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**DRAFT MEETING SUMMARY**  
**Montana Climate Change Advisory Committee**  
**Meeting #2**

Whitefish, Montana  
September 15, 2006

Attendance:

- Climate Change Advisory Committee (CCAC) Members: Trudi Peterson, Mary Fitzpatrick, Bob Raney, Shane Mogensen, Gloria Flora, William Walks Along, Sue Dickenson, Robert Boettcher, Dave Ryan, Steve Loken, Tim Gregori, Chuck McGraw
- Montana Department of Environmental Quality (DEQ): Richard Opper, Lisa Peterson, Lou Moore, Jim Boyer, Bob Habeck, Brian Green
- Science Advisory Panel Members (SAP): Ted Dodge
- Members of the Public: Brett Tallman - AERO, Jeanne Souvigney, Steve Eckels, Collin Watters - DNRC, Richard Janoso – PPL, Todd O'Hair – Rio Tinto Energy, Theo Spencer - NRDC
- Center for Climate Strategies (CCS): Tom Peterson, Ken Colburn, Steve Roe, Mike Lazarus, Lewison Lem

Background documents: (*all posted at [www.mtclimatechange.us](http://www.mtclimatechange.us)*)

- Agenda and Notice
- Power Point Presentation
- Draft Meeting Summary – Meeting #1 – July 13, 2006
- MT Greenhouse Gas Inventory and Forecast, 1990-2020
- CCS Catalog of State Actions

Discussion and conclusions:

1. Montana DEQ Director Richard Opper opened the CCAC's second meeting, welcomed participants, and led off with introductions around the room.
2. Tom Peterson from CCS reviewed agenda for the day, and a question arose about the Science Advisory Panel (SAP) and its role. Richard Opper explained that the SAP would supplement the support that CCS is providing to the CCAC as requests are received from it. Tom Peterson asked if there were any corrections or changes to the posted Summary for CCAC Meeting #1. One additional name

was added and minor corrections made. The summary was approved subject to the opportunity for further additions or changes to be added later in the day (none were offered).

3. Ken Colburn from CCS covered recent developments in other states, including the successful conclusion of a similar climate change action planning process in Arizona, which indicated that a halving of GHG emissions by 2020 over business as usual could be achieved while saving \$5.5 billion. CCAC members had several questions about the Arizona results. Colburn also reviewed the provisions of AB-32, California's recently passed legislation making it the first state to adopt a comprehensive GHG emissions cap. Again, CCAC members had many questions, notably about the impacts of AB-32 on the power sector and its potential "ripple effects" on states and companies that export energy to California, including Montana.
4. Colburn also reviewed the ongoing development of GHG registries in the West and elsewhere in the U.S., including a multi-state registry meeting held on September 6, 2006 in San Francisco. States active on this front appear to be increasing their cooperation, increasing the likelihood that a nationwide, multi-state GHG registry will be developed. SAP member Ted Dodge requested that someone from DOE come in and talk about the federal 1605b program. Opper asked that Dodge try to get someone to address the CC TWG on this issue. CCS will look into whether any good compare/contrast documents are available for use by the CCAC.
5. The progress of the Western Regional Air Partnership (WRAP) effort to develop GHG inventories and forecasts for the region was also discussed. Work is underway in the development of inventories and forecasts for AK, WA, ID, SD, CO, NV, UT, and WY. Work on these projects is expected to be completed on a staggered schedule with a completion of all by the end of January 2007.
6. Review of the Inventory and Reference Case Forecast. Michael Lazarus and Steve Roe discussed the draft inventory, reviewing the approach and projection methodologies and overall inventory graph. Many questions arose.
  - a. Energy Supply (ES) – GHG emissions from electricity generated a lot of interest and questions, particularly regarding high- and low-hydro years, plant outages, etc. The "dips" in the curve were viewed as encouraging signs that future, larger "dips" could be successfully engineered. Lazarus spotlighted the question of new and replacement sources of power, and the uncertainty (and simplistic assumption) used for the initial inventory. He also raised the issue of fuel use reporting inadequacy and requested the CCAC's help on that front. Finally, he raised the issue of net vs. gross and production vs. consumption emissions to ensure that the CCAC had a common understanding of this terminology. Lazarus and CCAC members clarified questions on the importance of these distinctions.

Lazarus discussed fossil fuel production, and specifically spotlighted the fact that the projected inventory (based on US DOE regional projections) assumes limited growth in oil and gas production (including coalbed

methane), coal power development, and oil refining, and does not assume any coal-to-liquids activity, etc. Jim Boyer reinforced the latter point; raising the question of doing a forecast scenario that reflects the potential emissions increases associated with these developments. Other TWG members reinforced this, particularly in light of Gov. Schweitzer's interest in some of these energy development activities.

