DRAFT

Meeting Minutes and notes

Environmental Effects Subcommittee
Spring meeting, March 23, 23, 2004
Point Reyes

Research, Projects, and Outreach

Outreach

Mercury: New brochure
David Gay presented a mock-up for a booklet intended to "sell" the MDN to state and regional air quality managers. The committee commended the work making a few general suggestions particularly regarding length and wordiness.
Action: Each member present is to review the mock-up and send comments and suggestions to David by the first week in April. David will work with the comments and present a more completed version by the Executive Comm. Meeting in May or June.

Web forum/list server
Continued discussion from Joint subcommittee meeting. The ability to have a weekly summary rather than real time messages was recommended. There appeared to be good support among the Joint subcommittee to move forward, with some remaining questions regarding who would access the site and how the site would be used. Ultimately data users, operators and other interested folks will be contacted via e-mail for notification of the site availability. It was recognized both in sub- and joint committee that use and application may change or not be quite as originally envisioned
Action: Bob Larson, John Sherwell and Rick Artz will assemble a test page for further evaluation. The chair recommends that EES participate as beta-testers before release. (OK, other subcommittees can come play too)

NADP outreach materials geared toward regional organizations.
This issue was brought forward during the DC meeting. The approach discussed was an interactive CD that would provide information and answer questions regarding both NTN and MDN network and how they can benefit regional air quality management districts. A secondary audience including Fish and Wildlife, Habitat Protection Organizations and organizations focused on a variety of charismatic species was suggested. The purpose is to advance the understanding that atmospheric deposition effects begins with the very bottom of the food chain ultimately impacting species apparently far removed from soil nutrient effects. The US Climate Reference Network CD created by NOAA was recommended as a model
Action: Maggie Kerchner will send a copy of the NOAA CD to folks attending the meeting (done). Nicholas McMillian will begin pulling ideas together and develop an approach for further discussion during the fall meeting.

Moving toward total N-deposition: Suggestions for speakers and topics for the fall meeting.
Gary Lear, Cari Furiness joined the subcommittee meeting for discussion of potential session topics addressing the policy and science of deposition processes not captured by NADP,

including nutrient, acidity and mercury. The current plan is to use invitations for oral presentations and call for posters for volunteered presentation, with the caveat that the authors of any particularly interesting poster abstracts could be asked to give oral presentations.
Action: All committee members are requested to send potential speaker names and area of expertise (both science and policy) to Cari and Gary who are organizing the sessions. In particular, if you can think of any folks from the New England and Eastern Canadian who are not necessarily active members in NADP.

Research

Mercury: Investigating dry deposition
Update from John Sherwell. The instruments and experimental design for evaluating dry deposition methods are more or less in place, but the experiments have not begun. John will keep us posted

Phosphorous – improved sensitivity with ICP methods
Discussion with Karen Harlin. The CAL is continuing to look at alternative, and more sensitive techniques for measuring phosphorous in rain samples.
Action: We asked Karen to keep the subcommittee informed on progress and will provide input as requested.

Total nitrogen analysis
Discussion with Karen Harlin. The presence or importance of organic nitrogen in rain samples continues to be a question. It is scientifically unresolved whether deposition of organic N is subsequently modified and therefore measured as other compounds, or whether it might be an artifact, or whether it is due to contamination of debris. Karen stated that she does not current have the resources to tackle this study relative to NTN, altho ugh the equipment and methods have been investigated and are in place.
Action: The committee is requested to search for extra-mural funding to support a more systematic study that would address the importance of organic N under the NTN protocols. Maggie Kerchner requested a cost analysis for such a project from the CAL that will aid in finding a funding source.

Plant and animal disease agent in precipitation: Sudden Oak Death as a test organism
Information and update from Pam Padgett. The National program director, Pat Shea is still quite interested in pursuing the project, but has been unsuccessful in location a certified lab with the time to do the analysis.
Action: Pam will continue to work with Pat Shea and look into the possibility of incorporating one of the Plant Pathologists on the Univ. of Calif, Riverside campus.

Projects

Data mining project: Air quality related values (AQRV's) and the National Critical Loads effort. Update from Pam Padgett. The draft 1-page (+) document was handed out for comment. It was generally agreed that the cause and effect of terrestrial ecosystem response to deposition are poorly characterized, therefore this project is important in that it will help provide

information of both a regional and national scale. However, the scope and data needs are enormous. John Sherwell introduced the existence and use of new "data mining" programs design to assist in such an effort. "Rulequest" was a program that had been used his group for regional air issues in Md. Further discussion with Jill Baron (3/29/2004) also suggested that application of these programs might make the project feasible. A conversation with Ellen Porter suggested that the Forest Service's FIA plot database might be a good place to start. Formation of a steering committee comprised of well-recognized scientists was suggested and accepted and a proposal to set-up a workshop to start formulating the project was also accepted.
Action: The subcommittee with work with the Program office to find funding to host a workshop and Pam will continue to work on selling the project to the Federal Land Managers, looking for agency buy-in and funding.

Network design – gap analysis/range of influence
Both the NTN and MDN networks serve several research communities not in the original design plan. The sighting criteria debates have highlighted this. All sights were originally intended to represent the regional air shed and therefore were located away from local influences. Over the last 25 years urbanization, and other land use shifts have altered the network so that several are suburban at best. For some research and even regulatory questions this has been beneficial. So the question is: given different needs for these data, where are the gaps in samplers and what would and ideal network design look like? In the discussion the idea emerged that perhaps more than 1 design would be appropriate given the variety of data needs. It was agreed that we would begin with the 1985 network plan and grow from there.
Action: Chris Lehmann would send copies of the original 1985 document for perusal by interested subcommittee members. Chris and Maggie would begin discussing an approach to Project proposal discussion, Maggie Kerchner and Chris Lehmann

Other:

Conference call capability – how do we use it effectively?
We thank Kathy and the Program office for getting conference call capabilities. The fall meeting agenda will be arranged so that the key topics and issues are grouped at a specific time enabling non-attendees to call in, but not remain attached to the phone for more than an hour or 2.

What's in a name? Proposal to change the subcommittee's title.
Rationale: this is the committee that is charged with the most outreach responsibility. It is also the committee with the greatest commitment to understanding biological responses in addition to fundamental changes in air, soil and water. Therefore a title that is more reflective of these goals is appropriate. (Not to mention the importance of an acronym that spells something clever.) The 2 winners in the discussion were: Ecological Initiative, Environments Influence and Outreach (the EIEIO subcommittee) or Ecological Responses and Outreach Subcommittee (EROS). EROS, while perhaps controversial to some, seemed to spark the imagination of the subcommittee members present (plus a few hanger-oners). We will put it to a vote of the entire subcommittee and have a proposal for consideration at the Executive Comm. Meeting later this spring.