MONTEREY COUNTY PLANNING COMMISSION

Meeting: December 12, 2012 Time: 2:00 P.M.	**Agenda Item No.: 10**
Project Description: Conduct a workshop to consider the scope of the effort to draft and adopt a community climate action plan	
Project Location: Countywide (including the Coastal Zone)	**APN: A**ll
Planning File Number: REF120045	**Owner:** County of Monterey **Agent:**
Planning Area: All	**Flagged and staked:** N/A
Zoning Designation: : All	
CEQA Action: TBD	
Department: RMA - Planning Department	

RECOMMENDATION:
Conduct a workshop to discuss and consider an approach to preparing a Community Climate Action Plan for unincorporated Monterey County. The primary purpose of this workshop is to:

- Consider alternatives related to the proposed "rules" that will guide the policy approach to be taken in the development of the Community Climate Action Plan (see Exhibit A, Project Issues section—page 4 of staff report) and provide direction to staff.
- Consider the implications of the data presented on GHG baseline emissions and provide direction to staff on the preferred approach to developing a GHG emission reduction program (See Exhibit B, Summary of 2005 Baseline GHG Emissions section—page 7 of the staff report),
- Allow the public and Planning Commission an opportunity to comment on the scope of the CCAP, to provide insight on specific opportunities and constraints, and to express any concerns about the process; and
- Educate the public and Planning Commission about the purpose and process of developing a climate action plan.

PROJECT OVERVIEW:
The purpose of a Community Climate Action Plan is to provide a program and specific implementation actions that will result in a reduction in greenhouse gases (GHG). The proposed Community Climate Action Plan (CCAP) is intended to implement the *Monterey County 2010 General Plan*, which applies to the Inland (non Coastal) areas of the County. The CCAP is also intended to implement Executive Order No. S-3-05 and Assembly Bill AB32, which set statewide goals for GHG emission reductions. In order to achieve these statewide goals, the proposed CCAP will also be applied in the Coastal Zone and therefore is proposed to apply County-wide.

DISCUSSION:
Over the last couple of centuries, the increased consumption of fossil fuels (wood, coal, gasoline, etc.) has substantially increased atmospheric levels of greenhouse gases (GHGs) in the Earth's atmosphere. GHGs, which include carbon dioxide, methane, water vapor, nitrous oxide, and other atmospheric gases, play an important role in regulating the surface temperature of the Earth. They allow light to penetrate and prevent heat from escaping, which in turn warms the planet in a way that is similar to a greenhouse warming the air inside its glass walls. As atmospheric concentrations of greenhouse gases rise, so do temperatures. Over time, this rise in temperature has resulted in climate change.

In June 2005, Governor Schwarzenegger signed Executive Order S-3-05 mandating a reduction of GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. The 80 percent emissions reduction target is consistent with the magnitude of reduction thought necessary to avoid the worst consequences of global climate change (IPCC, 2007). In 2006, California adopted AB 32, mandating regulations to achieve GHG emissions reductions to 1990 levels by 2020 and achieving further reductions in future years.

At the local level, the County of Monterey addressed climate change when it adopted its new general plan in 2010. General Plan Policy OS-10.11, called for development and implementation of a Greenhouse Gas (GHG) Reduction Plan with a target to reduce emissions by 2020 to a level that is 15 percent less than 2005 emission levels.

SUMMARY OF APPROACH

Climate action plans (CAPs) are relatively new in the State of California, and the scope of GHG emission reduction measures contained in these plans has varied widely. Early CAPs—the City of Oakland for example—contained scores of GHG emission reduction measures. More recently, planners have scaled back the number of measures to better match the institution's capacity to implement, monitor, and report on the GHG reduction measures contained in the CAPs. A typical set of GHG emission reduction measures includes all of the following elements:

- Public education about energy efficiency (e.g., public outreach programs)
- Residential and commercial energy efficiency measures (e.g., weatherization, green building),
- Alternative energy promotion (e.g., wind and solar power),
- Recycling and Reuse programs (e.g., curbside recycling),
- Alternative fuel vehicles (e.g., biodiesel, electric vehicles),
- Water conservation measures (e.g., energy and water efficient landscaping), and
- Improved community planning (e.g., transit planning, green zoning).

The above listed elements are anticipated to be included in the program of GHG emission reduction measures for the County. In addition, planners intend to reach out to agricultural and industrial producers to find cost-effective energy efficiency measures for these important emission sectors. A more detailed discussion is included in Exhibit A. Specific data for Monterey County related to GHG is included in Exhibit B.