- b. Residential, Commercial, and Industrial (RCI) – Several questions again arose about the estimation of emissions from in-state electricity use, e.g., system average vs. contract path, assumed growth rates, etc. Lazarus indicated that the same issues come up – along with others like price forecasts – for natural gas, and urged the CCAC to consider what it would like for such major assumptions underlying the inventory and forecast. He also raised the issue of changing electricity use patterns (e.g., summer peaking vs. winter peaking utilities, etc.). Lazarus ended with an explanation of Industrial Process emissions, which provoked some questions (e.g., about SF6 – which may be overstated for Montana – and about the longevity of HFCs in the atmosphere).
- c. Transportation and Land Use (TLU) – Lewison Lem took up the Transportation Inventory and Forecast after a break. Mr. Lem indicated that many issues remain under discussion relative to the inventory, but that they are being worked through. Transport emissions are dominated by on-road emissions, ~2% for gasoline, >3% for diesel. Montana DOT has agreed to provide refined estimates and growth rates for VMT growth. Questions arose about insurer differentiations based on emissions, and on biofuels' potential contributions and availability. Mr. Lem indicated that these matters would be considered by the TLU TWG as part of reviewing the catalog of states' actions. Mr. Boyer noted that the inventory/forecast review and revision effort in TLU was proceeding effectively.
- d. Agriculture, Forestry, and Waste (AFW) – Steve Roe reviewed the Agriculture and Forestry Inventory and Forecast. Plum Creek will be providing additional information. Several questions came up to better understand how the figures were arrived at and what they meant. TWG members offered several additional contacts and sources for additional, Montana-specific data. Other questions related to the forest character (e.g., timber vs. biomass). Members pointed out that if these numbers are correct, Montana's net emissions may be negative at this time (i.e., that Montana is currently a net carbon sink). Richard Opper pointed out that while this may be good news for Montana, the purpose of the CCAC is to work toward reducing emissions, not just netting out positively. The Waste Management Inventory was similarly reviewed and provoked some input from CCAC members. CCS cautioned that the forest carbon numbers may be subject to very significant changes based on additional work by the US Forest Service to normalize the most recent inventory effort with those preceding it due to major changes in data collection methods.

- e. Black Carbon - Steve Roe reviewed estimates for black carbon emissions, which appear to equate to ~5-10% of total Montana GHG forcing emissions. The largest contribution comes from diesels. These emissions are likely to decline as new federal diesel fuel and engine standards penetrate the fleet. A question arose as to potential mileage decrement from these improvements, and whether it could in turn increase emissions.

## 7. Review of the Catalog of States Actions.

- a. Energy Supply (ES) – Tim Gregori asked about the exact meaning of “demand side management,” and specifically where it belongs in terms of general categories (e.g., ES-5? RCI?) The question of whether nuclear power should be kept on the list also arose. Gloria Flora asked about whether distributed generation was on the list, due to its potentially greater efficiency (by virtue of lower line losses) as well as other benefits (e.g., security). CCAC members also expressed special interest in demand-side management, utilities’ authority to decline hookups, concerns about double counting of reductions, among other issues.
- b. Residential, Commercial, and Industrial (RCI) – Steve Loken raised the concern that conservation should be built into planning for new generation, and that Integrated Resource Planning is meant to address both the supply and demand issues. Lazarus indicated that RCI-1 is meant to address many of the issues associated with conservation and energy efficiency. Loken also mentioned the idea of a surcharge for large homes being hooked up to the grid. Lazarus asked that the policy idea be developed further for possible inclusion under RCI-5.4 or 5.5. Advanced metering and time-of-use rates also came up in this discussion, as did the need for incentives and/or regulations for rented properties (under RCI-9.2). Mobile homes were specifically mentioned, with the idea that programs were potentially needed to help low income people get into more efficient structures. Gloria Flora noted that state agencies’ own emissions should be adhere to the same goals and policies as other parties in the RCI sectors.
- c. Transportation and Land Use (TLU) – In response to a question, Mr. Lem indicated that hybrid vehicles are implicitly included under multiple options that incentivize fuel efficient vehicles. CCAC members also raised the possibility of other options, including driver education and training on efficient driving methods; anti-idling for non-commercial vehicles; fleet conversion to low-emission fuels like biodiesel or hydrogen; maintaining roadless lands (under TLU-2.1); roundabouts vs. intersections; discriminatory pricing for gas guzzlers; tax credits for low- or zero-emission vehicles; incentives for hydrogen vehicles and efficient diesel vehicles; improvements to freight and off-road vehicles; and possible disincentives for non-essential or inefficient equipment.

- d. Agriculture, Forestry, and Waste (AFW) – Steve Roe reviewed the Ag, Forestry, and Waste Catalog with the CCAC. The CCAC added comments on several options and new options for consideration. New options included the establishment of windbreaks (under the AFW-3 Soil Carbon Management category; but refers to increases in both above and below ground carbon). Also, under the same category, an option to support Weed Management Programs was added (potential for lower above and below ground carbon in areas where weeds such as knapweed have become established). Under group AFW-9 (Waste Management Strategies), an option for Solid Waste Pricing Programs was added (to encourage recycling/reduce waste generation).
8. Members of the public were invited to make comments and raise questions, and members of the CCAC were invited to make any related announcements.
  - a. Public Input – Steve Eckels, a Kalispell citizen, indicated that a local group was keeping a report card on air quality in Kalispell and would appreciate input and suggestions from members of the CCAC or audience. A local teacher also suggested awards for community-level efforts to reduce carbon footprints. Local arts groups could be involved in providing these awards. The need for additional high school education in ecology was also cited. Additional marketing efforts were recommended to increase public awareness of projects with positive GHG outcomes (e.g., through TV advertising, etc.).
  - b. Web Links – Members of the public and the CCAC indicated a desire to have additional events and resources linked to the CCAC effort’s website. Several specific ones were identified and recorded by Lisa Peterson.
9. CCAC members were reminded that the next meeting would be held on December 14, 2006 in Billings, MT at the Northern Plains Resource Council headquarters. The meeting was adjourned.