ENVIRONMENTAL INSTITUTE

Mission

The mission of the Environmental Institute at Oklahoma State University is to foster and promote transdisciplinary environmental research and scholarship.

Vision

The Environmental Institute will be recognized as the premiere organization in Oklahoma devoted to facilitating transdisciplinary environmental research that promotes development that is environmentally, economically, and socially sustainable.

Core Values

Excellence – We seek excellence in all our endeavors, and we are committed to continuous improvement.

Intellectual Freedom – We believe in ethical and scholarly questioning in an environment that respects the rights of all to freely pursue knowledge.

Integrity – We are committed to the principles of truth and honesty, and we will be equitable, ethical, and professional.

Service – We believe that serving others is a noble and worthy endeavor.

Diversity – We respect others and value diversity of opinion, freedom of expression, and other ethnic and cultural background.

Stewardship of Resources – We are dedicated to the efficient and effective use of resources. We accept the responsibility of the public trust and are accountable for our actions.

Goals, Critical Success Factors, Objectives, and Strategies

Goal 1. Facilitate transdisciplinary faculty research collaborations.

Critical Success Factors:

- Development and maintenance of a database that includes all environmental research faculty at OSU and which addresses research interests, capabilities, and past performance
- Development and successful implementation of a protocol for identifying and communicating the short and long term research needs in Oklahoma
- Development and publication of an up-to-date compendium of environmental research opportunities that are tailored to specific faculty
- Recruitment of collaborative transdisciplinary research teams, facilitation of proposal preparation, timely submission of successful research proposals, tracking of progress toward completion of research, and dissemination of research findings to appropriate audiences in Oklahoma and elsewhere

Objectives:

Objective 1.1: The institute will characterize Faculty Environmental Research Capabilities and Interests.

- The institute will meet with faculty across campus to stimulate interest in and support of the work of the EI.
 - Identify as many faculty as possible who may have an interest in participating in transdisciplinary environmental research (can be based on various databases managed by the EI and OURS, supplemented with references by known environmental researchers, research deans, and department heads)
 - Sponsor a series of meetings with these environmental researchers within broad disciplines (e.g., life sciences, physical sciences, social sciences, engineering, business, and humanities) to discuss the how the EI can best serve their research needs
 - Develop a detailed plan for how the EI can best meet these needs
 - Distribute this plan for review and comment by researchers and research administrators
 - Conduct a plenary meeting at which the detailed EI plan is presented, discussed, revised if necessary, and approved
 - Gain faculty cooperation in providing information about to the EI for entry into the research database

- The institute will modify the environmental research database as necessary to allow easy online entry of information about faculty research interests, capabilities, and past successes.
- The institute will advertise availability of database for data entry.
- The institute will ensure that all faculty who wish to participate have accurately and completely entered required data.
- The institute will generate database queries and reports that can be used to summarize OSU research faculty, interests, capabilities, and past performance.
- The institute will continue to recruit new faculty and update the database each semester.

- Number of faculty who attend meetings and agree to work with the EI
- Completion and demonstrated usability of the environmental research database
- Number of interested faculty who were contacted about the availability of the database
- Number of interested faculty who accurately and completely entered data in the database
- Production of a summary report
- Production of a new summary report each semester

Objective 1.2: The institute will identify Environmental Research Needs in Oklahoma.

- The institute will meet with environmental agency managers individually to identify their short-term research needs and to recruit them for membership on an Environmental Research Advisory Board (ERAB).
- The institute will attend the Governor's Annual Water Conference, the Oklahoma Academy's annual meeting, the Oklahoma Wind Power Institute meeting, and other meetings at which research needs are addressed.
- The institute will consult with Oklahoma's strategic water and energy plans.
- Working with Robert White, the institute will meet with or write letters to selected State legislators to recruit them for membership on ERAB.
- The institute will meet with selected environmentally interested nongovernment organizations (NGOs) to recruit them for membership on ERAB.
- The institute will issue formal invitations to potential ERAB members to join the board.
- The institute will develop agendas, issue informational packages, and conduct annual meetings (each October) of ERAB in Stillwater, Tulsa, or OKC to discuss future short and long term research needs.

• The institute will publish summary of research needs to OSU environmental researchers via the EI website.