The Long Range Planning staff is developing the Monterey County CCAP in house, with technical assistance from ICF International. Based on input received at this workshop and during subsequent discussions with stakeholders, staff will develop a draft CCAP that will be brought back to the Planning Commission for further discussion and consideration.

OTHER AGENCY INVOLVEMENT: The Alternative Energy and Environment (AEE) Committee was briefed on this item at its October 25, 2012 meeting. The AEE Committee supported staff's plans to contact stakeholders, such as the Land Use Advisory Committees, the Agricultural Advisory Committee, the County Permit Streamlining Task Force, California Coastal Commission staff, AMBAG, and the Monterey Bay Unified Air Pollution Control District. The AEE Committee suggested that wine producers be specifically contacted as part of this process. The Association of Monterey Bay Area Governments AMBAG attended the AEE Committee meeting and suggested that the County focus on a small, realistic set of greenhouse gas (GHG) reduction programs, keeping in mind that scope of the GHG reduction effort must be within the County's institutional capacity to verify and monitor. A community member that

attended the AEE Committee meeting suggested that the plan address community choice aggregation and residential/commercial Property Assessed Clean Energy (PACE) programs (an innovative means of financing rooftop photovoltaics and other energy improvements).

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(November 6, 2012)

cc: Front Counter Copy; Planning Commission; LUACs (11), AMBAG, Monterey Bay Unified Air Pollution Control District; Jacqueline Onciano, Planning Services Manager; Martin Carver, Project Planner; Marti Noel, Assistant RMA Director; Wendy Strimling, County Counsel; The Open Monterey Project; LandWatch; Planning File REF120045

Attachments: Exhibit A Project Discussion
Exhibit B GHG Data for Monterey County

This report was reviewed by Jacqueline R. Onciano, Planning Services Manager.

EXHIBIT A
PROJECT DISCUSSION

Project Description

The Community Climate Action Plan (CCAP) will:

1. Establish an inventory of 2005 GHG emissions in the County of Monterey including but not limited to residential, commercial, industrial, transportation, and agricultural emissions;
2. Forecast GHG emissions for 2020, 2035, and 2050;
3. Identify reduction goals for 2020, 2035, and 2050 Planning Horizon
4. Identify methods to reduce GHG emissions;
5. Quantify the reductions in GHG emissions from the identified methods;
6. Establish requirements for monitoring and reporting of GHG emissions;
7. Establish a schedule of actions for implementation; and
8. Identify funding sources for implementation.

Project Issues

The purpose of the following rules is to set the basic tone for developing Monterey County's first climate action plan. In general, staff favors an approach that builds a sturdy but modest foundation for achieving greenhouse gas emission reductions. This foundational plan will then be built upon in future years to meet intermediate and long-range goals,

The following "rules" will guide the policy approach taken in the CCAP:

Proposed "Rule"	Discussion Points
1. Keep things simple. The program of GHG reduction programs contained in the final CCAP should be within the means of the existing County organization—both organizationally and financially. The final product should be easily understood.	The alternative to be discussed is whether there is a desire to increase the size of the County organization to administer a more far-reaching program.
2. Look for "low hanging fruit" and seek ways to achieve the biggest changes for the least cost (to either public or private coffers).	Approximately 1/3 of all baseline emissions come from three industrial uses, and we intend to explore a cooperative approach with these businesses. The alternative to be discussed is whether there is a desire to focus staff efforts elsewhere.
3. Promote programs that call for incremental behavioral changes and coincide with strategies for household economic efficiency; avoid programs that call for major behavioral changes from the public at large that do not also have major beneficial economic impacts.	The alternative to be discussed is whether there is a desire to work toward a more robust set of program requirements.

Proposed "Rule"	Discussion Points
4. All GHG emission sectors participate in GHG reductions. The County will work closely with the agricultural industry to identify measures already being undertaken to reduce energy costs. The County will also work to establish new set of best management practices that demonstrate how the agricultural industry can reduce GHG emissions and save money. A program to develop such BMPs might even be included in the CCAP. The County will also look specifically at wineries to see how GHG emissions from the wine-making process can be reduced.	The alternative to be discussed is whether there is a desire to exempt selected industries from the GHG emission reduction strategy.

