

Board of Directors Fall Teleconference Meeting

November 24, 2009

Call to Order: 3:35 pm

Roll Call and Determination of Quorum (Kevin Dressler)

- An “X” indicates present. 10 members required for quorum, 12 are present

Term expires 12/31/2009

Efi Foufoula, University of Minnesota X
Larry Murdoch, Clemson University (Synthesis Liaison) X
Fred Ogden, University of Wyoming X
John Selker, Oregon State University X
Juan Valdes, University of Arizona (HIS Liaison)

Term expires 12/31/2010

David L. Freyberg, Stanford University X
Patricia Maurice, University of Notre Dame
Jim McNamara, Boise State University X
Kenneth Potter, University of Wisconsin X
Claire Welty, University Maryland - Baltimore County X

Term expires 12/31/2011

Larry Band - University of North Carolina - Chapel Hill X
Jay Famiglietti, University of California – Irvine X
Tissa Illangasekare - Colorado School of Mines
Jennifer Jacobs - University of New Hampshire X
Scott Tyler - University of Nevada - Reno X

Officers Present: Kevin Dressler, Richard Hooper, Brian Waldron

Others: David Kirschtel, Witold Krajewski, Robyn Hannigan, Carol Johnston, Aaron Packman

Approval of Minutes, Meeting August 31-September 1, 2009

- Deferred until January BOD meeting

Reports (50 minutes)

1. Report on PASSCAL facility (Beatrice Magnani, U. of Memphis, PASSCAL Steering Committee)
 - PASSCAL – program for study of the continental lithosphere
 - Started in 1984
 - Does the CUAHSI community have an interest in using the facilities and possibly leverage some instrumentation in imaging such as GPR or LiDAR?
 - PASSCAL could provide technical expertise, etc
2. Report from HIS Standing Committee (Paul Houser)
 - Deferred, Paul House could not attend meeting
3. Introduction of E&O Standing Committee Chair (Thorsten Wagener)
 - Seven total members – mix of engineering and science departments, larger and smaller schools
 - Possibility of more members due to level of interest
 - Meeting Thursday morning of AGU for a brainstorming session
4. Status of Biennial Meeting Planning (Claire Welty)
 - Opening Remarks (Eric Barron)
 - Wolman Lecture (Gordon Grant)
 - Eagleson Lecture (Ignatio Rodriguez-Iturbe)
 - Keynote – TBD

Four Tracks under development

Dates of the meeting (Sunday July 18th arrival, 19th-21st meeting, ending on the 21st at Noon and then workshops through the 22nd)

- Need to solidify these workshop type events (what, where, needs, etc)
5. Pathfinder Fellowships (David Freyberg)
 - Support for graduate students to travel to other sites, up to 5 people at \$5000 maximum, deadline is December 31st
 - Was advertised a couple of time in the monthly CUAHSI Newsletter, EOS three times and on the CUAHSI website
 6. Hydrograf(x) competition (David Kirschtel)

- Deadline for application has been passed; there were two submissions (1 technical and 1 general audience submission)
- Need to consider whether this track should continue or if the funds could be better spent on other priorities

New Business

1. Strategic Planning Process (Jay Famiglietti)

- a. Calendar for Standing Committee and Board during 2010 Strategic Planning Process and in subsequent years (see page 4)
Standing Committee Charges (page 6):

- b. Role of Board in the Process

Proposal to have the board prioritize activities of CUAHSI and review suggestions from the Standing committees

Board to write the strategic plan

- i. Review of Mission statement at January meeting
(Current mission statement and new draft on page 5)
- ii. Retreat April 21-22 for primary writing
- iii. Revisions following Standing Committee reviews
- iv. Revisions following community input and final report

