impacts Group)
Joint Institute for the Study of the Atmosphere and Ocean
University of Washington

King County, Washington

With an introduction by King County Executive Ron Sims



CLIMATE CHANGE PREPAREDNESS GOALS AND ACTIONS IN SAMPLE PRIORITY PLANNING AREAS (AND OTHER PLANNING AREAS FOR ILLUSTRATION)		
Priority Planning Area	Preparedness Goal	Preparedness Action
Water Supply	Expand and diversify water supply	<ul style="list-style-type: none"> • Connect regional water systems • Develop new groundwater sources • Construct new surface water reservoirs • Enhance existing groundwater supplies through aquifer storage and recovery • Implement new technologies such as reverse osmosis for desalination • Develop advanced wastewater treatment capacity for water reuse (“gray water”)
	Increase usable storage in reservoirs	<ul style="list-style-type: none"> • Add capacity to reservoirs by raising dam height • Adjust reservoir operations to reflect changing conditions
	Reduce demand/improve efficiency	<ul style="list-style-type: none"> • Increase billing rates for water • Change building codes to require low flow plumbing fixtures • Install high efficiency delivery systems for irrigated agriculture • Meter all water uses • Provide financial incentives (e.g., tax breaks, rebates) for switching to more efficient manufacturing processes, irrigation practices, and appliances
	Increase ability to transfer water between users	<ul style="list-style-type: none"> • Use water banks, water pools, and water markets to facilitate the reallocation of water resources • Renegotiate transboundary water agreements where applicable
	Increase drought preparedness	<ul style="list-style-type: none"> • Update drought management plans to recognize changing conditions • Increase authority to implement water restrictions and other emergency measures as needed
	Increase public awareness about climate change impacts on water supplies	<ul style="list-style-type: none"> • Include information on climate change impacts to water supplies and how residents can reduce water use in utility inserts, newsletters, web sites, and local newspapers
	Enhance the type of information used for managing water supply	<ul style="list-style-type: none"> • Expand the use of climate information (e.g. seasonal forecasts) in water resources planning and management • Actively monitor trends in snowpack, streamflow and other conditions affecting hydrology and water resources to anticipate problems • Conduct additional research on how climate change may impact you community’s water supply

<p>Stormwater and floodwater management</p>	<p>Increase capacity to manage stormwater</p>	<ul style="list-style-type: none"> ● Increase capacity of stormwater collection systems to accommodate projected changes in precipitation ● Modify urban landscaping requirements to reduce stormwater runoff ● Preserve ecological buffers (e.g. wetlands)
	<p>Reduce property damage from stormwater and flooding</p>	<ul style="list-style-type: none"> ● Move or abandon infrastructure in hazardous areas ● Change zoning to discourage development in flood hazard areas ● Update building codes to require more flood resistant structures in floodplains
	<p>Improve information used to manage stormwater and flood events</p>	<ul style="list-style-type: none"> ● Increase the use of climate and weather information in managing stormwater/flood risk and individual events ● Update flood maps to reflect changing risk associated with climate change ● Conduct additional research on how climate change may impact stormwater and flooding in your community
<p>Road operations and maintenance</p>	<p>Reduce flooding and erosion impacts on infrastructure</p>	<ul style="list-style-type: none"> ● Increase capacity of stormwater collection systems to accommodate projected changes in precipitation ● Modify urban landscaping requirements to reduce stormwater runoff ● Preserve ecological buffers (e.g. wetlands)
	<p>Reduce damage to asphalt from warmer summer temperatures</p>	<ul style="list-style-type: none"> ● Increase maintenance frequency of asphalt roads ● Investigate potential of using other road surfaces on most heavily used roads
<p>Additional Planning Areas for Illustration</p>		
<p>Salmon and marine ecosystems</p>	<p>Improve freshwater survival rates and carrying capacities</p>	<ul style="list-style-type: none"> ● Carefully limit harvests for selective fisheries ● Protect and restore natural functions in watersheds (e.g., floodplains, woody debris) ● Protect and restore instream flows ● Minimize elevated summer water temperatures ● Control water pollution
	<p>Improve estuarine survival rates and carrying capacities</p>	<ul style="list-style-type: none"> ● Carefully limit harvests for selective fisheries ● Improve hatchery practices ● Reduce the spread of invasive species ● Protect and restore nearshore habitat
	<p>Improve marine survival and carrying capacities</p>	<ul style="list-style-type: none"> ● Carefully limit harvests for selective fisheries ● Improve hatchery practices
	<p>Improve information used in salmon ecosystem management</p>	<ul style="list-style-type: none"> ● Integrate climate change information into salmon restoration planning for freshwater and estuary environments

