EROS NADP Spring Subcommittee Meeting

April 28, 2009

Updates and Reports:

Outreach Letters- Letters were sent to the site operators prior to fall meeting 2008, including 31 NRSP-3 members. Update on the number of attendance forthcoming after checking with program office. For the spring 2009 meeting, site operators from 7 states and 36 NRSP-3 members were notified. Several site operators from southern states attended. An evaluation will be made post spring-2009 meeting on the number of people attending both training and meeting to consider if we would like to continue sending letters.

Invitations will be sent to the northeast executive directors for the fall 2009 meeting from David Gay (program coordinator). Consider sending invitation along with "authorization letter" to NRSP-3 administrative advisor (Doug Buehler, Experiment Station Director at Michigan State). David Gay should get an email when the NRSP-3 members get authorization to attend a meeting. Coordinate the letters from David Gay and those that go out for authorization. Provide an information letter on NADP and funding opportunities available for training to those agricultural stations that host sites.

Invite executive directors to attend regional meeting since there is a percentage of their Hatch funds are taken off the top for funding NRSP-3 initiatives. This would provide an update for them to see what their funds are contributing to.

Offer a standing "agricultural participation" session at the fall meetings. When the "ammonia network" comes online, the outreach to the agricultural scientists will become even more important. Atmospheric impacts from agricultural operations and pending regulations will bring more attention to the NADP.

Creation of dry mercury deposition information sheet.-Open discussion on the information sheet format and layout (possibly adding a map of mercury fish advisories and estimates of dry deposition, quotes from outside agencies on the need for the program, do not specifically mention Tekran etc). Submit mark-ups to David Gay by June 1, 2009 so that the second draft will be available by July 1. The final version of the information sheet will be available at the fall 2009 meeting. Target audience is both state and federal policy personnel and government scientists involved in environmental issues. A suggestion was made to provide an example of products that may be available (graphs, numbers for atmospheric deposition of Hg in their state).

NADP website- Program office hired a second programmer and a lot of progress was made to website development. The new website is complete, but is not the public website http://nadpweb.sws.uiuc.edu/. Will go public after electronic rain gage operating issues are resolved and deposition data is processed. (See motion below in notes).

Suggestions for new website content include, a "topic of the day" or featured manuscript that utilizes NADP data and frequently updated content (forum discussion). Website marketing and use has grown over the past few years. Discussion ensued on how to better educate and distribute NADP information via the web. Do we need to tack on a coordination fee in order to hire someone to manage the website full time?

Fundraising potential for specific areas (i.e. education and outreach) could be an option, although it might be a one-time deal. This could be an outreach to participating Federal Agencies for \$5 to \$10K. For example, the year that the cooperative agreement extension comes up, additional funds could be added onto the contract agreement to cover the cost of the webmaster/developer. This would occur in the spring timeframe (April to June) for those agencies coming up. Another option is to include the task in the cooperative agreement is between CSREES and University of Illinois. Specific tasks would be added to cooperative agreement and would be expected to be completed by a scheduled date. The program coordinator felt that having the date on the contract could help push this through.

Work on NADP Kids Corner was postponed due to Frank McCormick's reassignment. USDA is still feeling pressure to highlight the 4H program. The Kids Corner concept needs a new champion and if new funding is available the idea will be re-visited. We could send a letter of intent for the USDA AFRI-Agricultural and Food Research Initiative to create a youth development program associated with NADP.

Information sheet for "Monitoring Climate Change" was circulated to EROS via David Gay.

EROS and **CLAD** Joint Subcommittee-

EPA's Acid Rain Program Progress Report Jan. 2009 (for 2007 data) was presented and includes the Adirondacks case study. This report compared NADP data (1989-1991 to 2005-2007 data) using 50 ueq/L as the cut-off or threshold value. The same basic approach was used for the US-Canada Air Quality Agreement. The next Acid Rain Program Progress Report will expand to the northeast and certain areas in the southeast. This has been used to measure program success. Report is also available at the EPA Air Markets website for 2007.