Assessments:

- Managers contacted from the following agencies: Oklahoma Water Resources Board, Oklahoma Department of Environmental Quality, Oklahoma Conservation Commission, Oklahoma Department of Agriculture, Oklahoma Scenic Rivers Commission, Oklahoma Corporation Commission, Oklahoma Department of Wildlife Conservation, National Resources Conservation Service, US Army Corps of Engineers, US Geological Survey, US Environmental Protection Agency, City of Oklahoma City & City of Tulsa within two months of approval of the EI strategic plan
- Attendance at all such meetings
- Review of the State's strategic energy and water plans
- Letters written to all legislators identified by Robert White within one week of their identification after the EI strategic plan is approved
- Telephone calls, email, meetings, or letters to contact representatives from The Nature Conservancy in Oklahoma, Sierra Club of Oklahoma, Oklahoma League of Women Voters, Save the Illinois River, Oklahoma Farm Bureau, Oklahoma Farmers Union, and similar environmental interest groups within two months of approval of the EI strategic plan
- Letters issued within two weeks after contacts with potential ERAB members have been made
- Materials developed and delivered no later than three weeks before the October annual meeting
- Publication of research needs on the EI website no later than two weeks after the October annual meeting

Objective1.3: The institute will identify Opportunities for Transdisciplinary Environmental Research.

- The institute will identify funding opportunities.
 - Monitor requests for proposals from agencies such as the US Environmental Protection Agency, US Department of Defense, US Department of Energy, US Department of Agriculture, National Institutes for Health, National Science Foundation, and various private foundations
 - Monitor websites and newsletters from groups such as the National Council for Science and the Environment, Council of Environmental Deans and Directors, Universities Council for Water Research, National Institutes for Water Resources, American Water Resources Association, National Association of Environmental Professionals, Society for Risk Analysis, Society for Human Ecology, and other associations

- Attend conferences such as the Federal Research and Development Opportunities conference and the National Institutes for Water Research conference – both in Washington
- Meet at least once each year with research deans, directors, and coordinators in colleges
- Meet with NSF program directors at least once each year in Washington or at conferences
- Meet with Oklahoma Congressional staff each spring to ask for their support
- The institute will post research opportunities on the EI website and present results at Research Council meetings.
- The institute will prepare monthly summaries of opportunities, organized by topic, and distribute to environmental research faculty according to their interests.

- Monitor opportunities weekly
- Post opportunities on the EI website bi-weekly
- Prepare and distribute opportunity summaries monthly

Objective 1.4: The institute will facilitate transdisciplinary environmental research success.

- On promising research opportunities that match faculty's research interests and meet Oklahoma research needs, the institute will recruit faculty members to participate in the development of a proposal.
 - Identify a specific project that is promising
 - Identify potential collaborators
 - Prepare a summary that is tailored to the potential collaborators
 - Meet with candidates to recruit them to the project
- The institute will assist proposal development by managing the process.
 - Coordinate contributions
 - Assemble the final proposal
 - Assist in budget preparation
 - Route the proposal
 - Submit the proposal
- If successful, the institute will manage the research progress as necessary.
 - Set up accounts and track expenditures
 - Track progress and issue timely reports

- Identify opportunities and recruit teams (at least two per semester???)
- Submit competitive proposals on time
- Ensure that account tracking and progress reporting are done well and on time

Goal 2. Facilitate Graduate Student Research Funding.

Critical Success Factors:

• Obtain IGERT grants for doctoral students engaged in transdisciplinary environmental research (19 environmental programs have already been funded out of the 100 total programs established, but none of these is located at a Big 12 university)

Objectives:

Objective 2.1: The institute will consult with environmental research faculty and the Society of Environmental Scientists to identify promising IGERT program initiatives.

Strategies:

- The institute will solicit faculty to identify promising students and research areas.
- The institute will solicit SES to identify interested students and their research interests.
- The institute will identify one or more areas that could form the basis for a proposal.
- The institute will recruit faculty and students to participate.

Assessments:

- Faculty solicitation will be conducted as part of objective 1.1.
- SES solicitation will be conducted within one month after the EI strategic plan is approved.
- Area identification will be accomplished within two weeks after faculty and student solicitations are completed
- Participant recruitment will be completed within one month after solicitations are completed

Objective 2.2: The institute will develop IGERT proposals.

Strategies:

- The institute will monitor IGERT requests for proposals.
- The institute will develop and submit a competitive proposal by first due date that arises no sooner than three months after EI strategic plan approval.
- The institute will develop and submit at least one additional proposal for each RFP that is issued subsequently.

- Monitor for RFPs monthly
- Submit at least one proposal for the first competition that occurs after EI strategic plan approval
- Submit at least one proposal in each following competition

Objective 2.3: If successful, the institute will successfully administer the program.

Strategies:

- The institute will set up accounts and track expenditures.
- The institute will track progress and submit reports.

- Account management is performed on time and accurately
- Reports are well prepared and submitted on time

Goal 3. Increase Awareness of OSU Environmental Research Accomplishments.

Critical Success Factors:

- Increase awareness within the OSU community of the environmental research conducted at OSU
- Increase awareness outside of the OSU community of the environmental research conducted at OSU

Objectives:

Objective 3.1: The institute will identify research successes.