- c. Suggestions for location of retreat

2. Spring Cyberseminar series on Instrumentation

- Proposal right now, Hooper has a list of potential speakers
- Suggested Theme: “Recent Advances in Instrumentation”
 - Potential Speakers
 - Carol Finn, USGS, Airborne Geophysics (Mapping Ogallala)
 - Bridget Scanlon, UT Austin, Microgravity
 - Brian Pellerin/Brian Bergamaschi, USGS, Optical Water Quality Sensing
 - Craig Just, U Iowa, Clear Creek Long-term High-frequency Sensing
 - Miki Hondzo, U Minn, Lagrangian sensing

Adjourned: 4:45 pm

Standing Committees and Board of Directors

PROGRAMMATIC ROLES

Standing Committees

1. Review current projects within purview for their benefit to community, suggest priorities for future work, and modifications to current projects
2. Review annual “Status and Outlook” report to assess CUAHSI’s progress and strategy for advancing their subject area
3. Suggest new initiatives CUAHSI should pursue

Board of Directors

1. Prioritizes Standing Committee suggestions
2. Allocates current budget among activities
3. Decides which new funding initiatives to pursue

CALENDAR: STRATEGIC PLANNING 2009-2010

December, 2009. CUAHSI Staff delivers S&O Reports to SC

January-March, 2010: Standing Committees review S&O Reports.

April 21-22, 2010: Board retreat to write strategic plan.

April-June, 2010: Standing Committees form “inner circle” review of strategic plan

June, 2010: Incorporate comments

July, 2010: Release draft Strategic Plan to community (in connection with Biennial Colloquium); begin Community Comment period

September, 2010: Comment period closes. Writing team finalizes Strategic Plan

November, 2010: Release of Strategic Plan in advance of Annual Membership meeting

CALENDAR: SUCCEEDING YEARS

January. CUAHSI Staff delivers S&O reports to Standing Committees and delivers reports to Board for January meeting. (Help to orient new board members on CUAHSI activities.)

April. Standing Committee reports due back to CUAHSI

June. Collated and annotated package of reports distributed for Summer Board Meeting

July. Summer Board meeting establishes budget priorities for succeeding project year.

Oct 31. Annual report due to NSF with succeeding year Budget Request.

Dec. Annual membership meeting

Mission Statement—Current

To foster advancements in the hydrologic sciences, in the broadest sense of that term, by:

- Developing, prioritizing and disseminating a broad-based research and education agenda for the hydrologic sciences derived from a continuous process that engages both research and applications professionals;
- Identifying the resources needed to advance this agenda and facilitating the acquisition of these resources for use by the hydrologic sciences community; and
- Enhancing the visibility, appreciation, understanding, and utility of hydrologic science through programs of education, outreach, and technology transfer

Mission Statement—Draft Revisions

Facilitating major advances in hydrologic science through

- support of the academic research community and engagement with state, national and international agencies, applications professionals and the public and private sectors
- identifying the scientific infrastructure needed to advance hydrologic research and facilitate its acquisition and access for use by the hydrologic community
- enhancing the visibility, appreciation, understanding and utility of hydrologic science through programs education, outreach and technology

Charge to Education and Outreach Standing Committee

September, 2009

BACKGROUND

As part of its strategic planning process, CUAHSI must develop an approach to meet the education and outreach aspects of its mission. Efforts to date, such as the development of 3 short films about water, have been opportunistic. Moving forward, CUAHSI requires an education plan that articulates an overall vision for CUAHSI's role, as a university consortium, in education and outreach for hydrologic science as well as a prioritization of which activities it should undertake within existing resources and those for which it should seek additional resources.

