1. TAC Meeting 7 - Handout 1

   Documents:

   2014-04-09 TAC MEETING 7 - HANDOUT 1.PDF

2. TAC Meeting 7 - Presentation Draft

   Documents:

   2014-04-09 TAC MEETING 7 - PRESENTATION DRAFT.PDF
**City of Watsonville**  
**Advisory Committee Meeting (April 9, 2014)**  
**Climate Adaptation Recommendations**

### Short-term strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Impacts Addressed</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement recommended mitigation measures in the Local Hazard Mitigation Plan.</td>
<td>Heat waves, Drought, Severe storms, and Flooding</td>
<td>Public Works</td>
</tr>
<tr>
<td>Focus on passive cooling building technologies</td>
<td>Heat waves, Power outages</td>
<td>CDD- Building</td>
</tr>
<tr>
<td>Develop a heat response plan, which may include establishing cooling centers and a plan for transporting people to the centers when needed.</td>
<td>Heat waves, Power outages</td>
<td>Public Works/ Risk Management?</td>
</tr>
<tr>
<td>Continue working with the PVWMA to increase water recycling, if possible, and other efforts such as possibly increasing use of surface water</td>
<td>Drought, Salt-water intrusion, and Changes in seasonal patterns</td>
<td>Public Works</td>
</tr>
<tr>
<td>Pursue planning and financial support for the improvement of flood conditions along Corralitos and Salispuedes Creeks, the Pajaro River, and other areas of the drainage basin impacting Watsonville in coordination with Santa Cruz Water Conservation District Zone 7.</td>
<td>Severe storms, Flooding, and Changes in seasonal patterns</td>
<td>Public Works</td>
</tr>
<tr>
<td>Secure funding for levee engineering upgrades and coordinate with County Zone 7 to establish levees as a top priority for action.</td>
<td>Severe storms, flooding, and Changes in seasonal patterns</td>
<td></td>
</tr>
<tr>
<td>Review and update evacuation plans and emergency operation plans for major floods</td>
<td>Severe storms, and Flooding</td>
<td>Risk Management</td>
</tr>
<tr>
<td>Conduct a communitywide assessment and develop a program to address health, socioeconomic, and equity vulnerabilities.</td>
<td>Multiple</td>
<td>Public Works</td>
</tr>
</tbody>
</table>
## Medium-term strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Impacts Addressed</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cool paving guidelines</td>
<td>Heat waves, Power outages</td>
<td></td>
</tr>
<tr>
<td>Identify and protect locations where native species may shift or lose habitat due to climate change impacts. Limit development and monitor conditions of development and grading permits near natural channels and wetlands to prevent sedimentation</td>
<td>Changes in seasonal patterns, Loss of habitat / ecosystems</td>
<td>Public Works</td>
</tr>
<tr>
<td>Collaborate with agencies managing public lands to identify, develop, or maintain corridors and linkages between undeveloped areas.</td>
<td>Changes in seasonal patterns, Loss of habitat / ecosystems</td>
<td>Public Works</td>
</tr>
<tr>
<td>Review and update regulations related to flood plain development. Continue to regulate development in flood plains to optimize preservation of open space</td>
<td>Severe Storms, Flooding, and Changes in seasonal patterns</td>
<td>Public Works</td>
</tr>
<tr>
<td>Provide incentives for repetitive loss and other flood-prone property owners to retrofit homes to be safe from flooding</td>
<td>Severe Storms, Flooding, and Changes in seasonal patterns</td>
<td>CDD/Engineering</td>
</tr>
<tr>
<td>Review and update environmental education efforts to educate the public about adaptation</td>
<td>Multiple</td>
<td>Public Works</td>
</tr>
<tr>
<td>Incorporate climate change adaptation considerations into the city’s decision-making process, particularly around infrastructure and operations</td>
<td>Multiple</td>
<td>CDD/ Public Works</td>
</tr>
</tbody>
</table>
Long-term strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Impacts Addressed</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use purchase of development (PDR) or conservation easements to protect climate-vulnerable habitats.</td>
<td>Changes in seasonal patterns, Loss of habitat / ecosystem migration</td>
<td>Public Works</td>
</tr>
<tr>
<td>Encourage property owners in flood plains to purchase federal flood insurance. Require new development to conform to the Flood Damage Prevention Ordinance and the guidelines of the National Flood Insurance Program.</td>
<td>Severe Storms, and Flooding</td>
<td>Public Works/Engineering-CDD- if they have a mortgage they have to have flood insurance</td>
</tr>
</tbody>
</table>
City of Watsonville
Climate Action Plan and Carbon Fund Project

