

WICCI Advisory Committee Meeting

Tuesday May 25, 2010
Pyle Center, UW-Madison
12:00 PM

ATTENDANCE

Members

- Spencer Black
- Esteban Chiriboga
- Vicki Elkin
- Eric Guelker (for Kathy Lipp)
- John Edelblute
- Linda Hodorff
- Kris Krause
- Bob Krumenaker
- Mark Miller
- Erin O'Brien
- Gary Radloff
- Keith Reopelle
- Tom Sear
- Rick Stadelman
- Patricia Trainer
- Nancy Turyk
- Curt Witynski
- Joy Zedler

Staff and Guests

- Craig Anderson
- Tim Asplund
- Carolyn Betz
- Bill Bland
- Mel Bromberg
- Alison Coulson
- Kevin Gibbons
- Lewis Gilbert
- Mary Hamel
- David Hart
- Sarah Herrick
- Jim Hurley
- Chris Kucharik
- John Kutzbach
- Dick Lathrop
- David Liebl
- John Magnuson
- Mike Meyer
- Matthew Mitro
- Margaret Mooney
- Pete Nowak
- Steve Pomplun
- Zara Scharf
- Jack Sullivan
- Bill Walker
- David Webb
- John Young

ABSENT MEMBERS

- Lauren Azar
- Sean Dilweg
- Frank Ericson
- Ken Genskow
- Steve Hiniker
- John Imes
- Rob Krieghoff
- Paul Linzmeyer
- Shelly Mayer
- George Meyer
- Mary Patzlaff
- Robert Rogers
- Tommye Schneider
- Aileen Switzer
- Edward Wilusz
- Ned Zuelsdorff

MINUTES

[9:30] Meeting called to order by Lewis Gilbert.

Introductions and Announcements

Lewis Gilbert reviewed the agenda and flow of the day's events.

Advisory Committee members introduced themselves and the organizations that they represent.

Lewis Gilbert recognized Focus on Energy for the program's contributions to WICCI. He also discussed the history and progress of WICCI, starting as a startup organization, acquiring funding, supporting climate assessments, and continuing to foster impacts assessments. He reviewed the funding programs and various proposals that different groups within WICCI have submitted to review the potential sources that are available to WICCI.

Dr. Gilbert went on to briefly review the difference between mitigation and adaptation and the institutions that are relevant to those activities.

Federal Climate Change Legislation Overview

Gary Radloff from the Wisconsin Bioenergy Initiative distributed a handout that reviewed policy implications of federal bills related to climate change mitigation and greenhouse gas emissions reductions, focusing on the Kerry-Lieberman, the Obama Proposal, and Waxman-Markey.

He gave an overview of emissions trends before reviewing the handout and key themes in the Kerry-Lieberman bill. The emissions caps of the proposed legislation start in 2013 and will focus on energy production and transportation, which will lead to the regulation of about 7,500 entities. According to the bill, large fuel purchasers and distributors would have to purchase carbon permits from an auction drawn from a limited pool. These permits could not be traded. There are two billion tons of offsets. 43% of total capped emissions can be met with offsets, rather than permits, starting in 2013.

By 2043 all capped emissions can be met with offsets. Gary Radloff said that there are certain concessions for agriculture, making the bill "ag-friendly." While the EPA will be the main federal body in charge of enforcing the provisions of the bill, the USDA will be responsible for some of the domestic offsets. Gary Radloff noted that there are no state or regional programs.

There are nuclear provisions within the bill, including a \$54 billion federal loan guarantee. There are also some subsidies for carbon capture and sequestration at coal plants. In

terms of allowance allocation, 82% goes to either consumers or public purposes, and about 18% will be directed toward private industry.

He noted that the Waxman-Markey bill has passed the House of Representatives, but the Senate still has to pass a bill.

Gary Radloff concluded that he thinks that the bill is a good first step in regulating greenhouse gas emissions. He then accepted questions from Advisory Committee members and guests. Attendees discussed how the bill relates to the UN convention in Copenhagen, as well as the political climate that the proposed legislation is passing through. Bob Krumenaker noted that the Waxman-Markey bill is "dead," since people do not think that it can pass through the Senate.

Lewis Gilbert concluded the discussion by talking about how these developments relate to adaptation, noting that while these legislative developments will be important to the future of climate change mitigation, societies will have to adapt to changing climate conditions for many decades to come.