Project Schedule and Work Program

Task/Milestone	Approximate Timeframe for Completion
Project Initiation	Summer 2012
Internal Scoping and Consultation with AEE	Fall 2012
Admin Draft CCAP	Fall and Winter 2012/2013
Stakeholder Meetings (see list above)	Fall and Winter 2012/2013
Public Review Draft CCAP	Spring 2013
CEQA Initial Study and Supplemental EIR	Summer 2013
PC and LUAC workshop	Summer 2013
Planning Commission Hearing	Fall 2013
Board of Supervisors Hearing and Adoption	Fall 2013

Source: Monterey County Planning Department

Environmental Review

This CCAP will be developed as a "Qualified Climate Action Plan," and as such will be used to judge the GHG emission impacts of future projects. The strategy for CEQA compliance will be determined later, but it is anticipated that a supplement to the "2010 Monterey County General Plan EIR" would be an appropriate vehicle for environmental review. This is in keeping with recommendations from Governor's Office of Planning and Research (OPR) senior counsel and with OPR's forthcoming guidance on CEQA for climate action plans.

EXHIBIT B
GHG DATA FOR MONTEREY COUNTY

The following text, tables, and graphs describe the results of the initial research completed for the CCAP by staff and consultants. The primary source for this information was AMBAG's "Greenhouse Gas Inventory 2005 Baseline Report" (AMBAG, 2011). ICF International also contributed to this initial data collection effort by conducting an analysis of GHG emissions from the agricultural sector, including emissions from livestock, equipment, and fertilizer application in the baseline year. ICF International also validated and expanded the analysis of GHG emissions associated with commercial and residential waste generation. Finally, ICF International calculated GHG emissions associated with the conversion of natural lands to agriculture and urban uses.

SUMMARY OF 2005 BASELINE GHG EMISSIONS

The following is a summary by emission sector of baseline GHG emission in 2005.

Residential GHG Emissions

Residential GHG emissions represented about 10 percent of total GHG emission in 2005. This equates to 3.7 metric tons (MT) of CO_2e per household. Slightly more than half of the GHG emissions were produced through the use of natural gas, the remainder through electricity. Both natural gas and electricity are provided to Monterey County residents by Pacific Gas and Electric Company (PG&E).

This emission sector less than a tenth of overall emissions; nonetheless, many of the existing programs available through PG&E, AMBAG, and Ecology Action (to name a few) focus on energy efficiency retrofits, so this is considered low-hanging fruit. Also, the County's new Green Building Ordinance will ensure that new construction meets very high standards for energy efficiency, so there are savings to be expected there as well.

Commercial and Industrial GHG Emissions

Commercial and industrial GHG emissions represented the largest share of total baseline emissions with about 52 percent of 2005 GHG emissions or 759,974 MT CO_2e. Of this, almost 64 percent is from three stationary sources (about 33 percent of total baseline emissions)—Chevron USA (San Ardo), Aera Energy LLC (San Ardo), and Chemical Lime (Salinas).

This emission sector is the largest share of total baseline, and money spent here could have a significant impact on overall County GHG emissions. Staff expects to explore these possibilities fully.

Transportation GHG Emissions

Transportation GHG emissions represent about 21 percent of total 2005 baseline GHG emissions (308,489 MT CO_2e). This estimate represents vehicle miles traveled (VMT) on local roads, excluding VMT on state highways, air travel, train travel, and off-road vehicles.

This emission sector will be affected most by state and federal standards for vehicle fuel efficiency. While changes in land use development patterns can have an effect on VMT, most of this effect will play out in the very long term. In the short term, we don't expect to achieve much beyond what's saved by fuel efficiency standards.

Agricultural GHG Emissions

An important component of baseline GHG emissions in Monterey County is the emissions from agricultural production, including livestock, which represents approximately 15 percent of total baseline emissions. While crops play a role in sequestering carbon, overall, agricultural production generates a significant amount of GHG emissions. This is especially true of livestock, which produces methane through manure and enteric fermentation. To assess this impact, Monterey County Planning relied on an analysis of agricultural-related GHG emissions prepared by ICF International.[1] Table 1 shows an estimate of GHG emissions from Monterey County's agricultural operations.

Table 1

GHG EMISSIONS
MONTEREY COUNTY AGRICULTURE

Source	Total Production Acres 2005	Percent of Total
Livestock Emissions	108,071	49.1%
Enteric Fermentation	74,093	--
Manure Management	33,978	--
Fertilizer Application	28,800	13.1%
Off-Road Agricultural Vehicles	83,187	37.8%
Total	220,058	100.0%

Source: ICF International, IBID

This emission sector has the potential to yield some savings, and in fact agricultural producers have been working over the years to reduce operational costs that also translate to GHG emission savings. Staff will work closely with agricultural producers to see if there are ways to achieve further savings without significantly increasing production costs.

Wastewater GHG Emissions

Wastewater GHG emissions represent less than one percent of total 2005 baseline GHG emissions (8,850 MT CO_2e). This emission sector represents less than one percent of total GHG emissions, so while there may be some obvious measures to take, staff does not expect to achieve significant savings here.

