



CUAHSI Board Meeting Minutes

April 7, 2015, via teleconference

Roll Call

- 10 members are present, 10 needed for quorum
- “X” indicates Director is present

Term expires 12/31/2015

Anne Carey, Ohio State University X

Robyn Hannigan, University of Massachusetts-Boston

Carol Johnston, South Dakota State University X

Witold Krajewski, University of Iowa

Brian Waldron, University of Memphis X

Term expires 12/31/2016

Michael Gooseff, Colorado State University X

David Hyndman, Michigan State University

Brian McGlynn, Duke University X

Holly Michael, University of Delaware X

Todd Rasmussen, University of Georgia X

Al Valocchi, University of Illinois Urbana-Champaign (Chair) X

Term expires 12/31/2017

Erkan Istanbuluoglu, University of Washington

D. Scott Mackay, SUNY University at Buffalo X

Kamini Singha, Colorado School of mines

Scott Tyler, University of Nevada, Reno (past-Chair) X

Officers & Staff Present: Adam Ward (Secretary), Rick Hooper (CUAHSI), Emily Clark (CUAHSI), Emily Geosling (CUAHSI)

Minutes prepared by Adam Ward

Tuesday, April 7, 2015

15:00 EST Call to Order

Informational Items

1. Status of meeting minutes for Board of Directors (Ward)
 - a. Ward reported that Board of Directors meeting minutes have from January, February, and March 2015 have been approved by action without meeting.

	Jan-15	Feb-15	Mar-15
Carey	Approve	Approve	Approve
Hannigan	Abstain	Abstain	Abstain
Johnston	Approve	Approve	Approve
Krajewski	Abstain	Approve	Abstain
Waldron	Approve	Approve	Abstain
Gooseff	Abstain	Approve	Approve
Hyndman	Approve	Abstain	Abstain
McGlynn	Approve	Approve	Approve
Michael	Approve	Approve	Approve
Rasmussen	Approve	Approve	Approve
Valocchi	Approve	Approve	Approve
Istanbuloglu	Approve	Approve	Approve
Mackay	Approve	Approve	Approve
Singha	Approve	Approve	Approve
Tyler	Approve	Abstain	Approve

2. Management Review Report (Valocchi/Hooper)
See <https://cuahsi.centraldesktop.com/p/ZgAAAAAAR0il>
 - a. Valocchi summarized an overall positive meeting with the NSF during the management review. The final report has not yet been received from the NSF.
 - b. Hooper reported that the review committee recommends development of a business plan for long term sustainability of the WDC.
 - c. Valocchi and Hooper will share the report with the Board when it is received, and begin work on the response at that time.
3. Summer Board Meeting (Hooper)
Please confirm attendance with arrival and departure dates with Emily Geosling
 - a. Hooper has reserved rooms for this meeting. Please respond to Emily Geosling
4. National Flood Interoperability Experiment (NFIE) Update (Hooper)
 - a. Emily Clark reported a total of 54 applications for the NFIE programs that will be offered this summer. All applicants were accepted, including international attendees, and they must accept by Friday, April 10th. She has received some feedback from applicants and some confirmations at this time.
 - b. Hooper reported four themes that will organize the efforts: Hydrology, Hydraulics, Uncertainty, Emergency Response. Each team will focus on one aspect of a shared model, with theme leads identified to help structure the effort.