Strategies:

- The institute will search OURS and EI databases to identify past environmental research awards.
- The institute will develop research success data entry forms for online entry into an EI database.
- The institute will poll current research faculty who have received these awards and ask for brief summaries of accomplishments to be submitted via the online forms.
- The institute will summarize noteworthy accomplishments.
- The institute will perform annual updates.

Assessments:

- Within six months of approval of the EI strategic plan
- Within six months of approval of the EI strategic plan
- Within two months of completion of the database search
- Within one month of completion of the poll
- Each July

Objective 3.2: The institute will develop reports and brochures to publicize these successes.

Strategies:

- The institute will develop an attractive report and brochure that highlights past successes.
- The institute will update reports and brochures each year.

- The report and brochure that attractively and convincingly publicizes the successes is prepared within two months of development of the summary of successes
- Prepare annual reports in August of each year

Objective 3.3: The institute will increase internal awareness of research successes.

Strategies:

- The institute will publish a report and brochure on the EI Website.
- The institute will mail report and brochure to each department having environmental research faculty.
- The institute will publicize the report, and distribute the brochure, at meetings with new faculty.
- The institute will publicize the report, and distribute the brochure, at meetings with other faculty.

Assessments:

- August each year
- As occasions warrant

Objective 3.4: The institute will increase external awareness of research successes.

Strategies:

- The institute will publish the research success report on the EI Website.
- The institute will publish and distribute monthly newsletters to legislators, agencies, NGOs and other groups.
- The institute will publicize research successes to the Environmental Research Advisory Board and the Environmental Programs Advisory Board (which advises the ES Graduate Program).

- August each year
- Each month
- At the October meetings each year

Goal 4. Operate the Oklahoma Water Resources Research Institute (OWRRI).

Critical Success Factors:

Some of the following critical success factors are combined in the objectives that follow.

- Annual identification of water resources research needs in Oklahoma
- Annual development and issuance of a request for proposals
- Arrangement for external peer reviews of submitted proposals
- Timely selection of winning proposals for funding based on OWRRI and peer reviews
- Prompt notification of winners and setting up of accounts
- Tracking of research progress and expenditures
- Timely distribution of research findings to relevant stakeholders

Objectives:

Objective 4.1: The institute will issue timely requests for proposals.

Strategies:

- The institute will identify water research needs of Oklahoma by interviewing water resource agency managers and/or from meetings of ERAB (see Goal #1 above).
- The institute will develop and issue requests for proposals in a timely manner.

- Identification of research needs gained from interviews of managers within the Oklahoma Water Resources Board, Oklahoma Department of Environmental Quality, Oklahoma Conservation Commission, Oklahoma Scenic Rivers Commission, and Oklahoma District of the US Geological Survey
- Request for proposals that address research needs issued by end of October each fall
- Require and review semiannual and annual reports of progress within two weeks of submission to assure compliance with contract requirements and track expenditures as they occur

• Publish research findings within one month of receipt of the approved final report on the OWRRI website and submit summaries to ERAB members and water resource agency managers; present research summaries at water research conferences and symposia as they occur (depends on budgets and opportunities)

Objective 4.2: The institute will conduct timely review of submitted proposals.

Strategies:

- The institute will transmit received proposals to peer reviewers in a timely manner.
- The institute will select winners based on peer reviews and a review by the OWRRI director.
- The institute will notify winners and establish accounts upon their acceptance of the award.

Assessments:

- Transmission of submitted proposals to peer reviewers within one week of submission (in February each year)
- Selection of winners within one week of receipt of reviews (in March of each year)
- Notify winners within one week of selection and require acceptance within one week of notification receipt

Objective 4.3: The institute will track research progress and expenditures.

Strategies:

• The institute will track research progress and expenditures.

Assessments:

• Require and review semiannual and annual reports of progress within two weeks of submission to assure compliance with contract requirements and track expenditures as they occur

Objective 4.4: The institute will disseminate research findings to appropriate stakeholders.

Strategies:

• The institute will distribute research findings to stakeholders (water research agency managers directly, publication on the OWRRI website, and occasional water conferences and symposia).

• Publish research findings within one month of receipt of the approved final report on the OWRRI website and submit summaries to ERAB members and water resource agency managers; present research summaries at water research conferences and symposia as they occur (depends on budgets and opportunities)

BUDGET COMMENTS ON THE NEW EI

The EI has lost all state funding. We are currently operating on salary savings from early departures of the five staff that were laid off as well as on carryover from FY03. My 0.25 FTE as Director is scheduled to end on December 31. The following comments concern future funding.