Update on WICCI Assessment Report

David Webb reviewed the progress of the different groups within WICCI that have been compiling sections for the assessment report. The assessment is scheduled to be published and released by October 2010. He discussed the role of different WICCI bodies involved. The working groups have been submitting draft assessments that related to their sectors and areas; Science Council members have been reviewing these drafts; and Elizabeth Katt-Reinders has been responsible for compiling and editing these reports, as well as writing the draft of the overall assessment.

He said that the three main parts are (1) the climate change assessment, (2) the working group reports, and (3) future activities and developments. David Webb added that the climate change bills being considered all include requirements that states have climate change adaptation plans in place to receive certain funding items. He said that the assessment report will be the scientific foundation for the State of Wisconsin to write such a plan.

Lewis Gilbert addressed questions and discussed the timeline and relevance of the report to different levels of government and organizations. After a discussion of the audience of the report, Lewis Gilbert noted that, following the publication of the report, WICCI members will distribute the assessment report to local and state decision makers and spend time engaging with them to help them understand the report and its possible implications for policy and planning.

[10:50] Short Break

BREAKOUT SESSIONS

There were three breakout sessions before the lunch break. The minutes will reflect the questions that participants posed to the presenters.

Agriculture and Soil Conservation

Participants asked if there is comparable research being conducted within the dairy industry. Pete Nowak said that dairy science researchers intend to explore those themes. Bill Bland said that the College of Agricultural and Life Sciences (CAL S) at UW-Madison has good models on dairy productivity under climate change.

Gary Radloff asked presenters if the USDA research on offsets could be a resource. People noted that the county-level data that the USDA provides is not sufficient. John Young noted that new voluntary network for precipitation measurements has been established. Pete Nowak noted that these data collection activities should be listed as one of the adaptation recommendations. He noted that distributed data collection is especially applicable to agriculture since managers often require data from places where there are not many people available to collect that data, due to low population densities in rural areas.

John Magnuson noted that temperature drives evaporation and asked presenters what would be the long term effects if evaporation begins to overtake increases in precipitation. Pete Nowak and Bill Bland said that there is currently a gap in the scientific understanding of evapotranspiration and how it is affected by climate change. In other words, we do not have a good answer yet.

Bill Walker asked if all of the changes that were presented fall within known conditions somewhere (southern Illinois, for example). He asked if there would be a boundary condition in the future, such that sectors in the state would “hit a wall” and have to do something radically different from what is being done in different areas of the country or globe. Presenters noted that it is not clear. They could foresee difficulties if the state were to experience extreme events, such as extremely hot, dry sustained periods.

Rick Stadelman posed that farmers make decisions based on markets and economics and wondered how these main drivers of decisions will be affected as the climate changes. Pete Nowak said that wide variability is problematic. For example, corn was planted earlier in 2010 than at any other time in Wisconsin’s history. He added that there are currently no hybrids available in the state that have been bred for a 105-day growing season, since the average has been 90 days.

John Magnuson said that it might be useful to at least be able to say something about the frequency of variability in climate data, so that WICCI members can communicate with the agriculture communities of Wisconsin. John Young said that all the data is about probabilities. Precipitation is not projected to change a lot in overall amounts, though how it falls could change. Temperature increases is the big issue for productivity, though the state has not yet seen major summer temperature increases. That could change, according to some of the models.

Coldwater Fish, Forestry, Plants & Natural Communities, and Wildlife

Bob Krumenaker asked questions about how the findings of the working group will affect management decisions at the ground level, and he and Mike Meyer discussed this topic. Mike Meyer stated that managers will have to use longer time frames to make decisions.

Joy Zedler asked Matt Mitro (Coldwater Fish & Fisheries WG) how the group defines “stream restoration,” and presenters engaged in a discussion about this topic. Nancy Turyk asked him how nutrient loading and human land use patterns are being addressed.

Erin O'Brien noted that there is a lot of overlap among the groups and asked how they are working together. Speakers said that they are beginning to work with one another, and these assessments are allowing the groups to meet with one another.

John Edelblute of the Wisconsin Conservation Congress asked about musky populations since those fish are important to tourism and the economy of the state. Matt Mitro said that the working group is currently focusing on coldwater species since they are the most vulnerable, and future assessments will address coolwater and warmwater species. Mike Meyer noted that white-tailed deer populations, which are economically important within the state, will likely do well in a warmer climate.