- c. Hooper reported that the capstone conference will be combined with 3rd Hydroinformatics Conference (Conference Theme: Data and Model Interoperability: From Theory to Practice).
 - d. Hooper reported that funds have not yet been awarded, and all funds for participants are awarded conditionally on the basis that these funds are received.
 - e. Hooper emphasized the nature of this project, in that these funds are a major award from a new agency for CUAHSI.
5. WDC Staffing Update (Hooper)
- a. Hooper reported that Brian Cummings (Senior Software Engineer) will begin on April 13.
 - b. Hooper reported that the WDC is seeking a Bachelor's Level *Data Analyst* who can work on new services, in particular someone with a background in water quality or hydrology and coding experience.
 - c. Hooper requested that Board members suggest possible candidates, and he will circulate a position description to the Board.
6. Pathfinder Survey (Geosling)
See <https://cuahsi.centraldesktop.com/p/ZgAAAAAAR0il>
- a. Geosling circulated a draft survey to be sent to previous Pathfinder fellows for review by the Board, as requested at the January 2015 meeting. She requested feedback before the survey is circulated.
 - b. Carey and Valocchi provided some feedback and endorsed the survey.
7. Registration figures for Watershed Science Master Class and WRF-Hydro Training (Clark)
- a. Clark reported that registration for the Watershed Science Master Class was at 9 participants. She reported a break-even participation rate was 25 students. As a result, the course will be canceled due to budgetary constraints. She reported that interest was high for this course, but the timing conflicted with many academic semesters and was a likely reason for the low turnout.
 - b. Clark reported that a maximum capacity for the WRF-Hydro course was set at 25 students, based on capacity of the facilities. She has a total of 25 accepted applicants plus 7 on a waiting list. At this time 15 of the possible 17 student travel grants will be awarded.

Action Items

1. Appointment of Jennifer Arrigo to Education and Outreach SC
 - a. Hooper reported that Arrigo, former CUAHSI employee, is now at UCAR/NOAA. She has an interest in joining the Education and Outreach committee.
 - b. **Motion: The CUAHSI Board of Directors appoints Jennifer Arrigo (UCAR/NOAA) to the Education and Outreach Standing Committee.**
 - i. **Motion: Rasmussen**
 - ii. **Second: Johnston**
 - iii. **Discussion: (none)**
 - iv. **Vote: Approved (unanimous)**
2. Continental Hydrology and Science/Strategic Planning Effort (Tyler)
See <https://cuahsi.centraldesktop.com/p/ZgAAAAAAR0il>
 - a. Tyler reported that he and Hyndman had discussed major gaps in hydrologic science, and opportunities for CUAHSI to lead a major effort that would significantly enhance the capabilities of the discipline. They developed a document focused on capturing the

impact of humans on the hydrologic cycle, with particular focus on gauging in headwater streams. Part of the motivation for this was thinking of fundamental data that would be useful, and could be successful at a broad scale. Tyler noted that this was somewhat narrowly focused with this objective and a reasonable fiscal scope. He expressed that this would be a community data set at the continental scale, designed as a resource for hydrologists and not a singular direction for all hydrologists.

- b. Hooper suggested that one benefit to this proposal is that it is scoped at a level that addresses a community need, and is focused on development of a community data set with a defensible design. Hooper is interested in the opinion of the Board on this, as a key component in the science planning effort or something that should not be included in the science plan.
 - c. Valocchi noted that past discussion have focused on surveying leaders in the field of hydrologic science to assess ideas from the community and vet proposed ideas. He suggested this could be used as an example, and could frame the discussion.
 - d. Mackay expressed that these data would be common to many community members, acknowledging that there would be some who felt “left out” of many efforts.
 - e. McGlynn discussed the possible conflict of this operation being associated with the USGS and their existing network in comparison to a CUAHSI-led effort. Hooper suggested that these data could be added at a marginal cost at locations where existing efforts exist (e.g., LTER network). Tyler hopes that this could be executed in collaboration with the USGS and other federal agencies to coordinate field measurement and modeling efforts. He hopes this would catalyze a larger discussion about integration across many existing efforts.
 - f. Hooper suggested standardizing data collection and the workflow to translate data into models would be a key advance.
 - g. Valocchi asked what next steps would be taken if the Board were to endorse this. Hooper suggested that the upcoming decadal survey would be modified to present the framework of a common measurement framework for community analyses and modeling. As an example, he would ask questions like “would this sort of investment advance hydrologic science?” or “how would this investment enable a new line of research in your area of expertise?”.
 - h. Valocchi suggested that the review committee consensus was that CUAHSI is behind in updating its science plan, and needs to improve engagement with the community on this activity.
 - i. The group discussed a strength in the effort being led by people who are not primarily in stream gauging research (Hyndman, Tyler, Mackay), to help emphasize the basic community benefit of these data and efforts.
 - j. **Motion: The CUAHSI Board of Directors supports the further development of the Continental Hydrology Initiative as the basis for the CUAHSI Science and Strategic Plan that is under development.**
 - i. **Motion: Michael**
 - ii. **Second: Waldron**
 - iii. **Discussion: (none)**
 - iv. **Vote: Approved (unanimous)**
3. Use of Asa Johnson gift funds for OECD meeting (Hooper)
See <https://cuahsi.centraldesktop.com/p/ZgAAAAAR0il>

