

Long Term  
Ecological Research  
Network Office (LNO)

IMPLEMENTATION  
PLAN

March 1, 2005



# Table of Contents

Table of Contents.....	2
Work with the LTER Executive and Coordinating Committees to finalize an approved list of priorities for LNO activities that are not automatic .....	4
Develop process for providing Network Office cost estimates for new initiatives.....	5
Develop communication plan for Network Office and Network sites to disseminate new achievements and procedures.....	6
Determine what critical procedures exist within the LNO, establish whether these procedures are clearly defined, and propose new procedures where necessary.....	8
Work with Executive and Coordinating Committees to develop strategies for network growth, initially through the development of a planning grant.....	10
Directly facilitate and engage in synthesis discussions and other Network-wide initiatives.....	11
Leverage opportunities arising from the development of new national networks such as NEON.....	12
Work with the Technology Committee to identify infrastructure needs and develop long range plans for maintenance and replacement.....	13
Identify diversity issues and develop short range and long range plans for achieving balance in Network Office staff.....	14
Develop process and procedure for assessing Network Office effectiveness.....	15
Identify partnership opportunities with other organizations and associations and develop plan for establishing those partnerships.....	16



# Table of Contents (continued)

Work with the LTER Planning Team to identify particular strengths among LTER scientists within the network, and form “virtual coalitions” of these scientists, to call upon to accomplish strategies such as #4, Increasing Impact.....17

Develop job task list for critical LNO personnel and succession plans/options.....18

Identify team building opportunities, including external consultant support.....19

Examine public opinion, both local and national, and work with Network scientists to leverage education, outreach, and training aspects of Network to effect long-term change..... 20

Work with the Coordinating Committee to develop of an “ecological message” and identify the Network as a national and international voice of ecological research.....21

Track the development of new NSF initiatives that directly affect the Network .....22

Develop plans for Sabatarrians and links with the AAAS fellow program and the Aldo Leopold Leadership Program.....23

Leverage education, outreach, and training resources at UNM.....24



## **Work with the LTER Executive and Coordinating Committees to finalize an approved list of priorities for LNO activities that are not automatic**

Team Leader: Executive Director  
Team Members: Associate Directors

1. Based on the LNO Scope of Work, prepare a list of LNO goals for submission to the Executive Committee in January of each year
2. In discussion with the Executive Committee, eliminate, add, or modify goals as necessary based on Network objectives
3. Work with the EC to develop a recommended list of priority actions to achieve goals for Coordinating Committee approval
4. If necessary, propose revisions to the LNO Scope of Work to the NSF
5. Review and modify LNO Strategic Plan as necessary
6. Re-allocate effort towards priority actions as necessary
7. Review progress towards goals annually with Executive Committee

Metric for success: An adaptive Strategic Plan that tracks changing Network objectives and defines actions to facilitate achieving these objectives





## Develop process for providing Network Office cost estimates for new initiatives

Team Leader: Senior Program Manager  
Team Members: Executive Director, Office Manager

1. Based on core goals and proposed milestones of new initiative, review for critical cost categories such as FTEs, travel, technology infrastructure, and F&A.
2. Review space requirements; discuss with Office of the Vice President for Research & Economic Development any perceived needs and available support, such as cost/sq foot and where.
3. Review costs with goals, modify as necessary
4. Based on recommendations of cost review with goals/milestones, adjust costs based upon resources available and new resources required

Metric for Success: Measurable costs that are allowable, allocable, and reasonable for new initiative.



## **Develop communication plan for Network Office and Network sites to disseminate new achievements and procedures**

Team Leader: Public Information Officer

Team Members: Executive Director, Site Outreach Representatives

1. The Public Information Officer (PIO) in consultation with the Executive Director (ED) develops and sets goals & objectives for LTER public communication
2. PIO conducts a communication (mini) audit to evaluate the current LTER communication efforts
3. PIO identifies target groups/clients for LTER communication efforts (for which answers to questions such as ‘Why do we need to communicate with them? What’s important to them? What objectives drive their decision-making?’) are developed
4. PIO develops a strategy for reaching each target/client audience—e.g., use of scientific publications, workshops and conferences to reach scientific audiences; an information kit containing brochures, flyers, and fact sheets for a general audience; or press releases and a media kit for the mass media
5. PIO develops current and compelling messages, themes and storylines to be communicated in collaboration with Site Outreach Representatives; inventories skills/interests/tools that can be used to reach the target groups, e.g., interpersonal relationships (with reporters, officials, etc); member organizations (e.g., affiliates, clubs)

(continued on following page)



6. On the basis of steps 1-4, PIO prepares draft of Communication Plan
7. Review drafts with ED and executive Committee iteratively and incorporate comments and suggestions in subsequent revisions.
8. Identify costs of implementation and prepare a budget as part of the Communication Plan
9. With the help of the ED, set timescales/milestones for implementation
10. Circulate finished draft to the whole Network for comments
11. Review, revise and modify strategy as necessary, and in response to new developments every 12 months.