Keith Reopelle asked if the Coldwater Fish & Fisheries Working Group has engaged with Trout Unlimited and noted that he thinks that these assessments should focus on how these changes will affect the everyday lives of the people of Wisconsin.

Mike Meyer and Nancy Turyk discussed how important thorough monitoring and research will be to all of these efforts and to informing the development of adaptation strategies. Nancy Turyk of the Citizen-Based Monitoring Network of Wisconsin said that citizen monitors want to be sure that the data that they are collecting will be useful to scientists and managers, especially since there are many government entities and outside organizations involved in data analysis and management. Due to this desire to make a difference, she suggested that working groups engage with these groups, let them know which classes of data would be most useful for them, and set up a monitoring structure for these citizens to work under.

John Edelblute said that the members of the Wisconsin Conservation Congress are mixed in their beliefs of the human causes of climate change, and they have not reached consensus about what to do about climate change mitigation and adaptation efforts.

Joy Zedler noted that she believes that the most severe and visible impacts of climate change will be on invasive species, and citizens will likely see more invasive species throughout Wisconsin landscapes. She also noted that stream conservation and biodiversity conservation are potentially at odds since the invasive reed canary grass controls nutrient flows, yet does not foster native plant and wildlife populations.

Water Resources, Coastal Communities, and Stormwater

Margaret Mooney urged the groups to try to avoid statements like “We can’t link this to global climate change.” She said that negative statements might turn people away from considering climate change. She suggested that working group members use simpler, stronger statements that can be made with certainty.

Kris Krause noted that a very good discussion about uncertainty lends a lot of credibility to conclusions. Her biggest frustrations with the Governor’s Task Force on Global Warming

are that they mentioned the need for additional data and continued data collection, but these data requirements are not stressed in the recommendations. She hopes that WICCI can emphasize the great importance of monitoring into the future.

Mel Bromberg noted that an overarching theme of the presentations is the infrastructure surrounding water issues. The breakdown of the infrastructure is important to water resources management. She asked if there would be a subchapter in the Assessment Report on the importance of infrastructure. She thought that the report would benefit from such a discussion.

Esteban Chiriboga noted that people presenting the climate trends and projections can help instill confidence in projections by playing up the fact that the existing data (trends) are similar to the future projections.

Tom Sear asked WICCI presenters to suggest to managers and decision-makers to consider new design standards. Planning measures should focus on three-weeks or one-month events when discussing new design standards.

Mark Miller noted that moving towards resilience (versus focusing on resistance) is a good thing. He was not sure if this concept has infiltrated engineering and design schools, but he opined that this should become part of training.

Kris Krause added that timing is important. New standards for sewage treatment plans require upgrades or moving of plants. It would be helpful if local communities would be given the choice.

[12:35] Break for Lunch

Group Discussion

Lewis Gilbert opened the session and asked Advisory Committee members to introduce themselves and discuss how the organizations, sectors, and areas that they represent are thinking about and addressing adaptation. Highlights:

- Rick Stadelman discussed the political difficulties addressing multi-year climate change adaptation strategies since political terms and constituency concerns are focused on one- or two-year time scales. Messages concerning precipitation might strike home in parts of state with a lot of recent flooding. Towns and most local officials are worried about meeting the current year budget.
- Keith Reopelle gave a brief overview of Clean Wisconsin's advocacy efforts to foster climate change mitigation and how those efforts relate to adaptation. We are well aware that there is a cost to the impacts of climate change as well. Most of Clean Wisconsin's discussions are focused on telling some of the stories and figuring out what some of the impacts will mean in terms of cost for communities and other factors. People within the organization are trying to use WICCI research to estimate the costs of impacts to encourage investing in long-term adaptation strategies.
- Gary Radloff discussed the Wisconsin Bioenergy Initiative's plans to engage with many citizens and groups throughout the state to acquire input and information, as

well as the group's attempts to develop systems views of the issues involved. They want to engage public to hear what they are thinking about the issues and identify priority areas for research. He said that system-wide approaches are essential, and one way to tie things together is to incorporate ecosystem benefits into land-use policy.

