

Minutes of the LTER Executive Board Meeting
Wednesday Sept. 20, 2006
YMCA of the Rockies, Estes Park, CO

John Magnuson called the meeting to order at 8:00 am. In attendance were D. Peters, S. Collins, M. Ohman, C. Hopkinson, M. Grove, S. Johnson, D. Reed, P. Groffman, B. Lyons, D. Henshaw, and R. Waide
Welcome

1. Approval of minutes

Minutes of the Polycom EB meeting on Sept. 8, 2006 were amended and approved unanimously by a voice vote.

2. Additions to agenda, questions

Magnuson requested additions to the agenda, of which there were none. The agenda was modified to insure that the highest priority items were discussed first.

3. Record keeping

Magnuson assigned members of the EB to prepare summaries of each of the agenda items discussed. The identity of the person summarizing each agenda item is shown in parenthesis after the agenda item.

4. Review procedures for chair election (Waide)

Waide presented an overview of the procedure for conducting the election for chair and answered questions. There was discussion about whether the EB should discuss the candidates themselves or whether such a discussion should be left to the SC. The consensus was not to discuss the merits of the candidates in the EB. Further discussion centered on whether the SC should discuss the merits of candidates given that only one of the two candidates would be present to answer any questions that arose. **Johnson moved and Collins seconded that there be no discussion of candidates prior to the election by the SC. The motion passed unanimously.**

5. Time and Place of Future Science Council meetings (Hopkinson)

The LNO has been holding discussions with MCM and PAL LTERs concerning the Science Council (SC) meeting scheduled for May 2007. The proposed dates are May 17-19, with travel on the 16th and 19th. The proposed schedule includes meeting a half-day on Saturday and traveling that afternoon. The EB

recommended that "Trends" be the theme of the meeting. Within the Trends theme, there are several proposed topics, each of which should be led so as to result in a synthetic scientific publication:

ENSO signals and responses (Ohman)
Responses to climate variability (Kratz)
People, land use and vegetation (Grove)
Disturbances (Lugo)
N fertilization (Collins)
Atmospheric chemistry (Driscoll)
State changes (Peters)

The writing team for the Planning Proposal will assemble during the meeting.

The SC will select an ad hoc science program committee to choose the science theme of future SC meetings. The SC will select this committee at the SC meeting 1 year in advance.

The EB confirmed the future slate of sites, which had been agreed upon previously by the Coordinating Committee.

2007- McMurdo (MCM) and Palmer (PAL) in Portland, OR
2008 – Baltimore Ecosystem Study (BES)
2009 – California Coastal Ecosystem (CCE)
2010 – Plum Island Estuary (PIE)
2011 – Moorea Coral Reef (MCR)
2012 – Georgia Coastal Ecosystem (GCE)

In the future, the EB will select the hosting LTER site for the SC meetings. The EB will notify the SC of future site selections, 2 years in advance of the meeting. The EB set April as the preferred meeting time, give or take a month pending local site conditions, etc. The LTER Network Office (LNO) will negotiate with sites for specific dates.

There was discussion concerning holding meetings over weekends. Grove indicated that government employees are not supposed to work on weekends. Groffman expressed concern for preserving family values and avoiding holding meetings over weekends. The sense of the EB was to try to hold meetings mid-week, allowing for occasional weekend overlap.

6. Communication of Executive Board, Science Council, LTER Network Office, LTER Sites, and NSF. (Ohman)

Magnuson outlined issues that exist now that the Science Council has been removed from day-to-day business. The principal problem is that the EB will now act as a filter for information to the SC, and we need to decide the appropriate

level of information to transmit. We need specific suggestions to create information channels that are open, not closed. One vehicle we can use is the Network Office web page and we should discuss others as well.

The following suggestions came out of the subsequent discussion:

- At every Science Council meeting, the chair should distribute minutes of Executive Board (EB) meetings to all members of the SC.
- We should have an annotated organizational chart on the web site. The different functions for different bodies should be specified; perhaps a one page description of each.
- We need to update web pages; ensure that the content is current.
- We should think carefully about making internal docs available; not all info should be publicly available.
- Information on the LNO is too far buried. We need this year's update; what the LNO is doing. Who is doing what.
- We should have links to projects that have been supported; highlights from research.