CHARGE

The Standing Committee for Education and Outreach shall

- a) develop an education plan that articulates a vision for CUAHSI's Education and Outreach activities. This plan should define the niche that CUAHSI, as a university consortium, can fill uniquely. Principles that will assist CUAHSI in determining which activities to undertake should also be developed. This plan should consider a range of possible activities, from simply disseminating information developed by other groups, through hosting interactive databases and providing peer review of submitted materials to the direct development of education and outreach materials. A prioritized list of activities deemed appropriate for CUAHSI should also be developed
- b) develop an implementation plan for achieving the vision of the Education Plan, including, if necessary, seeking additional funding
- c) suggest metrics to track progress on achieving the vision of the Education Plan
- d) review existing CUAHSI and CUAHSI-affiliated projects to determine if they are fulfilling the spirit of "broader impacts" and suggest ways in which those activities can better meeting those needs

This education plan shall be submitted to the CUAHSI Board of Directors, for their review, by March 1, 2010.

COMPOSITION/MEMBERSHIP

The E&O Standing Committee will consist of no fewer than five members in the fields of hydrologic science and science education. The committee will have a Chair, Vice-Chair and Rapporteur. Committee members will be appointed by the Board of Directors or the Executive Committee of the Board acting in its place.

TERM

Members of the E&O Standing Committee will serve for a term not to exceed three years. The committee membership terms will be staggered with a target of no less than two continuing members each year.

MEETINGS

This Committee will commence meeting in October, 2009 and meet as necessary to complete its charge.

RESIGNATION

Any member may resign at any time by giving written notice to the Chair, the Vice Chair, the President or Secretary of the Corporation. Such resignation shall take effect at the time of receipt of the notice, or at any later time specified therein.

VACANCIES

Any vacancy in the E&O Standing Committee may be filled for the duration of the remaining term by the Board of Directors or the Executive Committee acting on its behalf.

REMOVAL

Any member of the E&O Standing Committee may be removed at any time either with or without cause by vote of the Board of Directors or the Executive Committee acting on its behalf.

CHARTER FOR HIS STANDING COMMITTEE

*Approved by the Executive Committee of the Board, February 25, 2008
and amended March 31, 2008*

CUAHSI HYDROLOGIC INFORMATION SYSTEMS

The Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI) is an organization representing more than one hundred U.S. universities. CUAHSI's mission is to foster advancements in the hydrologic sciences, in the broadest sense of that term, by:

Developing, prioritizing, and disseminating a broad-based research and education agenda for the hydrologic sciences derived from a continuous process that engages both research and applications professionals;

Identifying the resources needed to advance this agenda and facilitating the acquisition of these resources for use by the hydrologic sciences community; and

Enhancing the visibility, appreciation, understanding, and utility of hydrologic science through programs of education, outreach, and technology transfer.

As part of that mission, CUAHSI's Hydrologic Information Systems (HIS) Program has been developed to provide infrastructure to support the interdisciplinary study of hydrologic and related environmental systems across spatial and temporal scales. The goal of the HIS program is to develop tools that integrate the storage and distribution of data and that facilitate analysis, visualization, and modeling of data.

About the HIS Standing Committee

The HIS Standing Committee represents the community's interest in the various HIS projects.

The committee shall be appointed by the Board of Directors of CUASHI. In making appointments to the committee, the Board shall seek to create a balance of the membership interests (representing a range of colleges and universities and reflecting both instructional and research concerns) and individuals with the primary expertise in software design/engineering to evaluate the technical activities of the various HIS projects. Additionally, representatives from funding providers and agencies (such as USGS, NASA, and NOAA) that are important data providers, co-operators and partners may participate in committee deliberations as advisors to the committee.

Members of the HIS Standing Committee serve three-year terms and convene at least once per year.

Charge to the HIS Standing Committee

The HIS Standing Committee recommends to the CUAHSI Board on HIS policies, activities, and objectives, and assesses HIS projects in the context of those policies and objectives. The primary purpose of this committee is to review: 1) the progress of HIS projects during the previous year; 2) the projects' adherence to HIS policies; and 3) the projects' plans for the coming year in terms of allocation of resources, priorities, and comprehensiveness. This review includes, but is not necessarily limited to, usage, development, services, licensing, financial status, sponsorship and relations with the private sector. The committee's foremost responsibility is to ensure that the needs of the university community are met and that the various HIS projects are responsive to those needs.