Metrics of Success: 1) Satisfaction measured by client/audience surveys; 2) Number of products produced and distributed (e.g., newsletter issues published per year; number of press releases and or/media events held and the level of resulting coverage; etc, which are an indicator of reach and/or penetration); 3) number of exhibitions held/attended (e.g., ESA, SACNAS, which give an idea of event participation); 4) number of external inquiries and requests for products (an indication of popularity~effectiveness)



**Determine what critical procedures exist within the LNO, establish whether these procedures are clearly defined, and propose new procedures where necessary**

*Definition: A critical procedure is a process/procedure without which the functions performed in the service of our mission begin to fail in the temporal context of hours to days. Example 1: executing a purchase order in LINK, Example 2: rebooting computer servers after a power failure.*

Team Leader: Associate Director for Information management

Team Members: LNO Staff

1. Staff working groups formed in the areas of Admin, IM, CCI, and NIS. (June '05)
2. During a half-day session these groups independently identify critical procedures in their areas. (Late June '05)
3. During a joint half-day session of group leaders the final list will be considered, and a template developed for the documentation of critical procedures, and time allocation and timeline for project completion will be estimated. (Early July '05)

(continued on following page)





4. Procedure documentation will begin in July '05 and continue under goals of achieving the metrics of 50% of critical procedures documented by October '05, 75% of critical procedures documented by Mar '06, and 95% of critical procedures documented by July '06.

Metric for Success: Time allocation for completion through Step 3 is 20 person days. The metrics for implementing procedure documentation will be reviewed after Step 3 time allocation estimates are completed. Critical Procedures will be reviewed annually during May by a group of the whole for inclusion/exclusion of new/old procedures.



## **Work with Executive and Coordinating Committees to develop strategies for network growth, initially through the development of a planning grant**

Team Leader: Executive Director  
Team Members: Associate Directors

1. Work with the Science Task Force to define the optimal size, composition, funding levels, and governance structure of the Network to achieve goals set through the LTER Planning Process
2. Work with the Executive and Coordinating Committees to develop a Network Strategic Plan that sets out activities to achieve optimum Network characteristics
3. Facilitate the development of partnerships with sites and scientists from outside the LTER Network to collaborate on activities defined in step 2
4. Provide resources and expertise to facilitate workshops for the preparation of proposals to complete the activities defined in step 2

Metric for success: A Network Strategic Plan that provides a blueprint to achieve optimal Network growth



## **Directly facilitate and engage in synthesis discussions and other Network-wide initiatives**

Team Leader: Executive Director

Team Members: Associate Directors, LNO staff

1. In conjunction with the Executive Committee, annually identify 6-8 initiatives from LTER sites and scientists that address Network goals to increase the pace of synthesis
2. Provide \$50,000 in direct support from the LNO to facilitate initiatives identified under 1)
3. Provide indirect support for synthesis initiatives by facilitating communication among working groups and providing help in managing data and information
4. When appropriate, participate in Network initiatives
5. Provide additional resources to increase the number and breadth of synthesis activities by identifying and pursuing new sources of support

Metric for success: Double LNO resources available for synthesis within three years; triple the synthesis initiatives funded from all sources within three years



## **Leverage opportunities arising from the development of new national networks such as NEON**

Team Leader: Associate Director for Project Development

1. Actively contribute to and participate in design and development of new national networks like NEON.
2. Educate LTER stakeholders and partners about opportunities arising from developing national networks.
3. Serve as a conduit for information about LTER to new and developing national networks.
4. Identify opportunities for network/network partnerships and collaborative research and infrastructure development.

Metric for success: Participate in design and completion of the NEON Integrated Science & Education Plan, the NEON Networking and Informatics Baseline Design, the NEON Reference Design and the NEON Preliminary Project Execution Plan. Provide at least one verbal/written annual update annually about developing environmental observatories.