Future Roles of the EI

The proposed strategic plan suggests the following four roles:

- 1. Facilitation of submission of successful transdisciplinary, trans-college (and transuniversity), multi-year environmental research grant proposals to NSF, EPA, NIH, DOD, DOE, and other agencies and private foundations. The EI is seeking no share of the F&A earned on these grants, since this could serve as a disincentive for faculty to cooperate.
- 2. Obtain funding for graduate students for the conduct of environmental research (e.g., IGERT).
- 3. Publicization of environmental research successes at OSU.
- 4. Operate the OWRRI.

If the EI is charged with obtaining research funding itself (as opposed to facilitating others' success), then I would like to add a fifth goal. The long term budget discussion below addresses this.

Short Term Budget Needs

Currently, Talya is helping administer EI activities, which is untenable over the longterm. I recommend that the EI be permitted to hire a part-time (0.5 FTE) staff person for the rest of the fiscal year to relieve Talya of EI duties and allow her to focus on the ES program.

NOTE: This person is not being charged with accounting of our grants. This proposal assumes that Jason will continue this function during this fiscal year.

The duties of this person will be to help administer the OWRRI program (issue the RFP, track proposal, send proposals to peer reviewers, track receipt of reviews, notify applicants of funding decisions, receive progress reports from last year's winners, assist in preparing our 5-year program review, arrange travel to the NIWR and UCOWR conferences (mandatory for Institute directors) and process travel vouchers, answer phones, make copies, and perform other Institute administrative support activities.

From these duties, I would like to hire a person who is familiar with university research and travel policies and procedures, able to work with minimum daily oversight, and work ¹/₂ day five days a week. I suspect that such a person may cost \$1200 a month (totaling \$8400 for seven months, not counting benefits). I will check with Jason on how this can be paid from the existing EI budget.

I have already allocated funds from last year's carryover for conferences and travel for this fiscal year. I will check with Jason about the required 2:1 match for this year's OWRRI overhead.

Long Term Budget Needs

Long-term budgets will depend on the strategic plan that is eventually approved. If we are charged with obtaining funding by the EI, then I would like to hire a post-doc to help prepare proposals. I would also ask for three years of support to achieve the success that we are promising in the strategic plan. To pay for this, I would like to request that we

access the EI F&A account (about \$231,000). With this account, I could almost pay my own salary (0.25 FTE = 1750/month) as well as that of the post-doc (3000/month) and full-time staff assistant (2300/month). Salary would thus total 81K/year plus raises, if any, or about 250,000. As I previously discussed with you, I had asked for 30K per year in state funds to match the 10K OWRRI overhead and to provide money for travel. If provided, this would add 120K over three years to the EI budget.

To justify these expenses, we would, of course, need to earn more than \$351,000 in F&A (which is only \$1,028,606 in grants at 0.518 F&A rate). We plan to obtain much more than \$1 million over three years.

The following table summarizes the budget proposal for FY05-FY07.

ITEM	FY05	FY06	FY07	TOTAL
REVENUE				
From EI Working Funds1	77,000	77,000	77,000	231,000
From OWRRI2	10,000	10,000	10,000	30,000
Carry Forward from FY043,4	35,000	35,000	35,000	105,000
Total Revenue	\$117,000	\$117,000	\$117,000	\$351,000
EXPENSES				
Director Salary (with 5% raises)	21,000	22,050	23,153	66,203
Research Associate Salary (with 5% raises)	36,000	37,800	39,690	113,490
Staff Assistant Salary (with 5% raises)	27,600	28,980	30,429	87,009
Travel	10,000	10,000	10,000	30,000
EI-Sponsored Conferences	5,000	5,000	3,000	13,000
EI Publications	8,000	6,170	3,728	17,898
Website and Database Management	6,400	4,000	4,000	14,400
Equipment and Maintenance	8,000	8,000	8,000	24,000
Total Expenses	\$122,000	\$122,000	\$122,000	\$366,000

PROPOSED EI BUDGETFOR FY05-FY07

1 EI working funds are sitting in accounts AA-5-97890 and AH-5-97890, totaling \$232,454.13.

2 These funds come from a US Geological Survey grant to fund the Oklahoma Water Resources Research Institute (FY04 allocation = \$85,000, of which \$10,000 will be taken as administrative expenses, which must be matched 2:1 with non-federal money).

3 Carry forward includes funds remaining in accounts AA-1-50612, 50614, 60105, and 70725 at the conclusion of June 30, 2004 (expected to be about \$105,000) [after hiring 0.5 FTE temporary coordinator to work for 7 months assisting the Director in EI work as well as meeting obligations for conferences, OWRRI, database and website management, and publications for this year].

4 The carry forward balance anticipated in the previous footnote does <u>not</u> address the Presidential Water Fellowships (AA-1-50611 for FY04, 05, and 06), the FY04 Grad Assistant Support (AA-1-50670), nor the Laser Stores Account (AA-2-31100).