Critical loads workshops-a two day meeting in Ottawa, Canada discussing surface water and soils was discussed. Data needs and gaps within Canada were highlighted and a report was prepared. The report is to be distributed to the CLAD list-serve. Thresholds for soil and surface water-one of the key areas lacking was community structure measures and making the next steps between the threshold levels and impacts as you move up through the endpoints. Weathering rates had a lot of discussion and model limitations. Clay substrate model for Canada is difficult to apply to US. Jack Crosby spoke about surface water at the watershed level, f-factor for surface water modeling approach. Interest from Canada on forming a North American critical loads map.

International Critical Loads Workshop will be this fall in Europe. Theme will be on nitrogen deposition, critical loads, and biodiversity; regional and global scales; development of critical loads and how they are being applied in different parts of the world; and critical loads and climate change and policy decisions. The ICP-modeling and mapping group is on-board with this.

Incorporating critical loads results into the NAPAP report- State of science chapter in the report. This is the first time that "critical loads" will be mentioned in a NAPAP report. As this report moves to Congress it has to move through agency review (OMB) and there is a little bit of a risk that the term will be removed. The report is limited to published studies to include in the literature review. This will be completed by the end of the summer. In Title 9 of 1990 CAA, there is a description of the NAPAP report that deals with implementing the Acid Rain Program, costs and benefits, what further emissions reductions might be necessary to protect ecology. This information can be found in the Acid Rain Program Report, but EPA is restructuring to include into NAPAP report. Modeling exercise will be done with CMAQ to look at further reductions scenarios. These pieces will be put together by mid-fall. Depositional load is used instead of critical load in REA and critical limits or threshold values are known as "tipping points". Using the term adverse is also not included because the EPA administrator determines what is adverse.

Forest Service General Technical Report- Linda Pardo discussed the synthesis article on the state and knowledge of critical loads in U.S. The report is arranged by eco-regions and will have chapters on types of ecosystem response to nitrogen (empirical) including range of responses and comparison to critical loads in other regions. Focused is on different organisms than just forest including lichens. Report is in final review and will be available to CLAD.

Using critical loads as education and outreach (discussion) - Examples of products include the use of critical loads in EPA Acid Rain Program Progress Report and the NAPAP report for modeled deposition estimates from emissions reductions. One of the standard publications is the NADP "Nitrogen in the Nations Rain". This publication hasn't been updated in a while and could include critical loads concept. The EROS group could update the one-pager to include critical loads at the request of the CLAD group. The CLAD group does not currently have a one-pager information sheet. This could be included on the website and given out at the fall technical meeting. Pieces of existing verbiage are to be sent to and assembled by Tamara Blett (CLAD chair) and then sent to Andy Johnson (EROS chair) to work up through EROS together as a team. Draft for one-pager would need to run through executive committee prior to having the NADP logo on it. Draft could be presented to executive committee at the fall 2009 meeting.

Action item for EROS-to assist CLAD as described above.

Expanding outside of the nitrogen and sulfur issue? There is a report out on mercury impacts, but the CLAD group hasn't moved beyond N and S. Would the argument exist

that if you don't include Hg in as S impacts, does that mean that we really don't understand aspects of S entirely? Would this include other metals?

Discussion-Do we feel comfortable pushing a critical loads approach through the NADP? Will NADP get into TMDL development next? Would this be a conflict of interest? How will we convey the tie-in to the program without seeming like NADP is pushing a regulatory agenda? Will this cause site sponsors to drop out if it becomes a political issue?

Should focus on how you can use NADP data to develop critical loads data as opposed to NADP-CLAD modeling and going forth with a critical load.

Critical Loads Modeling Session at Fall 2009 NADP meeting- facilitate the sharing of models, models assumptions, data pertaining to calculating critical loads. Discussion will be an open forum to discuss current critical loads models, assumptions, data, and limitations and problems associated with them. How do we contribute to UNECE process? The online survey format "Survey Monkey" was suggested by Forest Service as a way of surveying critical loads researchers to coordinate information for UNECE. Jason Lynch (EPA) would like the results by the end of summer. The purpose of the meeting is to look at underlying assumptions and what it really means to regionalize the models. The desire to standardize the model would be discussed. What would be the US structure for standardization? How do various countries address this? How do you document the approach of using some regional models over areas that are different? How do you mandate spatial scale? Documentation framework as opposed to "this is the standardized form". At some point there has to be some coherence for bringing the results together. There has to be standardization in order for it to be used for program assessment tool. Different thresholds for different regions in order to achieve the same goal.