Magnuson requested ideas on how best to communicate with NSF. Our only direct contact is the annual meeting, plus we have series of emails. How informed do we want Henry Gholz to be (copies of EB minutes, Science Council minutes, planning grant, National Advisory Board)? How much of our day-to-day activities and those of the Science Council should be sent to Henry and to Jim Gosz, Penny Firth?

Henry Gholz joined the meeting and suggested meetings with NSF staff attending the ASM as well as follow up meetings in DC.

Gholz suggested that for NSF face-to-face meetings are the most important opportunities. We should not provide a lot of written materials but rather give them the highlights. Gholz and Baerwald need to be kept up but not swamped. Committee reports and interim reports are not appropriate. NSF is less interested in getting things partial or uncompleted material. James Collins had suggested that the EB chair be in regular phone contact with Gholz and that priorities and concerns of the LTER Network also be communicated to relevant others.

We also need to think about communication between LTER and other agencies.

How should we communicate as a network with the sites? Lots of information goes to lead PI's, but how much of this gets to investigators and graduate students is not clear?

The function of the e-mail aliases: lpi, site-exec (lead PI's plus governance body), and all_lter (everyone). A general consensus was that links to documents on the web page is preferable to e-mail attachments.

Suggestions on improving communications included:

Providing a link to documents on the web page is preferable to e-mail attachments.

Sites are responsible for updating their own e-mail lists and ensuring their validity. Waide will send a message asking sites to update the site-exec list.

On public page, a hierarchical structure of the LTER governance should be linked fairly high

Move LNO page to front

- Add accomplishments, links to submitted projects

- List of services

- Highlights for funded LNO projects

List of site responsibilities, prepared and sent to sites

Once a month e-mail to all_lter with list of links to key issues and documents

Magnuson tabled the discussion on just how communications will flow to "all" and to "site-exec" until the next EB Polycom meeting.

7. Show and discuss LTER Video (Waide)

See 14 below.

8. Finalize Announcement for post All Scientists Meeting (ASM) intersite proposals (Lyons)

Bob Waide presented a draft announcement for a proposal outlining the process and priorities for post ASM support by groups/individuals interested in pursuing inter-site projects and initiatives. It was acknowledged that even larger groups could only ask for the \$10K maximum. The Executive Board decided that the priority of projects should be "products", preferably publishable papers, followed by activities such as NCEAS synthesis grants, followed by a request for funds for a second meeting after a successful first meeting had taken place. Additionally, salary availability should be discouraged as a potential use of funds., that while these funds were not intended for a planning meeting, per se, meetings to plan inter-site experiments would be seriously considered and finally activities such as software tool development would be considered priorities. Bob Waide was to

wordsmith the document, produce a final copy and send it out to LTER folks as soon as possible after the ASM.

9. Review of LTER ad hoc and standing committees

This agenda item was not addressed because of the lack of time for an adequate discussion. The issue will be addressed in a videoconference in October.

10. Complete Planning Grant Proposal (Johnson)

John Magnuson: Discussion topics include options for the planning grant process, including EB and SC roles, ideas for governance for proposal, and the science plan under this process.

Scott Collins: Initiatives document (Integrative Science for Society and Environment; ISSE) has been created to recommend to NSF an infusion of funding for variety of needs and activities from Social, Geosciences, Biology and cyber info. The Initiative is 85% complete. This fall it will be sent to Henry Gholz, then to NSF, with endorsements from societies to follow. It will be presented to staffers on Hill - AERC coordinates meetings to inform Hill.

Next step will be to complete planning grant proposal which will present research ideas that could be funded from the ISSE. Many discussions will occur at ASM on topics for the proposal, integrated across disciplines and sites. The current task force is directing the process

Gholz: Delivery of the ISSE should be to the 3 Associate Directors at NSF and to Jim Collins, not to Henry only, Advisory Committee for Environmental Science and Education (ACERE) also.