Charge to the Instrumentation Standing Committee

November, 2009

BACKGROUND

Instrumentation services have been identified as one of the four fundamental areas for CUAHSI to pursue since its inception. A pilot project on a Hydrologic Measurement Facility was conducted between 2004 and 2008 and made a number of findings that found that many traditional approaches (e.g., a central warehouse of instruments) was not likely to fulfill the needs of the community. Alternative approaches were suggested. At the same time, funds for instrumentation facilities are very limited, so competition among proposals is stiff.

CHARGE

The Standing Committee for Instrumentation shall

- e) Review and comment on the “Status and Outlook for Instrumentation” report that will be delivered to the Committee by December 15, 2009. The comments should focus on the proposed near-term approach to providing instrumentation services for the hydrologic science community and address the following questions:
 - 1. Is the proposed role of CUAHSI appropriate or should a different or additional roles be considered?
 - 2. Does the proposed approach derive the maximum benefit to the community, recognizing limitations of resources, funding opportunities, and other constraints on CUAHSI’s actions?
 - 3. Are the procedures established for providing services to the community fair, objective, and transparent? Do procedures need to be modified?
 - 4. What additional instrumentation services should CUAHSI consider pursuing and why?
 - 5. Have all the important funding sources been considered or are there other funding sources that should be pursued?

This review must be received no later than March 1, 2010 to contribute to the on-going strategic planning process.

- f) Review and comment on the Strategic Plan that will be delivered to the Committee by June 1, 2010. The review must be received no later than August 1, 2010.
- g) In succeeding years, review and comment an annual Status Report, delivered in January, and deliver their review no later than April 1.

COMPOSITION/MEMBERSHIP

The Instrumentation Standing Committee will consist of no fewer than five members in the fields of hydrologic science and related scientific and technical fields. The committee will have a Chair, and Vice-Chair. Committee members will be appointed by the Board of Directors or the Executive Committee of the Board acting in its place.

TERM

Members of the Instrumentation Standing Committee will serve for a term not to exceed three years. The committee membership terms will be staggered with a target of no less than two continuing members each year.

MEETINGS

This Committee will commence meeting in December, 2009 and meet as necessary to complete its charge.

RESIGNATION

Any member may resign at any time by giving written notice to the Chair, the Vice Chair, the President or Secretary of the Corporation. Such resignation shall take effect at the time of receipt of the notice, or at any later time specified therein.

VACANCIES

Any vacancy in the Instrumentation Standing Committee may be filled for the duration of the remaining term by the Board of Directors or the Executive Committee acting on its behalf.

REMOVAL

Any member of the Instrumentation Standing Committee may be removed at any time either with or without cause by vote of the Board of Directors or the Executive Committee acting on its behalf.

Charge to the Observations Standing Committee

November, 2009

BACKGROUND

Establishing Hydrologic Observatories has been a goal of CUAHSI since its inception. While numerous interdisciplinary observatory activities have been initiated during CUAHSI's existence, none are currently managed or administered by CUAHSI, nor do any meet the specific objectives outlined in the CUAHSI science plan. Establishment of a network of observatories through the Major Research Equipment and Facilities Construction (MREFC) program seems unlikely at this time. Yet, there is a pressing need for organized long-term hydrologic observations now as CUAHSI Water Data Services mature. A data access center for hydrologic data is a far more likely facility investment in the near future than any large-scale investment in an observatory network. Given the current situation, CUAHSI needs to consider a more comprehensive strategy towards achieving the vision of long-term, comprehensive, coherent observations at a continental scale.