EROS Subcommittee Meeting April 29, 2009

Continued discussion on identifying sources or mechanisms for generating funds to help support an additional IT or webmaster/designer. A one-year or short-term source would "get us over the hump" until the program office reallocates funds. We could also assign a member of EROS to call the program office every few weeks or check on the status of the web site designer. Andy Johnson (EROS chair) to take on this assignment. Action Item #5 from the Spring 2008 Executive Meeting-Program Office "to commit to a schedule for the new website to be completed in order to publicly "go-live", that includes a prior review period by the subcommittees' membership which they will complete within 30 days." The general consensus from EROS is that this action item hasn't been fulfilled, although a new hire has made progress, he is leaving NADP and the "push" or "level of importance" hasn't been the level required to complete the task. In the action item, there was mention of a schedule, but without actual dates. Another source would be to ask the new director of the University Division for additional help from their IT department. Another source would be the "foundation" office at the University of Illinois. This would go for educational and outreach opportunities.

An additional task is to develop and re-design the "report on data access" form on the website. This is envisioned to be a "drop-down" box style that would prevent users to not type in pertinent information and still get data.

The main priority of the program office (PO) is to make the data available on the web (old website) within 6 months of receiving it. Currently, the PO is 7 months behind and the main focus of the IT developer has been on data management instead of developing the webpage. Program coordinator (David Gay) is going to suggest to Bob Larson that he wants to website to "go-live" by the summer budget advisory meeting.

Suggested motion for the Executive Committee:

Our motion is to make the new web site available for review by subcommittees for 30 days by August 1^{st} with a go-live date on or before the fall 2009 meeting.

Pam Pagdett (USFS) seconds the motion.

Open for discussion in EROS. David Gay (NADP) suggests that we change this schedule to be July 15th for the summer budget advisory meeting.

Our motion is for the program office to make the new web site available for final review by subcommittees on July 15^{th} for a 30 day review with a go-live date by September 1^{st} , 2009.

Second the motion as amended. Motion carried.

Can the program coordinator and program office make the decision to hire the web master or would this up to the budget advisory committee?

Second motion proposed by Maggie Kerchner (NOAA) to Executive Committee:

Motion that a strategy be developed by the program office for a permanent position (full-time or part-time) for a web master/web developer to be incorporated for the FY2010 budget.

Motion is seconded by Maggie Kerchner.

Motion carried.

Lake Tahoe is the proposed location for the spring 2010 program. The proposed theme is "Networking the Networks" with emphasis on inter-connecting the groups.

Report on data access via the NADP web:

Pam Padgett prepared a report on "who's using the data and what are they using it for?" Based on the report, precipitation data is the most used data from the website. The current questions asked for data access aren't adequate enough to capture the user affiliation. This report will provide us knowledge to determine if NADP's outreach efforts are reaching the desired audience. The number one use for this report is to help direct content on the website. NADP documents manuscripts that use NADP data and these can be found in Google Scholar. Program Director now has electronic archives of manuscripts.

Would EROS be charged with presenting user data-use on the web (ie. new publications using NADP data)? Do we want to have an RSS feed or a newsletter that you could sign up for? We would like to keep this topic on the agenda for the fall.

Roundtable Discussion-

Outreach efforts for the Program Director:

David Gay was charged by the executive committee to do more outreach activities. There is a desire to address the agricultural experiment stations and to develop a serious outreach program. There could be a small slide library or presentation(s) about the NADP program (generic template) that can be used to disseminate information. We need to develop the outreach program through EROS. David Gay has a few draft objectives that he will circulate via email.

Outreach objectives:

- -Increase membership
- -Increase data use by policy makers, scientists, and general public
- -Communicating stronger the linkage between NADP data and environmental impacts

Fall meeting topics-we can coordinate via conference calls.

•