Collins: All workshops at ASM, even ones that are not designated as planning grant workshops, should generate brief reports with planning grant in mind and submit to planning group.

A general discussion of size and potential membership in writing team followed.

Motion: Suggest to SC that they establish an ad-hoc writing team to report to SC to be co-chaired by Scott Collins and John Magnuson (as LTER Chair changes, the co-chair of the writing team will change to new PI).

EB has provided suggestions on potential members for co-chairs to select. SC individuals are encouraged to put names forward to Co-chairs in the next week. EB will approve final list of writing team names.

Site reps for proposal will generate specific research activities for programs which will go to writing team for inclusion in proposal. Existing proposal will be revised and shared with SC. Communication is important between writing team and SC.

Suggestions of membership for writing team should go to Collins and Magnuson within a week – team will be picked within 2 weeks of end of ASM, given that the SC approves.

Magnuson: The Governance committee addressed mechanisms for proposal funding, but since the Governance committee is no longer in existence these items will fall to EB. There are 4-5 models of governance for grant administration for this proposal.

Magnuson: Propose that Waide find someone to advise on pros and cons of various models. Find experts on 501.c.3 and NSF models (subs, collaborations, Cooperative Agreements)

Also, for CI – need examples of investments in CI that have lead to improvements in science. Hubbard brook and chemistry? Gage and acoustics?

11. How to jump start Science Council (Henshaw)

a. Science Council Meeting at All Scientists Meeting Agenda

Let the Science Council (SC) decide on the program for the spring meeting. The SC should consider the science theme and EB urges synthesis and cross-site themes. The Chairs of the planning grant proposal writing committee could generate the SC program, or an independent program committee would develop a program based on other issues apart from the planning grant. The final decision on science themes will be up to the SC.

The EB decided to put forth a science theme to the SC at the ASM meeting as a jump start in planning the spring meeting. The EB suggests an agenda where a proposal writing meeting and a science meeting are held in parallel. The writing team (approximately 12 members with John and Scott as co-chairs) would be part of the 52 participants. The meeting would be 2½ days (4 days total) and would include a ½ day field trip and a short 1-2 hour business meeting at the end of the meeting. A venue with 4 breakout rooms is needed.

Based on Deb's suggestion, the EB will recommend that the Trends project be used to generate science themes. Trends is introducing 7 thematic areas that are logically chosen as areas likely to produce publications or synthetic products. Discussions at ASM will select 3 areas to include as science themes at the spring meeting. The theme areas are:

ENSO signals and responses (Ohmann)
Responses to climate variability (Kratz)
People land use, and vegetation (Grove)
Disturbances (Lugo)
N fertilization (S. Collins)
Atmospheric chemistry (Driscoll)
State changes (Peters)

A program committee will be established with SC approval consisting of John Magnuson, Scott Collins, Deb Peters, and two others from Trends that Deb will recommend.

Discussion: Trends is a great concept idea. Choose topics where most sites could participate. Hold a plenary presentation early in the meeting to present each of the 3 Trends science themes and the planning grant proposal. These briefings might use 1-3 hours. A final version of the proposal draft should be presented. It is noted that Disturbance and N fertilization have been covered in past themes and published on the past.

The EB considered but rejected an alternate meeting plan that would include a ½ day discussion of the planning grant proposal and a day on a selected science theme. Chuck Hopkinson offered that by spring it will be a little too late in the proposal writing process to try to engage the entire Council, and that other themes should be considered. While a slightly shorter meeting may work better for people's schedules, the 2½ day meeting was favored by EB. An alternate theme suggested was planning with regard to the National Ecological Observatory Network (NEON).

Trends synthesis projects will compete for post-ASM funding.

EB will ask the Science Council (SC) to authorize a writing committee for preparation of the planning grant proposal.

b. Timing of Science Council (SC) meetings

A spring meeting is considered much more favorable than a summer meeting. The spring meeting does affect those with teaching responsibility. The May meeting works better for those teaching semesters, but may be too late for good conditions at some site venues. The April time period (give or take) is recommended as the best time for this meeting.