- a. Hooper reported that Asa Johnson had previously given a gift to CUAHSI to fund a Let's Talk About Water event. It has generally been used to support international efforts for outreach and collaboration. At present, the fund has about \$8,000 remaining. He noted that Linda Johnson plans to conduct a LTAW water at the Organization for Economic Cooperation and Development forum in Paris, France in October 2015. Hooper would like to use the funds to complement the effort with a panel discussion, primarily from Europe.
 - b. Gooseff clarified that the screening of Chasing Ice would be used to segue into a discussion of "big data" initiatives in hydrology with the panelists.
 - c. **Motion: The CUAHSI Board of Directors approves the use of the balance of the Asa Johnson Gift for Water Education (\$7,918) for the execution of a Let's Talk about Water Event on "Big Data" at the Organization for Economic Cooperation and Development, Paris, France on October 2, 2015.**
 - i. **Motion: Johnston**
 - ii. **Second: Carey**
 - iii. **Discussion: (none)**
 - iv. **Vote: Approved (unanimous)**
4. Selection of Theme for 2016 Biennial Symposium (Michael)
See <https://cuahsi.centraldesktop.com/p/ZgAAAAAR0il>
 - a. Michael has circulated a document outlining possible themes for the biennial, and a web-based vote has also been initiated. She reported that the theme related to leveraging "big data" for network-scale science was the most popular of the choices.
 - b. Hooper suggested that theme might help engage the CZO and LTER communities, and possibly NEON.
 - c. Michael was concerned about exclusion of people working at smaller scales, and how to link them into this meeting. It was suggested something like "finding your place in big data", which would also allow researchers focused on smaller-scale processes to engage with the theme.
 - d. There was general consensus on this theme, and Michael will solicit ideas for speakers and workshops in the coming weeks, hoping that possible speakers can be identified. Valocchi suggested the informatics standing committee might be a good place to request help, particularly with respect to the technology side of a big data effort. Waldron will work with Michael on this action item.
5. Education Vision Document (Waldron)
See <https://cuahsi.centraldesktop.com/p/ZgAAAAAR0il>
 - a. Waldron circulated a draft education vision document. The objective was to position CUAHSI to fill needs that are not currently addressed by universities. He envisioned a basic strategy for CUAHSI to move forward with limited resources, and attempt an iterative approach to growing this area of CUAHSI's proposal.
 - b. Hooper noted that this articulates a vision of CUAHSI building toward an E&O staff. He also noted that this document outlines an approach to guide the efforts of the E&O committee. Hooper suggested an extreme alternative would be a document that stated CUAHSI would not pursue E&O as part of its mission.
 - c. The group discussed a vision of hiring staff to lead these efforts, with widespread recognition of expertise.
 - d. Waldron expressed a desire to include a strong evaluation component in all activities, where quantitative metrics could be used to demonstrate advances.

- e. **Motion: The CUAHSI Board of Directors adopts the Education and Outreach Strategy outlined in the document submitted by the Education and Outreach Standing Committee.**
 - i. **Motion: Rasmussen**
 - ii. **Second: Carey**
 - iii. **Discussion: (none)**
 - iv. **Vote: Approved (unanimous)**
- 6. **Motion to adjourn.**
 - a. **Motion: Rasmussen**
 - b. **Second: Waldron**
 - c. **Discussion: (none)**
 - d. **Vote: Approved (unanimous)**

16:07 EST Adjourn