CHARGE

The Observations Standing Committee shall

1. Review and comment on the "Status and Outlook for Observations" report that will be delivered to the Committee by December 15, 2009. The committee should focus on the proposed near-term approach for advancing observations and address, at a minimum, the following questions:
 - a. Is the approach centered around voluntary data publication using CUAHSI Water Data Services a feasible strategy towards establishing a quasi-network of observatories?
 - b. Are CUAHSI support services adequate to accomplish this? If not, what else should be done? How can we create incentives to scientists to share data?
 - c. How can CUAHSI encourage research to be performed using WDS? Is the proposed strategy of education about client tools and server software stacks adequate?
 - d. Beyond data publication, the other major proposed activity in the report is measurement campaigns. Does the committee agree with the proposed development strategy?

This review must be received no later than March 1, 2010 to contribute to the on-going strategic planning process.

2. Review and comment on the Strategic Plan that will be delivered to the Committee by June 1, 2010. That review must be received by July 1, 2010.
3. Based upon the priorities established in the Strategic Plan, develop an implementation plan for observations for consideration by the Board by November 1, 2010.

4. In succeeding years, the Standing Committee will review and comment on a Status report to be delivered in January that indicates progress on an annual basis with reports to the Board of Directors due in April of every year.

COMPOSITION/MEMBERSHIP

The HO Standing Committee will consist of no fewer than five members in the fields of hydrologic science and environmental observatory networks. The committee will have a Chair and a Vice-Chair. Committee membership will be appointed by the Board of Directors or the Executive Committee acting in its place.

TERM

Members of the HO Standing Committee will serve for a term not to exceed three years. The committee membership terms will be staggered with a target of no less than two continuing members each year.

MEETINGS

This committee will commence meeting in February 2009 and meet as necessary to complete its charge. Meetings will be conducted by conference call or internet whenever possible.

RESIGNATION

Any member may resign at any time by giving written notice to the Chair, the Vice Chair, and President or Secretary of the Corporation. Such resignation shall take effect at the time of receipt of the notice, or at any later time specified therein.

VACANCY

Any vacancy in the HO Standing Committee may be filled for the duration of the remaining term by the Board of Directors or the Executive Committee acting on its behalf.

REMOVAL

Any member of the HO Standing Committee may be removed at any time either with or without cause by vote of the Board of Directors or the Executive Committee.

Charge to the Research Applications Standing Committee

November, 2009

BACKGROUND

The Standing Committee for Research Applications, defined as the exchange of knowledge between the research and practitioner communities, has been a standing committee since the inception of CUAHSI, but has not defined an agenda while waiting for other CUAHSI projects to take shape. The Board of Directors wishes to revisit how CUAHSI should engage with the practitioner community in hydrology, civil and environmental engineering given the progress it has made to date and the current outlook for CUAHSI.

CHARGE

The Research Applications Standing Committee shall consider how CUAHSI should engage with the practitioner community. Your report should address the following questions:

1. What is the appropriate role for CUAHSI, as a university consortium, to take in supporting the exchange between the research and practitioner communities? Consider the role of professional societies (AGU, ASCE, AWRA, AWWA, WRF, AEESP, etc.), other university groups (e.g., UCOWR, NIWR), and individual universities in addressing this question. What is CUAHSI's niche? Should CUAHSI partner with other organizations in pursuing research applications?
2. What actions can be taken within existing resources to improve the application of hydrologic science to current practices?
3. CUAHSI has traditionally focused on a portion of hydrologic science, summarized as the "AGU Hydrology Section." Is that a sufficiently broad community when considering research applications or should the community be broadened when considering the demands for water treatment technologies, waterborne diseases, and other water-related areas?
4. What projects that require additional resources should be developed? What are potential funding sources for such projects?
5. There are various initiatives from foundations and the private sector (e.g., ImagineH₂O, Water Innovation Alliance, Desalinization Challenge) concerning water technology. How should CUAHSI engage with such initiatives?

An interim report must be received by March 1, 2010 that provides initial thoughts on these questions for consideration by the Board during the strategic planning process. A completed report is due June 1, 2010 that addresses these topics and recommends steps that CUAHSI should take in addressing this issue.

