

Meeting Notes LTER Executive Board
May 15, 2017 Madison, WI

Minutes approved by LTER Executive Board at July 2018 Meeting

Attending

Current Executive Board: Peter Groffman (chair), Michael Gooseff (MCM), Sally Holbrook (MCR), Michelle Mack (BNZ), Steve Pennings (GCE), Dan Reed (SBC), Eric Seabloom (CDR), Katharine Suding (NWT), Jess Zimmerman (LUQ)

Incoming Executive Board: Kenneth Dunton (BLE), Emily Stanley (NTL)

LTER Committees: Kari O'Connell (Education and Outreach Committee), Wade Sheldon (Information Management Committee)

Network Communications Office (NCO): Frank Davis, Marty Downs, Kristen Weiss

Environmental Data Initiative (EDI): Corinna Gries

NSF: David Garrison, John Schade, Collette St. Mary, Dan Thornhill

Absent

David Foster (HFR) due to family emergency

Agenda Review

- Discussion will focus on the new structures for coordination, communication, and data management and how these affect the network now that we are 2 years into NCO and EDI.

NSF Update

40 Year Review of the LTER Program

- NSF will have clear guidance for a structured review process in time to present at the All Scientists' Meeting in October, 2018. The timetable should allow 6 months for the sites to compile their information and another 6 months for the NCO to integrate it into a report. The actual review will take place in 2020.
- The mechanism for the 40-year review of the LTER Network will be a Federal Advisory Committee Act (FACA) committee, which must be published in the Federal Register. GEO, BIO and Polar Programs will all be represented, in line with the current management structure of the NSF-LTER working group.
- The LTER Network is unique among NSF programs in its longevity. The 40-year review is an opportunity to demonstrate the value of that investment and to reflect on how the program is managed--both internally and by NSF.
- Key questions to address in preparation for 40 year review:
 - Why does NSF need a program like this?
 - What does it produce that others don't?
 - What are the questions that can only be answered via long-term research?

- Considering current funding limitations, how can LTER programs maximize the value of a \$30 million/year investment?
- What is the role of cross-cutting research and synthesis?
- Especially for the NCO--how is the LTER program engaging and impacting external groups; e.g. via synthesis working groups, scientists, managers, etc.
- Possible/likely review components:
 - LTER community response to NSF's 30 year review, including development of data management systems.
 - From sites: a short vignette, statistics, and responses to a limited set of questions, posed by NSF.
 - Network Communications Office will compile sites responses and a Network statement into a single report on behalf of the Network.
- There are a few key points to emphasize, with lots of discussion about what the best metrics are for assessing them:
 - How much leverage does each LTER site have; how much 'pull' do they have to bring people to a site BECAUSE its an LTER site?
 - Not all syntheses are appropriate across ALL sites. But linking and sharing data among the most related sites is important.
 - LTER leverages (and provides leverage for) many of NSF's other major investments (e.g. Coastal SEES, Sea Level Rise, Water Sustainability and Climate, Macrosystems, LTREB). What kinds of metrics could reasonably be collected that would demonstrate the nucleating role of LTERs.

NSF Personnel

- Upcoming appointment of new Division Directors in Environmental Biology (DEB) and Division of Ocean Sciences (OCE). Geosciences has a new Director (Bill Easterling).
- Assistant Director of Biological Sciences (BIO) will be changing. The current (acting) AD is Joanne Tornow.
- SEV approval pending with Jennifer Rutgers as PI
- Changes to the NSF-LTER working group: Doug Levey, Jennifer Burns rotating off. Dan Thornhill (OCE), Collette St. Mary (DEB) have recently joined.

General Discussion with NSF Program Officers

- Intense budget uncertainty in 2017 led to focus on short-term priorities, now shifting toward a bit more capacity for longer term planning and funding.
- What is the potential for new sites? GEO recently funded 2 new coastal sites. The BIO budget is not likely to allow new sites in the near-term. Any long-term opportunity would flow out of the 40-year review highlighting key research gaps.
- How does NSF view the overlap between LTER and CZO? Are we competing for funding? These are complementary programs and NSF recognizes the differences. NEON is also important, different, and complementary, but would benefit from increased connections with LTER and the ecological community in general.

Short Topics

March and April minutes are approved. Mike Gooseff abstains from March, since he was absent.

Publications Committee

- Bob Waide and Sharon Kingsland are editing a book on LTER science and synthesis and requested inclusion in the series.
 - The Committee agreed that the book proposal fits the criteria to include as an LTER product and recommended moving forward based on relevance, but not detailed knowledge of content.
 - The Committee recommended that they broaden the scope of the book to include coastal sites and a wider set of authors; keep in mind the relevance to the 40 year review, and focus on coming opportunities as well as past accomplishments and challenges.
 - Executive Board approves inclusion in the series, pending review of more detailed content.
- *Stepping in the Same River Twice*, edited by Ayelet Shavit and Aaron M. Ellison, draws on replication examples from within and outside the LTER Network. The book was approved and included in LTER science and synthesis book series. Published on April 25, 2017 (ISBN: 9780300209549).