## **Work with the Technology Committee to identify infrastructure needs and develop long range plans for maintenance and replacement**

Team Leader: Associate Director for Technology Development

Team Members: Technology Committee, CI Team

1. Conduct an assessment of cyberinfrastructure in the LTER Network as part of LTER Network Planning activity using surveys of members of the LTER Technology Committee
2. Match assessment against cyberinfrastructure goals as identified by CI Team members, NISAC Committee and IM Committee; note areas for improvement
3. Facilitate the development of the final LTER CI Assessment Report, with statistics on LTER Technology Web Page.
4. Work with CI Team and Network Information System Advisory Committee to draft strategic plan for cyberinfrastructure in support of LTER synthesis

Metric for success: Develop plan for LTER cyberinfrastructure by September 2006





## Identify diversity issues and develop short range and long range plans for achieving balance in Network Office staff

Team Leader: Executive Director

Team Members: Senior Program Manager, Office Manager, Associate Directors

1. Review diversity programs at UNM, NSF, and a sampling of research entities in the Southwestern United States
2. Based on these programs, develop diversity goals that are realistic and achievable
3. Compare present staffing of the LNO with these diversity goals and identify areas for improvement
4. Devise recruitment strategies that address identified areas for improvement, such as targeted advertisements
5. Consider diversity goals in making new hires
6. Annually review progress toward diversity goals and revise recruitment strategies

Metric for success: A Network Office whose diversity reaches or exceeds the established diversity goals within six years



## Develop process and procedure for assessing Network Office effectiveness

Team Leader: Executive Director

Team Members: Senior Program Manager, Office Manager

1. With the assistance of the LTER National Advisory Board, Executive Committee, the NSF, and an outside consultant, devise an operational definition of effectiveness that demonstrates the impacts desired by clients of the LNO
2. Quantify the operational definition of effectiveness in a way that allows comparison of degrees of effectiveness over time
3. Establish procedures for evaluating changes in effectiveness over time
4. Identify and provide resources to evaluate changes in effectiveness
5. Institutionalize an annual review of effectiveness as part of the evaluation of the LNO by the LTER Executive Committee

Metric for success: Establish a process for assessing LNO effectiveness within three years



## **Identify partnership opportunities with other organizations and associations and develop plan for establishing those partnerships**

Team Leader: Associate Director for Project Development

1. Identify organizations and associations that could benefit and benefit from partnering with LTER, identify key contacts and determine costs and benefits of a potential partnership.
2. Review results of step 1 with Executive Director and develop a partnering plan in concert with potential partners where deemed appropriate.
3. Communicate information about ongoing partnerships and efforts to establish new partnerships with NSF and Executive Director; as appropriate, communicate key opportunities and findings to LTER Network.

Metric for success: Annual report on ongoing partnerships and efforts to establish new partnerships.



**Work with the LTER Planning Team to identify particular strengths among LTER scientists within the network, and form “virtual coalitions” of these scientists, to call upon to accomplish strategies such as #4, Increasing Impact**

Team Leader: Executive Director

Team Members: Science Task Force, Executive and Coordinating Committees, Information Management Staff

1. As part of the LTER Strategic Planning process, work with the Science Task Force to identify strategies that require specific expertise or experience to accomplish
2. Use the Site and Personnel databases managed at LNO to identify LTER scientists with the required skills to carry out these strategies
3. As necessary, modify the Site and Personnel databases to incorporate additional information needed to assess relevant expertise and experience
4. Under the direction of the Executive and Coordinating Committees, invite scientists to form virtual coalitions to address specific strategic goals
5. Facilitate efforts to obtain resources to support the activities of the Virtual Coalitions

Metric for success: To provide information to the Executive and Coordinating Committees to permit formation of Virtual Coalitions in a timely manner



## Develop job task list for critical LNO personnel and succession plans/options.

*Definition: critical LNO personnel – those individuals responsible for performing tasks that are essential for the completion of the requirements of the SOW*

Team Leader: Associate Director for Information Management

Team Members: Associate Directors, LNO staff

1. Associate Director for Information Management (ADIM) and Senior Program Administrator (PA) compile existing job tasks for each LNO employee. 2 person-days (September '05)
2. During a half-day session Executive Director (ED), ADIM, and PA review job tasks, task requirements, and organizational structure as a whole to identify critical personnel. 1.5 person-days (October '05)
3. ADIM and PA draft critical personnel, critical tasks, and modified org structure 4 person-days (December '05)
4. ED and Associate Directors review draft and modify including adding options for replacement and succession in the near future; this draft to be reviewed by the Executive Committee. 4 person-days (January '06)
5. ED and ADIM will produce final draft for inclusion in the strategic plan. 4 person-days (March '06)

Metric for Success: Completion of said documentation by March '06. These documentation will be reviewed annually when the annual report is compiled and before any replacement or new hiring event to ensure that critical tasks are being addressed.