CLIMATE CHANGE PREPAREDNESS GOALS AND ACTIONS IN SAMPLE PRIORITY PLANNING AREAS (AND OTHER PLANNING AREAS FOR ILLUSTRATION)		
Priority Planning Area	Preparedness Goal	Preparedness Action
Forest ecosystems and parks	Maintain mixed landscape structure	<ul style="list-style-type: none"> • Expand or adjust protected areas to incorporate greater diversity of topographic and climatic conditions to allow for shifts in species distributions in response to climate change • Tailor timber harvest and/or prescribed burning to create a mosaic of patch sizes and age classes • Avoid creating monoculture forests and/or forests lacking a structural diversity (e.g., because of uniformly places or many large clearcuts)
	Maintain species diversity and within-species diversity	<ul style="list-style-type: none"> • Expand or adjust protected areas to incorporate greater diversity of topographic and climatic conditions to allow for shifts in species distributions in response to climate change • Plant local seeds and mixed species stands after harvest or disturbance • Reduce potential for invasive species
	Reduce the impact of climatic and non-climatic stressors	<ul style="list-style-type: none"> • Plant tree species or varieties known to have a broad range of environmental tolerances • Manage forest density to reduce susceptibility to severe fire, invasive or epidemic insects, and drought • Manage forests for changing fire risk and fire regime • Establish or enhance structural and lot development requirements in forested areas to reduce potential for fire damage
	Improve information used in forests and parks management	<ul style="list-style-type: none"> • Incorporate understanding of elevation-specific climate sensitivities into management strategies • Actively monitor trends in forest conditions, including drought stress, insects, and invasive species
Coastal ecosystems	Increase public understanding of climate change impacts on forest and park ecosystems	<ul style="list-style-type: none"> • Add information on climate change impacts and what the community is doing to address impacts to forest and park ecosystems in community newsletters, web sites, and trailheads
	Reduce shoreline erosion	<ul style="list-style-type: none"> • Preserve ecological buffers to allow for inland beach migration • Enhance shoreline protection where retreat and accommodation are not possible
	Reduce property damage from erosion, flooding events, sea level rise	<ul style="list-style-type: none"> • Reduce development in coastal hazard areas • Incorporate climate change impacts into design requirements for coastal structures • Move or abandon shoreline infrastructure • Restore wetlands for run-off storage and flood control

Coastal ecosystems <i>continued</i>	Maintain or enhance coastal habitat	<ul style="list-style-type: none"> • Preserve ecological buffers to allow for inland migration of wetlands, salt marshes, and other habitat systems • Reduce spread of invasive species
	Improve information used in managing coastal systems	<ul style="list-style-type: none"> • Increase monitoring and control of invasive species • Incorporate information on sea level rise into coastal planning and ecosystem restoration
Agriculture	Adjust production to reflect changing conditions	<ul style="list-style-type: none"> • Change planting dates • Consider double cropping where longer growing seasons allow • Change planting varieties • Promote greater use of heat-resistant, insect-resistant and disease-resistant crops
	Improve agricultural water supply and use	<ul style="list-style-type: none"> • Promote new irrigation technologies to improve water use efficiency • Promote water conservation • Use market forces to distribute water • Diversify and expand water infrastructure
	Improve information used in managing agriculture	<ul style="list-style-type: none"> • Be aware of how climate change affects global agriculture • Work with county extension agents to distribute information to farmers on projected climate change impacts to agriculture
Public health	Reduce impacts of extreme heat events	<ul style="list-style-type: none"> • Open additional cooling centers during extreme heat events • Extend hours for public wading pools during extreme heat events • Improve use of early warning systems for extreme heat events • Increase use of shade trees to reduce temperatures in urban areas
	Improve disease surveillance and protection	<ul style="list-style-type: none"> • Increase monitoring of known diseases and potential diseases moving into the area • Increase public education on disease prevention for West Nile and other vector-borne illnesses that could increase as a result of climate change
	Improve information used in managing public health	<ul style="list-style-type: none"> • Increase emergency planning for disease outbreaks • Monitor global trends in the spread of disease

Table 10.1 – Climate Change Preparedness Goals and Actions in Sample Priority Planning Areas (and Other Planning Areas for Illustration).

This table represents possible preparedness goals and actions for the sample planning areas of water supply, stormwater management, and road operations and maintenance (for the purposes of this table, labeled as priority planning areas). It also includes possible goals and actions for other planning areas, as illustration. This list is not all-inclusive, and the appropriateness of these actions will vary on a case-by-case basis.

(Sources: Mote et al. 1999; NAST 2001; Hamlet 2003; Mote et al. 2003; Kay et al. 2005a)