Site Affiliation

- Peter Groffman received a request from Brad Wilcox to create an LTER affiliate site. A Texas A&M site applied for LTER site funding but was not successful in the NSF competition. Their University identified funding, but they would like to affiliate with the Network
- Concerns:
 - NSF program officers are OK with this, except that they want to ensure their investment in the NCO is not diverted to service non-NSF sites.
 - An official status for non-NSF-funded sites (even if clarified as “affiliated”) suggests some level of vetting--for which we have no process or capacity.
 - LTER welcomes other sites as collaborators and that can occur without formal partnership. If they formally affiliate, it creates branding issues (especially now that the LTER logo includes NSF).
- A supporting view:
 - If we COULD find a way to do this, we could expand LTER sites, create more partners for synthesis, extend our data management system, etc. Could we call them ‘partners’ and ask them to pay a membership fee equivalent to the benefit they receive?
- Conclusion: LTER creates infrastructure that's useful to other sites doing long-term research. We can take steps to make external groups aware that any long-term site can participate in a variety of ways, including: attending the All Scientists’ Meeting, joining synthesis groups, getting help with data management, etc.

- Marty will work with Peter on developing this list, responding to Brad, and creating a web page that clarifies how other scientists and sites can participate in Network activities.

New Website Guidelines

<https://lternet.edu/wp-content/uploads/2018/05/Guidelines-for-LTER-Web-Site-Design-and-Content-revised-2018-05-17.pdf>

- A working group composed of information managers, education managers, communicators and PIs developed updated website guidelines. They are technologically neutral and offer an organizational structure for sites without being prescriptive. They are posed as resources and recommendations, not requirements.
- The Executive Board voted to recommend that the science council adopt these guidelines. Michael Gooseff (who was on the committee) abstained.

Sexual Harassment Communication Guidelines

- NSF solicited comments on new sexual harassment reporting policy that requires institutions to report a finding concerning an NSF investigator to NSF and allows NSF to withdraw or reassign funding.
- Because LTERs often are based at remote field sites with collaborators from many institutions, the Executive Board established a subcommittee to review the policy and determine if LTER should comment. The committee (Frank Davis, Mike Gooseff, Kari O'Connell) did not see cause to comment on the policy, but did see it as an opportunity to review LTER's current approach to communicating about sexual harassment resources and reporting options.
- A range of ideas were suggested: FAQs, resources webpage, highlighting different LTER sites and what they are doing in relation to Title IX, host a workshop and bring in experts
- Two particularly difficult issues were identified:
 - How can we identify a point person (or group of point people) who is accessible enough when in the field and also sufficiently senior/responsible to take protective action and report through institution?
 - Campus risk managers do not seem to be aware of, or designing policies to address, the situation at field sites, where it may not be possible to separate a victim and an alleged perpetrator.
- There was interest in more PI-to-PI discussion than there is time for at the Science Council and it was suggested that we set aside time for deeper discussion (potentially with invited expert(s) on Title IX) at the All Scientists' Meeting. The goal would be to support PIs to think about the issue at the site level, but not on their own and not without resources. This could include examples from Toolik Lake, UNOLS vessels.
 - We could have sites reflect on an action item to bring back to their site, e.g. a resource or a reporting process. A working group could pursue workshop funds through NSF. Good resources: Erika Marin-Spiotta at Univ. of Wisconsin, GEO GOLD field institute.
- Each site should at least develop a reporting chain and post it on their website (along with other field research information), at field site residence and dining facilities, and at a site orientation.

- OBFS is working on this, but does not yet have a policy. They are interested in what we come up with.

New Information Management Committee Representative

Dan Bahauddin (Cedar Creek LTER) has been elected as the Information Management Representative. Dan has broad experience and has served on IM-Exec steering committee. This election was heartily endorsed by the EB and Dan will start participating in monthly calls in June.

LUNCH

LTER Committee Reports

International LTER

No representative was present and no report was received in time for the meeting, but there are some important questions for the EB. Should we be active in ILTER or not? Should we continue to pay our dues? How is the LTER community benefitting?

- LTER is setting a standard for other networks, with respect to data management;
- The dues (\$5000-\$10000/year) are worth the level of involvement, and its valuable to maintain links with international science in a time of U.S. isolationism.
- There are good data streams coming out of ILTER and useful opportunities: kelp network, mountain research network, NutNet, GLEON, resource management, etc.
- LTER community isn't very active in engaging ILTER, if we're going to keep paying dues, we should strive to more actively engage with the Network.