## Identify team building opportunities, including external consultant support

Team Leader: Executive Director

Team Members: LNO staff, UNM Human Resources Office, external consultants

1. Using an external consultant, evaluate and quantify the status of teamwork in the operations of the LNO
2. Identify weaknesses and develop goals for improvement
3. Through UNM, identify and employ resources that will facilitate the achievement of goals, including training for supervisors, team building tools, and mentoring
4. Conduct annual comparisons of changes in metrics of teamwork
5. Evaluate goals and activities bi-annually

Metric for success: A functioning team-building program that leads to regular improvements in LNO teamwork



**Examine public opinion, both local and national, and work with Network scientists to leverage education, outreach, and training aspects of Network to effect long-term change**

Team Leader: Executive Director

Team Members: LTER scientists, Education Committee, Public Information Officer

1. Collaborate with Science Task Force and Education/Outreach Working Group to identify goals of the LTER Strategic Plan that emphasize education, delivery and marketing of the results of LTER synthesis
2. In collaboration with the Executive and Coordinating Committee, evaluate existing mechanisms for delivery of information from LTER synthesis
3. Work with the LTER community, the public, and policy makers to clarify the nature of the information needed to effect long-term change
4. Facilitate the development of new delivery mechanisms that use LTER education, outreach, and training to provide information to policy makers and planners
5. With LTER scientists, seek mechanisms to allow the scientific process to adapt to changing needs of decision makers

Metric for success: A significant improvement in the delivery of information from LTER synthesis to decision makers.



## **Work with the Coordinating Committee to develop of an “ecological message” and identify the Network as a national and international voice of ecological research**

Team Leader: Public Information Officer

Team Members: LTER community, Executive Director

1. Review existing ecological message or past messages
2. Guided by the mission, vision, goals and objectives of the LTER network, identify or develop 10 possible and appropriate ecological messages (might need to invite submissions from LTER members—perhaps through a competition)
3. Discuss/Review the messages with the Executive Director. Reduce to 5 messages.
4. Circulate among EC/CC (or entire LTER) membership for comments, opinions, suggestions as to wording, and for their 2 most preferred choices.
5. Incorporate comments and suggestions into final messages. Refine messages and review with ED.
6. Test the final messages for visual appeal in text material (e.g., brochure cover) and for audio appeal in media-style ‘sound-bites’ among LTER members.
7. With the approval of ED and CC, finalize choice of ecological message.
8. Communicate final ecological message choice to the whole network; ask sites to incorporate message in their products; develop templates or give guidelines for use of message.

Metric for Success: feedback comments from members, affiliates, scientists, the public.



## **Track the development of new NSF initiatives that directly affect the Network**

Team Leader: Associate Director for Project Development

1. Develop plan for tracking new NSF initiatives.
2. Identify and report (e.g., email, web postings, newsletters and verbal presentations) on key initiatives that affect the LTER Network.

Metric for success: Develop action plan and initiate reporting mechanisms by June 2006.



## **Develop plans for Sabatarrians and links with the AAAS fellow program and the Aldo Leopold Leadership Program**

Team Leader: Associate Director for Technology Development

Team Members: LTER community, Executive Director

The AAAS Fellowships program focus on critical links between federal decision-makers and scientific professionals.

In the Aldo Leopold Leadership Program, up to 20 academic environmental scientists are selected to receive intensive experiential training, expert consultation, and peer networking each year.

1. In collaboration with the LTER Executive Committee, identify aspects of these two programs that would benefit the LTER Network
2. Identify links between the programs and the vision and mission of the LTER Network
3. Develop proposals to the two programs for joint efforts that would be mutually beneficial
4. Develop and implement a mentoring program for LTER scientists interested in these two programs

Metric for Success: A doubling of the number of LTER graduates in these programs within five years





## Leverage education, outreach, and training resources at UNM

Team Leader: Public Information Officer

Team Members: UNM staff, LNO staff

1. Based on the results of the Network Planning Grant, define desirable education, training, and outreach goals and objectives
2. Review existing efforts to meet these goals and identify areas where additional help or expertise would facilitate attainment of goals
3. Identify and explore possible areas of cooperation with UNM departments (e.g., Public Affairs/Media Arts) and possible avenues for LTER research output/publications; Make contact and develop partnerships with the appropriate people/groups.
4. Leverage these resources through joint proposals, internships, student projects, and dissertations
5. Review efforts and revise/modify as necessary.

Metrics for Success: Additional resources brought to bear on LTER Network goals and objectives in education, training, and outreach