Technical Advisory Committee Meeting #7
Final Meeting
April 9, 2014
Introductions

- City of Watsonville
- DNV KEMA and EcoShift
- Advisory Committee
- Members of the Public
Agenda

- Goals of today’s meeting
- Review Draft Climate Action Plan
  - Brief recap of emission reduction targets and strategies
  - Adaptation analysis and recommendations
  - Implementation and tracking
- Carbon Fund
  - Update on changes since the last meeting and next steps
- Project Schedule:
  - Public Workshop (May 8, 2014, 6-8 pm)
  - Planning Commission Meeting (June 3, 2014, 6 pm)
  - City Council Meeting (July or August)
Today’s Meeting

Desired outcomes

• Review new aspects of the Draft CAP and provide input
• Receive update on the Carbon Fund
• Provide overview of the schedule for next steps
Draft Climate Action Plan

Brief Recap of Emission Reduction Targets and Strategies
Historic and Future Projected Emissions
City of Watsonville GHG Reductions

Based on all the Climate Action Plan strategies

GHG Emissions (MTCO2e)

2005 Baseline

Forecasted Business-as-usual Emissions

Targets for Reducing Emissions

GHG Emissions based on Climate Action Plan

2005 2010 2015 2020 2025 2030 2035 2040 2045 2050

0 50,000 100,000 150,000 200,000 250,000 300,000 350,000
GHG Reductions by Sector in 2020 and 2030

See Appendix D of the Draft CAP for all assumptions behind these calculations.
Draft Climate Action Plan

Adaptation Analysis and Strategies
Adaptation Strategy

Overview of the effects of climate change

Primary hazards

Secondary hazards

Current policies that address the risks

Existing plans

Ongoing programs

Assess risk in more detail

Probability

Consequences

Gaps and Strategies for Future Consideration
Overview of the Effects of Climate Change

- Flooding
- Heat waves
- Salt water intrusion
- Loss of habitat/ecosystems
- Long-term power outages
- Drought
- Severe storms
- Changes in seasonal patterns
Current policies that address the impacts

- Draft CAP, Table 12

<table>
<thead>
<tr>
<th>Existing Strategies that Address Climate Change Impacts</th>
<th>Secondary Impact(s) Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flooding / Extreme High Tide</td>
</tr>
<tr>
<td>Coasland use plan - limits development or annexation of land in the coastal zone</td>
<td>x</td>
</tr>
<tr>
<td>Ongoing projects with other agencies to reduce flooding from the Pajaro River and increase flood protection of levees</td>
<td>x</td>
</tr>
<tr>
<td>Flood early warning system in coordination with other agencies</td>
<td>x</td>
</tr>
<tr>
<td>Erosion control standards to reduce erosion during flooding</td>
<td>x</td>
</tr>
<tr>
<td>Storm Drain Development Standards and ongoing management of the storm drain system</td>
<td>x</td>
</tr>
<tr>
<td>Numerous water conservation strategies to reduce demand for groundwater including landscaping guidelines, utility rebates, water audits, etc</td>
<td></td>
</tr>
<tr>
<td>City Council’s intention to not increase groundwater pumping</td>
<td>x</td>
</tr>
</tbody>
</table>
Assessing Risk

Figure 22: Risk Ranking, 2010 – 2050

(Risk = Probability x Consequence)

Legend

Recommended Action Based on Level of Risk

<table>
<thead>
<tr>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Extremely High</th>
</tr>
</thead>
</table>

- Low
  - Changes in seasonal patterns
  - Loss of natural habitat / ecosystems

- Moderate
  - Severe storms

- High
  - Heat waves
  - Long-term power outages

- Extremely High
  - Flooding
  - Salt-water intrusion

Develop and Implement Strategies

Monitor

Evaluate Mitigation Strategies

No Action
Focus for future strategies

- Continue to focus on:
  - Salt water intrusion
  - Flooding

- Add a new focus on:
  - Heat wave
  - Drought
  - Long-term power outages
  - Severe storms
Adaptation Recommendations

Review Handout 1:
Near-term, Medium-term, and Long-term Adaptation Strategies
Draft Climate Action Plan

