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Sent: Tuesday, March 03, 2009 5:24 PM
To: hydro_both@lists.orst.edu; 'Field, Jennifer'; 'Istok, Jonathan David'
Cc: 'Fisk, Martin'; 'Cassady, John'; 'Randhawa, Sabah'; franciss@oregonstate.edu
Subject: Notes from meeting of the OSU Water Community, Feb 27, 2009
Attachments: OSU_Water_Meeting_2_27_09.doc; ATT00061.txt; ATT00064.txt

Dear Treasured Members of the OSU Water Community,

We are so fortunate to be studying water at Oregon State University! We have a natural environment with every hydrologic character you could hope for, a Faculty with rigor, depth and excellent collegial relationships, and an administration that understands the importance of our work and the unique opportunities presented to vibrant environment of the University. Occasionally we need to take the time to gather to think about this theme within the university, to consider what we are doing well, and what can be improved.

On the 27th of Feb we had a very productive 2-hr conversation with 28 members of the community spanning almost every aspect of our activities. I have attached a summary of what I and members of the four break-out teams heard at that event. I pass them on for your consideration and records.

We identified several critical challenges that require urgent attention. Highest among these are (see attached document for summary of full discussion):

1. The provost's IWW funding expires in just a few months. What have we learned from this experiment and what do we think will best serve our community support needs?
2. The curriculum needs to be re-considered to specifically address the diversity of the incoming students: how can we serve this broad constituency, while increasing the rigor and decreasing the overlap between these classes?

We saw immediately that we need to meet regularly as a faculty. We have urgent and unmet business. Some thought that it had been over 10-years since our last such meeting. The participants thought that twice yearly 2 hr meetings would be a place to start. These will be scheduled immediately before the Fall and Spring Hydrology BBQ's, so **this Spring's meeting will be 1-3 PM June 3**. Prior to this meeting the Water Resources Graduate Program Curriculum Committee, under Mary Santelmann's care, will start to develop a proposal for adjustments to the Curriculum. Michael Campana proposes that he will shepherd, via the IWW executive committee, the development of an IWW-follow-on strategy. Both of these teams will be diligent in seeking and incorporating community input.

I have taken input from many of the people in attendance in preparing the attached document, but claim any errors in quotation, fact, or concept as my own fault. Please recognize this as a place to start our conversation rather than a full and exact representation of the Feb 27 meeting. It is not seeking to represent decisions, but rather to open conversations. I greatly appreciate your forbearance.

Sincerely,

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Redirecting, Refocusing, and Reinvigorating OSU water initiatives

**A Report of a Meeting of the Faculty of Water Resources held
February 27, 2009 1 – 3 pm
MU 206, Asian Pacific Room**

Statement of Meeting Objectives

With the establishment of the Water Resources Graduate Program and the IWW, OSU has positioned itself well to aggressively pursue exploration and training related to the social, technical, and theoretical aspects of water on earth. OSU has some of the world leaders in water resources on its faculty, and receives some of the finest graduate applicants. It is expected that both the student applicant pool and the funds available to study sustainable use of water and hydrologic sciences will continue to increase in the coming few years. At that same time, OSU is unlikely to gain more faculty members to address this opportunity. Thus, we need to think about refining our approach, conceiving of new approaches to expand our ability to respond to this set of conditions, including more semi-independent post-doc/research faculty who can co-advise students. Optimizing the academic and research activities of the university requires periodic gatherings of the faculty with the specific intent of making programmatic adjustments. With this meeting we sought to kick-off the effort to take the already strong program to even greater performance.

Overview

Approximately 30 members of the community gathered for 2 hours. Following an update on OSU's current academic and research programs, the meeting addressed four current questions seen as central to the future of the effort:

1. How can OSU better support multi-investigator proposal development?
2. How can we more adequately support "soft money" investigators?
3. Are the courses working? What needs adjustment in the academic program?
4. What should be in the post-June 30, 2009 OSU Water Center?

Following the conversation it was agreed that it would be a good practice to have regular meetings of the water faculty to remedy known problems, proactively adjust the program in light of changes in the overall academic environment, and layout strategic directions for growth. As a starting point we decided that meeting for two hours before each of the two annual Hydrology barbecues would be a place to start. Monthly meetings were seen as excessive, and this gave a natural rhythm to the start and finish of the academic year.

Summary of Brainstorming and Breakout group conversations

1. How can OSU better support multi-investigator proposal development?

The group discussed the need for faculty to meet and discuss ideas for multi-investigator proposals. It is especially important of starting faculty to learn more about the existing faculty research interests and expertise across campus and those in local federal agencies. The development of working focus groups on several topical areas of interest should be considered. These groups would meet on a regular basis.