12. LTER Network Response to the possibility of a fixed LTER budget at 2008 levels.

This agenda item was not addressed because of lack of time.

13. National Ecological Observatory Network (NEON) information (Groffman)

Executive Board Comments on the new NEON Integrated Science and Education Plan (ISEP).

- The Executive Board drafted comments and sent them to NEON, Inc. These comments are included below.
- Our comments will become part of the minutes of the meeting that we had on September 8, 2006. When the minutes are distributed, our note will be included as an attachment.
- Once the NEON RFI is issued, should there be an LTER network response:
 - o Will the network submit a proposal?
 - o Will the network coordinate a response from multiple sites?
 - o Decision: We should be alert when the RFI comes out and then decide if we need to prepare a network response. Bob Waide and Deb Peters will consult with Bill Michener on this.

Brief statement from the LTER Executive Board on the revised NEON ISEP – September 14, 2006

In general, the LTER Executive Board was impressed with the revised NEON ISEP. We were particularly impressed with the fact that the new plan has more flexibility and more potential for interaction with LTER science than the earlier version. We were also heartened to see a stronger link between activities proposed for NEON and the NRC Grand Challenges in Environmental Sciences; this link is consistent with current LTER planning activity.

There is a strong sense that a lot of the infrastructure proposed in NEON could complement research that we hope to accomplish in the LTER network in a powerful way. The proposed infrastructure for the core sites, gradients, and airborne observatory could provide fundamental support for existing and future LTER activities. Any NEON gradients and experiments should be carefully designed to be complementary and supportive (and not duplicative) to existing LTER activity

Many LTER scientists have been involved with NEON from the beginning. We feel the new ISEP is a positive step, and we look forward to continuing to help NEON come into existence.

On page 74 concerning the creating NEON Partnerships, last sentence:

What is not said here is where these partners will obtain support to conduct the actual research. NEON by its nature externalizes the cost of the non-measurement aspects of the research.

We would like to offer the follow suggestions for your consideration in the final draft of the ISEP.

- It is unclear how positioning core sites on wild land will address Grand Challenge questions because many of the example questions require data or measurements from urban or interface areas. In addition, the document still contains references to core sites in urban areas. A more explicit link between the goals of measurements in core sites and measurements along gradients might help to clarify the link among the different NEON components.
- Organization of some studies, for examples, wildfire, hurricanes, drought, zebra mussel invasion, do not fit well into the climate domain model. This is obvious from Figure 3.1. This suggests a potential conflict between the sentinel and Grand Challenge roles of NEON. Additional wording should be added to explain how climatic or biotic phenomena are dealt with under the core site structure.
- The concept of transects/gradients and experiments is good. But the openendedness of these gradients and experiments leads to difficulties. With the description provided, there might be a moisture gradient in one domain, a land use gradient in another, a temperature gradient in a third, and a river continuum that crosses through tree more. This has some local or regional advantages. But what will connect this diversity of studies together to form a single, national observatory?
- The ISEP will yet undergo modifications by NSF, in part based on available funding. It is critical that the major elements of the plan be preserved. If they are not, subsequent versions of the plan may not be as well received. The balance between standardization and innovation is particularly subject to budgetary pressures.
- On page 69, it seems as though one of the goals of NEON should be to catalyze research that uses the facilities and open up dialog with various potential partners and funding agencies. Some of these partnerships may well be with state agencies or non-governmental organizations that manage land.

On page 78 the brief description of LTER is misleading. LTER is a long-term ecological research program funded by the National Science Foundation with 26 sites in the US, Puerto Rico, and Antarctica. Some 1200 researchers conduct site specific, intersite, and regional studies. The LTER provides both potential sites for the NEON infrastructure, users of the data streams from NEON sites and projects, and science partners especially on gradient and experimental studies.