Solid Waste GHG Emissions

Solid Waste GHG emissions represent about 1.5 percent of total 2005 baseline GHG emissions (19,999 MT CO_2e). This number represents future GHG emissions from waste that was sent to the landfill in the base year but will result over a 100-year decomposition cycle. Landfill-related GHG emissions from materials deposited prior to 2005 are not included here, but are instead included the inventory of the municipal operations.

[1] ICF International (November 9, 2012). Memorandum to RMA, Monterey County Planning Department, from Margaret Williams, ICF re: Summary of Updates to Monterey County's Community GHG Inventory Baseline.

This emission sector represents slightly more than one percent of total GHG emissions, so while there may be some obvious measures to take, staff does not expect to achieve significant savings here. Table 2 shows a summary of baseline GHG emissions for unincorporated Monterey County in 2005. Figure 1 shows baseline GHG emissions by sector in pie chart form.

Table 2

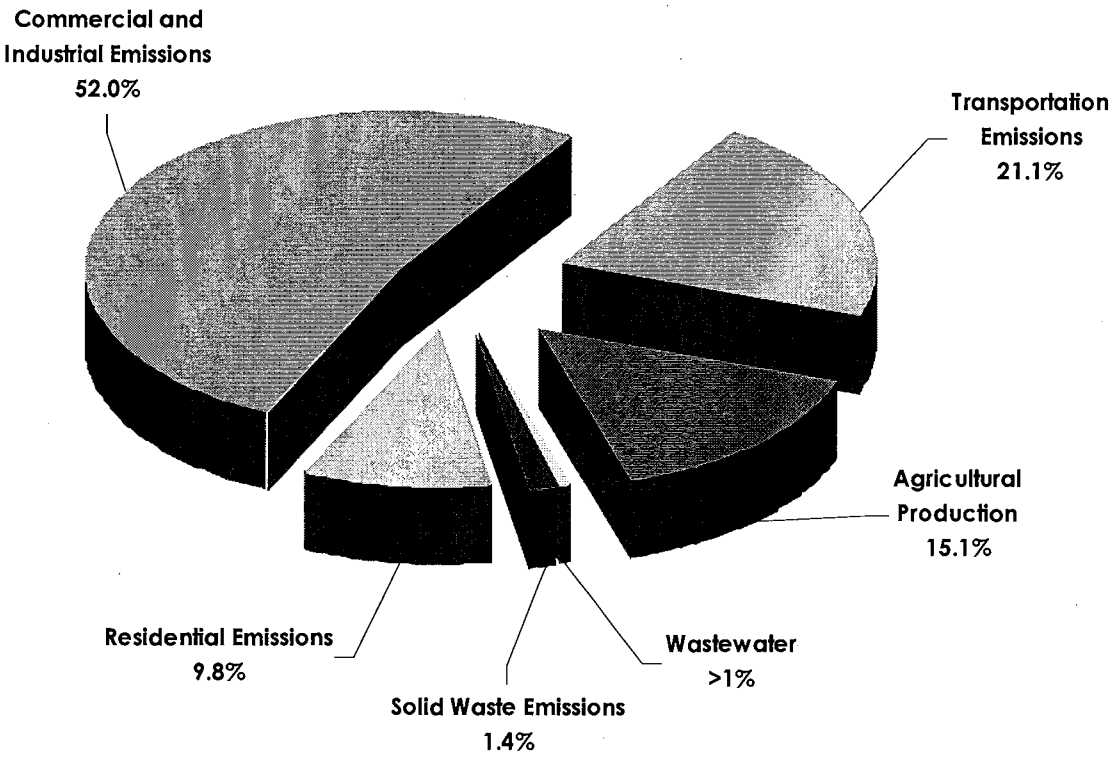
BASELINE GHG EMISSIONS
UNINCORPORATED MONTEREY COUNTY
2005

Sector	CO_2e Emissions (metric tons)	Percent of Total
Residential Emissions	143,707	9.8%
Commercial and Industrial Emissions	759,974	52.0%
Transportation Emissions	308,489	21.1%
Agricultural Production	220,058	15.1%
Wastewater	8,850	0.6%
Solid Waste Emissions	19,999	1.4%
	1,461,077	100.0%

Sources: Monterey County Planning; AMBAG 2005 Baseline Report (AMBAG 2011)

Figure 1

DISTRIBUTION OF COMMUNITY GHG EMISSIONS BY SECTOR, 2005



Source: Monterey County Planning; AMBAG 2005 Baseline Report (AMBAG, 2011)