The groups would be more effective in developing multi-investigator proposals if a Grant Coordinator existed, presumably funded by the Research Office. The Grant Coordinator would help in all aspects of getting a proposal successfully submitted: identification of opportunities; gathering team of PIs whose skills and interests would address the need; coordination of timeline and writing tasks for the team; logistics of grant document preparation (on-line activities, assembly of CV's, C&P, facilities, etc); careful review of budgets and text.

The other issue discussed is the need for institutional support for the PI of large multi-investigator proposal, if the proposal is funded. For many grants, like NSF IGERT, there is not enough support for the PI in the grant for the time effort involved. Providing incentives for taking on the role of PI are needed.

Specific Actions:

- 1) **Grant Coordinator:** Develop a plan for the duties and funding for a Grant Coordinator. Refine the concept through the development of several grants in the coming months. Ultimately this position, at some fraction of an FTE, would be proposed to the research office as part of the support to the follow-on activities of the IWW.
- 2) **Focus Groups:** If there is faculty interest in forming focus groups, efforts are needed to facilitate meetings, decide on topic areas, leadership and meeting format.
- 3) **Faculty:** Faculty meetings that are coordinated, for example, with the semi-annual BBQ, to discuss the concept of developing working focus groups and for faculty to provide information on their research interests and expertise.
- 4) **PI Support:** Discuss the need for institutional support for the PIs of large multi-investigator projects.

Action Item: Todd Jarvis coordinates meetings of target teams of faculty to develop 2-5 proposals >\$1M in the coming 3 months. A faculty team should assemble in parallel prior to with spring pre-BBQ faculty meeting to further develop these ideas.

2. Ideas on Greater Support of Soft-money Staff

See the need to increase the number of soft-money staff but also want to have these staff feel highly valued. The diversity of situations suggests that they may need different forms of assistance in their research careers. Central issues included the ability to secure bridging funds to span brief gaps in grant dollars; to be given titles that allow the authoring of PI grants, and the ability to take on and guide graduate students both to advance their research programs and train the next generation of water experts.

Specific actions suggested included:

- A. Make a transparent and feasible means of gaining a **professional title** that provides greater recognition and allows the scientist to author grants. This should follow a clear career track (e.g., Research Scientist I/II/III, Senior Research Scientist, Assistant/Associate/Full Professor for research). To make soft-money staff successful, they need to have PI status – this is a critical element of building a research program.
- B. **Bridging Funds:** Due to federal grant and OSU carry-over restrictions, it may be that these can't be designated as bridging funds, but the need to assist productive researchers when they have a brief lapse in funding (i.e., when one grant ends prior to another approved grant commencing) should be available. These might come from the Director's discretionary funds or an OSU foundation fund, or "consulting services" (which is a highly flexible category) written into their grants.
- C. **Seed-money** is important for new research ideas – can help develop larger projects. This needs to be part of the OSU research enterprise, where promising scientists are given 6-12 months of funding specifically to develop a funded research program in a target area.
- D. **Semi-soft.** Partial FTE may be the model for future faculty (similar to what COAS has been doing, 0.25 FTE hard money the rest is soft money). Lots of research gets done this way but not much time for teaching.
- E. **Peer efforts.** Look to other successful soft-money organizations such as CIRES at University of Colorado (Cooperative Institute that's a collaboration between NOAA and CU).
- F. **Distance education** could also help provide funding for soft money scientists, valuable teaching experience, and add additional courses that would enrich the water program.

Action Items: Distribute the recent report on post-docs prepared by the faculty senate; and, have oceanography present a seminar on their methods, successes, and challenges.

3. Are the courses working? What needs adjustment in the academic program?

Water Courses at OSU

The question was brought up of the structure of the courses: how can we bring the diverse student entrants up to speed in basic hydro, policy, etc – should there be a foundational course series to provide a common understanding of fluid mechanics, sediment transport, climate change, water law? It was noted that the broader community (e.g., an email from Steve Taylor from WOU) is ready to help. Given the tight resources for teaching we need to leverage our people to into key needs rather than simply continue to teach the hodge-podge of courses that have come to exist following the whims of faculty and programs of the past. It was particularly emphasized that senior faculty should lead this effort, as they have the security to offer courses that may not be in their area of expertise. To succeed will require that we are experimental, and specifically work to improve our curricular effectiveness as a community.

The small group discussion reiterated that the campus needs fewer, more closely connected courses with larger enrollments. We must reduce the prevalent overlap in content by unifying and enhancing the level of preparation for graduate level courses. Ideas such as summer e-class and boot-camps for basics (water science, engineering, policy) need to be pursued.

To make this happen will require a series of meetings to evaluate:

- what we teach
- where is avoidable overlap within classes
- where are the holes in our offerings
- cross departmental/college scheduling issues

We need to identify an efficient strategy to guide how can we reduce, re-focus, strategize our academic offerings that cross 5 colleges.