The comments of this Standing Committee are also requested on the Strategic Plan to be submitted to this Committee for review by June 1. Those comments are due August 1, 2010.

A Status Report on Research Applications will be submitted to this committee annually in subsequent Januaries for its review and comment. Those comments are due by April 1 in order to contribute to the annual planning process for CUAHSI projects.

COMPOSITION/MEMBERSHIP

The Synthesis Standing Committee will consist of no fewer than five members in the fields of hydrologic science and related scientific disciplines. The committee will have a Chair, and Vice-Chair. Committee members will be appointed by the Board of Directors or the Executive Committee of the Board acting in its place.

TERM

Members of the Instrumentation Standing Committee will serve for a term not to exceed three years. The committee membership terms will be staggered with a target of no less than two continuing members each year.

MEETINGS

This Committee will commence meeting in December, 2009 and meet as necessary to complete its charge.

RESIGNATION

Any member may resign at any time by giving written notice to the Chair, the Vice Chair, the President or Secretary of the Corporation. Such resignation shall take effect at the time of receipt of the notice, or at any later time specified therein.

VACANCIES

Any vacancy in the Synthesis Standing Committee may be filled for the duration of the remaining term by the Board of Directors or the Executive Committee acting on its behalf.

REMOVAL

Any member of the Synthesis Standing Committee may be removed at any time either with or without cause by vote of the Board of Directors or the Executive Committee acting on its behalf.

Charge to the Synthesis Standing Committee

November, 2009

BACKGROUND

Synthesis has been identified as one of the four fundamental areas for CUAHSI to pursue since its inception. A technical report, written in 2004, laid out the need for a National Synthesis Center (<http://www.cuahsi.org/docs/does/CUAHSI-TR5.pdf>). A proposal for such a center was unsuccessful, but two “synthesis activities” were chosen in 2006. Lessons learned from these projects should inform the future directions CUAHSI will take in advancing synthesis in the hydrologic and related sciences.

CHARGE

The Synthesis Standing Committee shall review and comment on the “Status and Outlook for Synthesis” report that will be delivered to the Committee by December 15, 2009. The comments should focus on the proposed near-term approach to advancing synthesis science for the hydrologic science community and address the following questions:

1. Is the proposed strategy for supporting synthesis science appropriate or should different strategies be considered?
2. Is the role of CUAHSI, as defined in this report, an appropriate role for it to take?
3. Has the proposed strategy adequately considered potential funding sources? Are there other funding sources?
4. Does the proposed strategy best serve the academic research community whom CUAHSI represents?

This review must be received no later than March 1, 2010 to contribute to the on-going strategic planning process.

The Committee shall also review the Strategic Plan, to be delivered to it by June 1, 2010. This review must be delivered by August 1, 2010.

In succeeding years, the Committee shall review and comment on an annual Status Report that will be submitted to it in January. This review shall be submitted by April 1.

COMPOSITION/MEMBERSHIP

The Synthesis Standing Committee will consist of no fewer than five members in the fields of hydrologic science and related scientific disciplines. The committee will have a Chair, and Vice-Chair. Committee members will be appointed by the Board of Directors or the Executive Committee of the Board acting in its place.

TERM

Members of the Instrumentation Standing Committee will serve for a term not to exceed three years. The committee membership terms will be staggered with a target of no less than two continuing members each year.

MEETINGS

This Committee will commence meeting in December, 2009 and meet as necessary to complete its charge.

RESIGNATION

Any member may resign at any time by giving written notice to the Chair, the Vice Chair, the President or Secretary of the Corporation. Such resignation shall take effect at the time of receipt of the notice, or at any later time specified therein.

VACANCIES

Any vacancy in the Synthesis Standing Committee may be filled for the duration of the remaining term by the Board of Directors or the Executive Committee acting on its behalf.

REMOVAL

Any member of the Synthesis Standing Committee may be removed at any time either with or without cause by vote of the Board of Directors or the Executive Committee acting on its behalf.