- Kris Krause discussed the efforts that We Energies has made to reduce greenhouse gas emissions and noted that those reductions will not be counted if the proposed bills are passed as they have been drafted. She said that it has been difficult for them to project future costs and benefits, and We Energies has had to hire an attorney in Washington, DC to interpret how the proposed bills will affect their company. However, it continues to be difficult plan for the future. She emphasized the need for data collection and continuing to update current datasets.
- Nancy Turyk discussed the structure of citizen-based monitoring programs, noting that acquiring quality data is a large undertaking, requiring extensive planning. She said that presentations and discussions highlight areas where citizens can fill some of the data gaps in observations over time and could also be part of an outreach effort. They could also help to ask questions that are not currently being asked.
- Wisconsin State Senator Mark Miller, Chair of Senate Environment Committee, said that there has been an erosion of public confidence of the veracity of climate change research, mostly along political lines. He said that this divide makes passing effective legislation quite difficult, which is one reason why the recent climate bill did not pass. He said that WICCI's focus on adaptation is a new perspective that he welcomes. He looks forward to bring the information from WICCI to decision makers at the Capitol.
- Linda Hodorff (Second Look Holsteins and Professional Dairy Producers of Wisconsin) said that farmers are quite interested in the impacts of climate change. She said that farmers would like to know how the agriculture industry can improve their land-use practices to mitigate the negative impacts that they have on the land and neighboring communities. She identified some key challenges the dairy industry: (1) How can they do a better job of explaining the things that they do? (2) Networking with organizations like WICCI and other organizations is key to sharing information. (3) Farmers don't think much about long term climate, more day-to-day.
- Curt Witynski noted that there is not a lot of public dialogue regarding climate change adaptation and said that it will be important for WICCI to bring data and results regarding stormwater management to local managers and DNR officials, and he said that unless there is public "buy in," WICCI members will find it difficult to affect real change.
- Vicki Elkin of DATCP said that the Land and Water Resources Bureau of DATCP is the only group tracking climate change, and it is clear that these changes will affect all aspects of the agency's activities. She looks forward to receiving the assessment and bringing it to different parts of the agency, such as sectors addressing food security and animal health.
- Erin O'Brien of the Wisconsin Wetlands Association said that before WICCI was formed, WWA staff and members only had questions about the impacts of climate change on wetlands. Currently, sees promise in WICCI undertaking and expressed

interest in (1) deciding how to allocate resources to conserve and manage Wisconsin's wetlands and (2) researching the roles that wetlands play in local communities' resilience to climate change. She said that one of their key data needs is an understanding of research to quantify the contributions of the role that wetlands play, as well as costs and benefits of wetland restoration solutions compared with other solutions to climate change. She said that a major goal of her involvement in WICCI is to increase their community's engagement in climate change adaptation issues.

- Patricia Trainer of the Wisconsin Department of Transportation (WDoT) said that many people at the WDoT are concerned with the economic impacts of emissions reduction legislation and how that will affect WDoT revenue from the gas tax, which is used for highway construction and maintenance. She said that WDoT officials are struggling to figure out how to address climate change mitigation and adaptation in their plans. She mentioned some example questions that people have been considering: How should they choose which road materials to use? What should managers do with the soil and plant matter left over after plowing the roads? How should WDoT help the counties prepare to shovel snow or salt for ice? She also mentioned considering improving resilience, and she noted that maps of localized climate change are very important for local managers. She added that WDoT is also building partnerships with different groups, and she sees this as critical in the years to come.
- John Edelblute noted that over half of the members of the Wisconsin Conservation Congress (an elected body) do not believe in climate change. He said that he thinks that people must start with educating their membership so that people start to consider changes over decades, rather than only discussing weather changes from year to year. He hopes that members can broaden their perspectives of the issues involved.
- Tom Sear of the Wisconsin Association for Floodplain, Stormwater & Coastal Management discussed how stormwater managers have adapted to climate change. He noted the importance of water course rehabilitation in Milwaukee. Efforts such as these could be considered climate change adaptation measures. He said that there are many opportunities that can come from water course rehabilitation, and they fall in line with the goals of WICCI. He said that infrastructure design evaluations should be based on three- or four-week flooding events, rather than what they are currently based on.
- Gary Radloff noted that he sees many flood management synergies, such as road/transport design, wetlands, and floodplain management.

Lewis Gilbert opened the floor for discussion among members. He noted that there are many cross-cutting issues and potential linkages, such as wetlands, management of streams, etc. Rick Stadelman noted that many people have mentioned data collection needs, and he is wondering how those needs are being recorded.

Data Needs and Collection

Lewis Gilbert asked some other WICCI members for comments to guide the discussion about data needs.

John Magnuson noted that in the first Advisory Committee meeting there was confusion of the difference between mitigation and adaptation, and that he is pleased to see that attending members currently have much to say about adaptation and are asserting their sectors' needs in this realm.