Implementation and Monitoring
Implementation

- The CAP includes a prioritized list of strategies, including near-term, medium-term, and long-term actions.
- Most new actions require funding, so the City will continue to look for grants and other resources.
- Responsibilities were developed by assigning a department for each category as follows:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>Community Development Department</td>
</tr>
<tr>
<td>Transportation</td>
<td>Public Works &amp; Utilities Department, Community Development Department</td>
</tr>
<tr>
<td>Water and Wastewater</td>
<td>Public Works &amp; Utilities Department</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>Public Works &amp; Utilities Department</td>
</tr>
<tr>
<td>Green Buildings, Green Business, and Local Food</td>
<td>Community Development Department</td>
</tr>
</tbody>
</table>
Ongoing Monitoring

- AMBAG to conduct a city-wide inventory every 5 years
- Free, online tools are available for tracking the reduction strategies (AMBAG)

- Progress Report: Every 2 years. The first one in 2016 should cover:
  - Updated GHG inventory data (from AMBAG)
  - Summary of ongoing programs and policies
  - Overview of newly implemented strategies
  - Details on each reduction strategy
Climate Action Plan Progress

Check out Berkeley’s progress toward achieving its Climate Action Plan goals in the areas of: Transportation and Land Use, Building Energy Use, Waste & Recycling, Community Outreach, and Adaptation & Resilience.

The Berkeley Climate Action Plan (CAP) guides community-wide efforts to reduce global warming emissions and to achieve several other associated benefits, such as improved public health, increased energy affordability, and improved access to green jobs. The plan identifies 30 specific goals designed to help reduce Berkeley’s community-wide global warming emissions 33% by 2020 from 2000 levels.

Core Strategies of the Berkeley Climate Action Plan:

- Transportation & Land Use
- Building Energy Use
- Waste & Recycling
- Community Outreach
- Adaptation & Resilience

Getting to 33% by 2020: Reaching our Greenhouse Gas Emissions Goal

- Where We Are Now...
  - Community-wide emissions decreased 8% since 2000

- Where We Are Going...
  - CAP strategies will achieve an estimated additional 15% reduction by 2020

- Where We Need to Go!
  - We need your help...
    - 10% more reductions needed to achieve 2020 target
**Example Progress Report (Chula Vista)**

<table>
<thead>
<tr>
<th>#</th>
<th>COMPONENTS</th>
<th>STATUS</th>
<th>PROGRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Implement a Solar &amp; Energy Efficiency Conversion program for the community</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td>2</td>
<td>Upgrade municipal facilities with energy efficiency &amp; solar energy technologies</td>
<td>Ongoing</td>
<td>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.</td>
</tr>
<tr>
<td>3</td>
<td>Link conversion program to local economic development</td>
<td>Ongoing</td>
<td>A public workshop was held in September to identify opportunities to leverage and link the future PACE financing program to local retailers and contractors.</td>
</tr>
<tr>
<td>4</td>
<td>Adopt pre-wiring and pre-plumbing standards for solar pv &amp; solar hot water, respectively</td>
<td>Completed</td>
<td>In 2009, the City adopted the &quot;solar ready&quot; ordinances. To date, over 1,500 new residential units have complied with the new code.</td>
</tr>
</tbody>
</table>
Ongoing Monitoring

- City to track certain key indicators and programs and provide information in the Progress Report. Examples:
  - Solar permits and total solar PV installed each year (in kilowatts)
  - Citywide Street Tree Plan: number of trees planted
  - Participation in utility programs (obtain data from PG&E)
  - Participation in Safe Routes to Schools
  - Progress of the CCA Feasibility Study
Day-to-Day Implementation

- Checklist for new development projects to ensure projects comply with the CAP
- Funding from Carbon Fund used to implement high-priority projects

Other ideas:
- Incorporated in the City’s Capital Improvement Plan
- “Climate Action Plan impact” section added to staff reports when making other infrastructure decisions
Carbon Fund: Net Zero Energy Development Fee

Updates and Next Steps
Next Steps and Action Items
Remaining Project Schedule

- Provide any comments on the Draft CAP by May 9
- Release the Draft CAP for public review and comments
  - Public review period from April 14 – May 9
- Public Workshop on May 8, 2014 from 6-8pm
  - Review the Draft CAP at interactive stations
  - Provide overview of the Carbon Fund
- June 3, 2014: Planning Commission (both CAP and Carbon Fund)
- July or August 2014: City Council (both CAP and Carbon Fund)