Communications Committee

Report:

<https://lternet.edu/wp-content/uploads/2018/05/LTER-Communications-Committee-Annual-Report-2018.pdf>

Discussion: The communications committee is refining its mission after a 6-month hiatus.

Key questions:

- Is communications different than education? If so how?
- What is the future and focus of this committee?
- Do we want sites to specifically designate communication point people?

Diversity Committee

Report:

<https://lternet.edu/wp-content/uploads/2018/05/LTER-Diversity-Committee-2017-18-Annual-Report-draft-2.pdf>

Discussion:

- Need to recruit new/more members to the Diversity Committee: Look for people who are is younger AND more diverse.
- Ideas for supporting increased diversity

- More support via REU and other early career programs
- Who can we connect with in NSF to help support diversity work? John Schade recommended reaching out to Frances Carter Johnson at NSF for connections and ideas
- Hosting SEEDS students. Promote more engagement with this program at sites.
 - Related concern -- placing SEEDS students in culturally isolating situations may not result in the hoped-for outcomes.
- Have the EB assign a rep to the committee

Publications Committee

Report:

<https://lternet.edu/wp-content/uploads/2018/05/LTER-Publications-Committee-Annual-Report-2018-final.pdf>

Discussion:

EDITORIAL NOTE: The publications committee has a fairly narrow mandate: to consider and recommend books and reports for inclusion in LTER's numbered publication series. The discussion described below ranged more broadly to questions of how to define, attribute, and archive an LTER paper.

- What qualifies as an LTER publication? NSF would like to define it as something that couldn't have been published without LTER research, whether or not it was directly funded by an LTER grant.
- The goal is to understand the broader impact of LTER data and science and to quantify the nature and extent of how LTER data are used.
- How can we ensure that data are cited? EDI helps. It provides a DOI by which to cite data, but that's not yet a broadly accepted practice for authors.
- Perhaps some broad categories are possible, such as:
 - funded directly by LTER,
 - using LTER sites,
 - using LTER data.
- It's appealing to think that's possible, but in practice these are quite difficult to parse out. Maybe it's more important to focus on the main LTER publications, using the standard of 10 high-impact papers.
- Ultimately, the goal is to show that LTER is very productive and that many people come to partner with LTER.

Grad Student Committee

Report:

<https://lternet.edu/wp-content/uploads/2018/05/LTER-Graduate-Student-Committee-Annual-Report-2018.pdf>

Discussion:

- Siddarth Iyengar and Paul Julian are leading the grad student reps and working with Kristen Weiss to plan events prior to and at ASM. The ASM will focus on developing longer-term activities to help grad students connect across sites and with PIs.

- Three or four sites have joint graduate programs. Are there lessons for the rest of the sites?
- On a positive note, grad students have begun seeking out IMs earlier in their programs because journals are requiring data to be in repositories

Information Management Committee

Report:

<https://lternet.edu/wp-content/uploads/2018/05/LTER-Information-Management-Committee-Annual-Report-2018.pdf>

Discussion:

- This was a transition year, with EDI and NCO reorganization. The committee includes representatives from every site, plus NCO and EDI.
- Five-member steering committee tracks working groups and sets topic for IM water cooler teleconferences.
- Major activities:
 - updated by-laws related to meeting funding and network governance,
 - reinvigorated DataBits,
 - helped update web guidelines.
 - Annual IM in-person meeting held at Earth Science Information Partnership (ESIP) meeting this year. EDI and NCO came up with partial funding to send IMs. The IMs developed and attended lots of good workshops, including topics such as: code repositories, sensor data practices. New sites came, presented their data management plans, got feedback.
- One major change is to support the production of useful data products desired by NCO-funded working groups. The committee is looking for new ways to move those efforts forward with fewer resources.
- Information managers are trying to participate in EDI trainings and to work with others outside of LTER to provide expertise. Working to create stronger connections between the Information Management Committee and EDI.

Education Outreach Committee

Report:

<https://lternet.edu/wp-content/uploads/2018/06/EOC-LTER-Science-Council-2018.pdf>

Related documents:

<https://lternet.edu/wp-content/uploads/2018/05/Guidelines-for-LTER-Web-Site-Design-and-Content-revised-2018-05-17.pdf>

Discussion:

The committee is organized as a community of practice, with a dedicated rep from each LTER site; some have met monthly for over 8 years. The committee's focus is on cross-site initiatives, engaging external partners, setting professional development goals, inviting guest speakers, and proposal ideas. Key focus areas include K-12 resources and educator professional development, but there are also many other activities that vary by site, such as citizen science at Bonanza Creek, building ecological data literacy with younger students with hands-on training for teachers and data packages.