Action item: The Water Resources Graduate Program Curriculum Committee is the natural group to lay out the road-map for this effort. This committee should be re-convened and given the charge to propose a ground-up revamp of the three WRGP tracks.

4. What should be in the post-June 30, 2009 OSU Water Center?

Challenges identified include termination of the Provost Initiative support for IWW at the end of this fiscal year (June 30, 2009) and lack of IWW inclusion in OSU's Capital Campaign or other funding sources to carry on from this time. The next-incarnation of the IWW/OSU Water Center should provide a focal point for cross-cutting water resources activities on campus. The value of the OSU Water Collaboratory as a vehicle for promoting OSU water research and engaging students in laboratory methods was recognized. The Vice President for research has indicated a strong interest in having the faculty develop a plan in advance of June 30, suggesting that urgent work is needed which involves the entire faculty with interest in water.

A number of suggestions for roles IWW/Water Center could serve were made, including the following:

- Provide focus (in conjunction with the new Climate Center) on **climate change impacts on water** resources in the state and region
- Provide organizational support for **large grant development** support for multidisciplinary teams (see appendix 1)
- Continue to administer the USGS small grants program
- Provide a major “docking point” for external groups to link to OSU water programs (the flag seen by people from the state, nation, and world)
- Provide focus for OSU Capital Campaign, particularly related to endowment support, professorships
- Provide a major international focus for OSU water programs, e.g. organizing short courses on irrigation management, other aspects of water resources
- Continue to promote the OSU Water Collaboratory

A more in depth discussion is needed as we consider the future of the IWW at OSU. A compelling vision that joins OSU water strengths, synergistic recognition of and possibly alignment with other OSU centers and programs, understanding of future opportunity areas, and alignment with OSU Strategic Plan is needed if we are to be successful in continuing the a center on campus that addresses the opportunities and challenges of water.

Appendix1:

Meeting Agenda Feb 27, 2009

Facilitator: John Selker

1:00-1:15 **Michael Campana** - Current statistics of OSU water community

1:15-1:30 **Richard Cuenca** - Outlook for water from a DC perspective

1:30-1:40 **Self-introductions** - Attendees

1:40-1:50 **Research Office** - Current research grant opportunities

1:50-2:15 **John Selker** - Open brain storming of ways forward

2:15-2:45 **Break Out Sessions** - Task-groups to address identified opportunities

- How to support multi-investigator proposal development
- How to support "soft money" investigators in our community
- Are the courses working? What needs adjustment in the academic program
- What would the ideal IWW look like?

2:45-3:00 **John Selker** - Closing synthesis

Appendix 2:
How IWW/OSU water Center could proactively support large grant development.
Thoughts of John Selker on this topic

One of the key campus needs is the promotion and technical assistance in the preparation of water resources research grant preparation. This would occupy the bulk of the time of one staff person, with an objective to submit on the order of 2-5 proposals in excess of \$5M, and 5-10 \$1-5M proposals per year. The completed proposals should be polished to a luster in all respects so that they are exceptionally well reviewed. Central activities might include:

Identify topical research clusters

- identify up coming large grant opportunities (e.g., NSF -new CZO call - which we should attend, Keck foundation, USDA (<http://www.csrees.usda.gov/water.cfm>), NASA (e.g., <http://neptune.gsfc.nasa.gov/hsb/etc>; USDA NRI; Gates foundation Water, Sanitation and Hygiene (<http://www.gatesfoundation.org/topics/Pages/water-sanitation-hygiene.aspx>); DOW (http://news.dow.com/dow_news/corporate/2008/20080514b.htm); Coca Cola
- Local water-related businesses and agencies (e.g., PGE, EWEB, Weyco, BPA))
- Propose a set of opportunities base on the skills and calls as the basis of a set of exploratory meetings
- Identify the top 5 opportunities that should be pursued each quarter.

Generate a list of potential teams and leadership that will be called to come together when a key opportunity is identified. Without any particular order, potential themes and leadership include (but are by no means limited to):

- Water resources at risk: Anne Nolin, Chris Daly
- Dam operations and removal: Desiree Tullos, Gordon Grant
- Stream function and restoration: Stan Gregory, Steve Lancaster, Roy Haggerty, Tullos
- Groundwater quantity and quality: Istok, Semprini, Haggerty Selker,
- Aquifer storage and recovery: Selker and others known to the IWW
- Ecological transition due to GCC: Bond, Law, Nolin, Nielsen
- Upland water generation: McDonnell, Grant
- Forest practices and Water: Skaugset, Grant, Jones
- Ag practices and water: J. Field, Istok, Selker, Haggerty
- Eco-informatics: Jones, Daly, Deitterich, Waymire