Dick Lathrop discussed the value of the upcoming assessment report in building momentum and gathering funding for the identified research needs.

Lewis Gilbert then asked Advisory Committee members to discuss their data needs, noting that WICCI is not a data-collection organization, per se. Kris Krause noted that the questions currently being asked of Advisory Committee members are better focused and directed, so she has found it easier to be an active participant. She said that it may be most useful to identify data that is most relevant to the assessments that WICCI working groups have been working on. She said that she would like to see better resource mapping that compiles many different layers of data that cannot currently be found in one location.

Senator Mark Miller and Kris Krause noted that it has been difficult and frustrating to acquire data from different government bodies throughout the state.

Gary Radloff said that state and federal agencies have been huge data repositories for long-term monitoring and research, but these budgets are often the first to be cut. He noted that some useful data that had been compiled in the past is no longer being compiled. He said that public-private partnerships may be quite important to building more robust datasets that may not be being collected currently. He noted that before identifying datasets, people should consider what questions people would like to ask of the data.

John Kutzbach, a UW-Madison climate scientist and member of the Science Council, noted that the Wisconsin State Climatology Office is a good source of climate data. He said that listening to the participants has led him to better understand the importance of *derived* data that could be acquired from current models.

David Hart, GIS Specialist with Wisconsin Sea Grant, noted that he has been working on a coastal communities atlas that will compile data relating to Wisconsin coastal areas. He noted that it may be useful to develop a Wisconsin climate atlas that would be a repository for climate data throughout the state.

Jack Sullivan said that he was concerned how DNR could work with the Wisconsin Conservation Congress, especially since they serve an important advisory role in the state government. He said that WICCI needs to understand how to begin the conversation among Wisconsin communities to talk about how to adapt to climate change.

Other highlights of data requests:

- Snow vs. ice events
- Multi-day rain events
- Resource mapping

- Economic impacts (e.g. amount of damage done by flooding events over time, flooding insurance rates over time, etc.)
- GAP Analysis (the role of citizen scientists and which areas need to be filled)

Agenda Items for Fall Advisory Committee Meeting

Lewis Gilbert asked if there were issues that people wanted to discuss.

- Report from Operations and Outreach Unit
- Discussion of Reflections and Next Steps following the Publication of the Report
- In-depth Review of Some Working Group Reports

Participants were enthusiastic about hearing more about outreach activities. Keith Reopelle noted that the activities of the working groups and the Advisory Committee should be synced better so that the Advisory Committee can better contribute to developing processes, messaging, outreach, science, etc. before critical decisions have been made. Participants generally wanted to hear about *actionable* results from the climate assessments. Keith Reopelle noted that WICCI Outreach Committee members should engage with the Wisconsin Climate Change Action Initiative since their main thrust is marketing and education.

John Edelblute noted that he will try to start a climate change committee on the Wisconsin Conservation Congress.

[3:00] Meeting Adjourned

APPENDIX

Meeting Agenda – May 25, 2010

WICCI Advisory Committee Meeting

9:00 a.m. – 3:00 p.m.
Pyle Center, UW-Madison

- 9:00 a.m. Informal Conversation and Refreshments
- 9:30 a.m. Introductions and Announcements (Lewis Gilbert, Nelson Institute)
- 10:00 a.m. Federal Climate Change Legislation Overview (Gary Radloff, WI Bioenergy Initiative)
- 10:30 a.m. Update on WICCI Assessment Report (David Webb, Wisconsin DNR)
- 10:50 a.m. Break
- 11:00 a.m. Working Group Presentations/Feedback Breakout Sessions
- Agriculture and Soil Conservation (Room 217)
 - Chris Kucharik, Bill Bland
 - Coastal Communities, Stormwater and Water Resources (Room 317)
 - David Hart, David Liebl, Tim Asplund
 - Coldwater Fish, Forestry, Plants & Natural Communities and Wildlife (Room 325/326)
 - Matthew Mitro, Sarah Herrick, Craig Anderson, Mike Meyer
- 12:30 p.m. Lunch
- 1:15 p.m. Group Discussion:
- What kinds of conversations and/or actions are happening at your organization regarding climate change?
 - What knowledge and/or resources do you need to address climate change and adaptation in your organization?
- 2:45 p.m. Closing Comments & Request for Agenda Items for Next Meeting
- 3:00 p.m. Adjourn (Optional Social Hour to Follow)