2017-2018 accomplishments:

- Made connections to groups outside of LTER (NEON, Concord consortium, CZO, WildNote) and set up professional development for Education/Outreach Managers.
- Three new Schoolyard Book Series books have been published in the past year (PIE, JRN, SBC). Some sites are getting extra funding to develop associated curricula.
- LTER Data Jam been a success at Jornada, Luquillo, and BES.
- Undergraduate Field Ecology Research Network (UFERN) and REU opportunities with LTER are under development: virtual programs, sharing mentor resources, coordinated cross-site programs.
- LTER education programs contribute a lot of leveraged funding for LTER sites. Great examples of what an education program can do specifically with long-term data.

NCO Update

Report:

<https://lternet.edu/wp-content/uploads/2018/06/NCO-LTER-Science-Council-2018.pdf>

Discussion:

- Transition from LNO to NCO/EDI completed and working smoothly together.
- Synthesis: Six working groups are active, representing a broad cross-section of sites and external investigators.
 - Synthesis working groups have many early career investigators.
 - Would appreciate feedback from the EB on the possibility of switching to a two-tiered approach with several smaller working groups alongside fewer large well-resourced groups.
- Communications:
 - LTERnet rebuild complete except a few backend processes.
 - Science update is switching to bi-monthly schedule, alternating with News from the NCO.
 - Social media engagement continues to increase, print materials available for use by sites.
- Presented basic web/social media stats

EDI Update

Report: <https://lternet.edu/wp-content/uploads/2018/06/EDI-LTER-Science-Council-2018.pdf>

- EDI grew out of the efforts of LTER Information Managers. The office has been charged with the mission of spreading good data practices to other investigators and networks. The resulting structure leaves some ambiguity about the role of LTER information managers and unanswered questions about how they can get their needs for collaboration and professional development met and how they can contribute most effectively. EDI is very open to LTER information manager involvement; IMs just need to communicate their needs and goals.

- Some participants expressed concern about whether EDI might be overwhelmed by their own success and unable to meet the demand for data curation services:
 - EDI is working on a business model that would allow compensation for services. Much can be done with well-supervised students.
 - Another approach is to fully develop the data-management marketplace -- essentially, a matchmaking service for data management piecework. LTER produces high quality metadata, might need to charge \$300-\$500 per dataset.
- There has been some confusion about whether it is mandatory to submit data to EDI/LTER Data Portal.
 - Some confusion is related to misunderstandings about which organizations are truly data repositories (such as EDI) and which are discovery networks (such as DataONE). In the case of BCO-DMO and the Arctic Data Center, LTER Portal Data can be replicated to (or from) their records.

EXECUTIVE SESSION: NCO and EDI personnel recused - no notes available

NCO/EDI Discussion with NCO/EDI personnel present

Synthesis Working Groups

- Not all sites are participating in synthesis working groups. There are fewer marine sites involved and no explicit mention in the RFP of urban site themes.
 - In many cases, site data is used even when researchers from that site are not participating in the working group. More funding would be required to get more sites involved.
 - Some sites are doing synthesis through other organizations (Powell Center, SESYNC) and did not need to propose an LTER synthesis group.
- Is there a need for a synthesis committee to help strategize formation of working groups and other synthesis activities?
 - NCO needs clear direction on where to focus efforts with limited funding--toward external participation, or broader LTER participation?
- It would be helpful for the LTER community to see more of what is coming out of the synthesis working groups:
 - Nearly all the working groups have presented webinars, but the NCO could also develop short presentations on progress for the science council.
- In general, the competitive proposal process received strong support from the Executive Board.
- In may be worthwhile to consider partial funding, or a lower level of funding, to groups that have a more discrete task or require some proof of concept.

Thoughts on Network Feedback

Open question for discussion: How should the NCO seek feedback from the LTER community? Should the community be part of NSF's evaluation process of the NCO?

- It might be more useful to track metrics of participation and use than to rely on survey results.
- While LTER community support is important, ultimately NCO answers to NSF and is evaluated by NSF. From the NSF perspective, it is most valuable to directly observe interactions between the Executive Board and the NCO and EDI. This has been accomplished over the past two years as program officers have attended EB and SC meetings.

Structure of Future Science Council Meetings

The past 5 science council meetings have focused on a single core theme and have made products a specific goal, but products have been slow to result.

- Should the Science Council try to set scientific priorities for the Network?
- What kinds of products can we reasonably expect out of Science Council meetings?
- Should we see if champions emerge, or try to cultivate some ahead of time?
- Including synthesis working groups could help stimulate dialogue and conversation at Science Council meeting, at the same time stimulating discussions of what datasets exist and where the gaps are.

Acknowledgement of outgoing EB members and welcome to new members

Welcome new Site Representatives to the Executive Board: Ken Dunton (BLE), Emily Stanley (NTL), Oscar Schofield (PAL), Dan Bahauddin (IMC)

Thank outgoing Representatives: Steve Pennings (GCE), Mike Gooseff (MCM), Dan Reed (SBC), Wade Sheldon (IM)