14. Meet with Donata Renfrow on LTER video (Waide)

Bob Waide gave a short background on the context for the LTER video which stems from the LTER Network's general interest in sharing its accomplishments with both the scientific and lay communities. The production of a short video had been suggested as an effective means of promoting the LTER to the non-science community. Acting on this advice the LNO produced a video of the LTER Network's accomplishments. The project was done on a shoestring budget (~\$10 K) using existing footage. The video was intended for a broad audience that included foundations, politicians, and the general public. The major objectives of the video were to showcase the wide diversity of research encompassed by the LTER Network and to demonstrate how the results of this research were being incorporated into public policy.

The EB viewed the video and met with its producer and creator Donata Renfrow to discuss whether it appropriately captured the objectives that it set out to achieve. There was general approval by EB of the video and consensus that it displayed a good representation of the diversity of the Network. Suggestions for improvement included:

- Adding a small bit about the development/importance of cyber infrastructure within the network
- Changing the narrative so that it referred to LTER's contributions to "ecosystem based management" rather than "ecosystem management"
- Use of an updated map of the LTER that included all 26 sites, and increased exposure of the map in the film.
- Changing the credits at the beginning of the video to read that it was produced by the LTER Network rather than the LNO at UNM
- Including credits at the end of the video that listed all 26 sites.

The EB's suggestions were to be sent to Donata.

The consensus of the EB was that the video, revised as per the EB's suggestions, would be ready for production after it had been shown to the broader LTER Network.

15. Mini symposium notes (Peters)

The mini-symposium will take place on March 8, 2007 at NSF in Arlington, VA. The main theme will come from the five Planning Grant questions that link natural-social sciences. The focus will be on what we have done to address these questions.

Magnuson will ask Morgan Grove, Steve Carpenter, Chuck Hopkinson to organize the meeting. Members of the EB should suggest key invitees to Magnuson.

16. Origin, Development, and Future of the LTER Network of Research Sites

This item was not discussed because of the lack of time.

17. Annual survey

This item was not discussed because of the lack of time.

18. Site Characteristics Table

This item was not discussed because of the lack of time.

19. National Phenological Network

This item was not discussed because of the lack of time.

20. NISAC election

The Executive Board (EB) was asked by the Network Information System Advisory Committee (NISAC) to choose two new PI representatives to NISAC. In the past NISAC members were voted in by the CC. Tim Kratz and Robin Ross are rotating off and Deb Peters, Chuck Hopkinson, and Alan Knapp are the other current PI members. Terms have been 2 or 3 years. The EB voted for two of the following candidates who have agreed to serve on NISAC:

Will Pockman (SEV)
Emily Stanley (NTL)
Libe Washburn (SBC, MCR)
Bill McDowell (LUQ)

In very close voting, Pockman and Washburn were voted in as new NISAC members.

NISAC also requested the EB to review and consider official acceptance of general web design recommendations from the Information Management (IM) committee, which would be included as part of the IM review criteria. The EB has asked Bob Waide and Don Henshaw to consider this request and make a recommendation to the EB at the next video teleconference meeting in October.

21. Adjourn

Draft Agenda for the Science Council Meeting at the All Scientist Meeting
Saturday September 23, 2006, 3:30PM to 7PM (Dinner at meeting at 5:30PM)

1. Welcome, introductions
1. Charge
2. Approval of minutes (Magnuson)
3. Election of Chair (Magnuson)
 - a. Candidates Jerry Melillo & Phil Robertson
4. Report from the Planning Grant (Collins)
 - a. Discussion
5. Report for the Executive Board (Magnuson)
 - a. Discussion
6. Spring Science Council Meeting
 - a. Date and place, and host sites comments (Waide)
 - b. Topic, Chair, and Program Committee (Magnuson)
7. Completing the proposal through the planning Grant
 - a. Role of the Science Task Force
 - b. Role and activities of the Science Council
 - c. Role and activities of the Executive Board
 - d. remaining Issues
8. Topics raised from the floor.
9. Recognition and appreciation to organizers, etc of the All Scientists Meeting (Magnuson)
10. Adjourn
11. Dinner