January 9, 2007

Symbols in the text are placed to draw attention to votes, action items and other priority agenda items.

**Notes for the meeting are recorded by the CUAHSI secretary (Kevin Dressler) as representation of the discussion topics and point and are not the opinion of the secretary**

OPEN TO PUBLIC
8:30 Call to Order (Claire Welty)
- round table introductions, discussion of using Robert’s Rules of Order

8:31 Roll Call of Attendees (Dressler records roll)

Role Call of Current Board of Directors: “X” – **Indicates Present**

**Term expires 12/31/2007**
- Wendy Graham, U Florida: X
- Jeff Dozier, UC Santa Barbara
- Claire Welty, UMBC: X
- Laura Toran, Temple: X
- David Tarboton, Utah State: X

**Term expires 12/31/2008**
- Jay Famiglietti, UC Irvine: X
- Praveen Kumar, U Illinois: X
- Venkat Lakshmi, U South Carolina: X
- Greg Pasternak, UC Davis: X
- Fred Scatena, Penn: X

**Term expires 12/31/2009**
- Efi Foufoula, U Minnesota: X
- Larry Murdoch, Clemson: X
- John Selker, Oregon State: X
- Fred Ogden, U Wyoming: X
- Juan Valdes, U Arizona: X
**Officers**
Rick Hooper: X  
Kevin Dressler: X  
Chunmiao Zheng: X  

**Others**
Jon Duncan  
Doug James  
Dave Schimel  
Paul Thrasher  
Jessica Annadale  
Charles Vörösmarty  
Jami Montgomery  
Art Goldstein  

**Approval of agenda** (Claire Welty)
→ Motion and vote

Motion to Approve Revised agenda: Famiglietti  
Second: Graham  
Approved: Yes  
Discussion: At 3 pm we have a discussion on the WATERS process – we should do this without NSF here as there is a vote  

**Role of the Board of Directors, Meeting Procedures** (Rick Hooper)
- Hooper reminds the Board that they run CUAHSI and inform the staff on what they should be doing  
- Tomorrow will be electing chair-elect to the Executive Committee  
  o Are now on the 3 member rotation  
- Must be a formal ballot for President, according to law – may write in candidates  
- Following Robert’s Rules of Order (10th edition)  
- Would like Board to consider the renewal proposal (content and process)  
  o Would like CUAHSI to formulate formally what we are, what we are doing, what we want – Instead of only reacting to opportunities  
  o Questions for Rick Hooper  
    - Will this be an unsolicited proposal? – probably yes  
    - Is there a budget limit? Right now is NSF is indicating a level funding limit  
    - When will we focus on the renewal proposal? Tomorrow morning in the breakout groups and then in the afternoon in the strategic planning exercises  

**Miscellaneous Discussion**
- Comment from Venkat Lakshmi – CUAHSI has had a great start but we must realize that we must decide what we can do beyond conventional projects  
- There is no contractual obligation to do a science plan for NSF
II. Review of Programs – Observatories (Portion moved from afternoon)

Observatories (To be continued at 3 PM) (Claire Welty)
→ Toran is liaison to standing committee/Waters Coordinating Committee

→ Collaboration with NEON (Dave Schimel)
  ■ Last Spring NEON submitted a Science and Education Plan that went through 2 reviews which were quite negative
    o NSF requested a writing team and suggested a change in leadership
    o There was a move away from 60 rigid experimental sites to a new design that allowed for community input
      ▪ New design puts emphasis on 20 eco-climatic zones (domains)
      • Each domain will have a core wildland site hopefully in a first order watershed
  ■ NEON had its Conceptual Design Review in November
  ■ April 30 Project Design Review
  ■ Site level issues
    o NSF is organizing an evaluation workshop in February to mine the RFI responses
    o The network will be voted on by the NEON board on February 22nd
  ■ Have R&RA through FY08
    o If there is a continuing resolution cannot have an MREFC new start
    o Note, there is a current continuing resolution for FY07
  ■ 4 Component Platform
    o Core Sites, Mobile and re-locatable (3-5 yr duration), airborne, land-use analysis package (need to know land-use context and something about the human and economic drivers for the land-use)
    o National scale ecological change is driving the network design
      ▪ Land-use and climate change impacts on ecosystems
  ■ If NEON is funded what would be the annual level? Not specified
    o What would be the O&M? Not specified

■ How do we start making better formal collaboration as these initiatives evolve?
  o Develop some MOUs? Beyond that and more specifically (see points below)
  o Opportunity for collaboration may be in the satellite sites, not in the core sites
  o Open call for input via webcast (NEON to inform CUAHSI of the timing)
  o Cyberinfrastructure
    ▪ 3-main components
• Sensor Push (sensors and software that captures observations)
• Middleware (data management, archive, security, file formatting, metadata, etc)
• User Pull – designing right now, modeled somewhat on NASA data products (providing variables in a way that disciplinary scientists can use; need to envision what high level data products are needed to be most useful otherwise it is just a big data warehouse)
  o Could just be mean and variances
  o Applying models to raw data to convert to a useful product (e.g. turning local data into regional data)

  ▪ So, define information products that are needed to answer science questions – this is a point of entry for collaboration
  ▪ Collaborate with scientists to implement algorithms into the NEON data system to produce products that enable the science
    o Positioning WATERS Network
      ▪ Making distinctions between NEON and WATERS so that is not perceived that the NEON is solving our community’s problems

  ■ Once NEON sensor suite is defined, then a general proposer could respond and propose a better sensor or design, for example
    o Similarly with respect to algorithms there could be targeted calls that leverage off the NEON observations to develop higher level products
    o Both NEON and CUAHSI could work with NSF to recommend reviewers in general calls

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I. Corporate Administration

Financial Report (Chunmiao Zheng)
  ➔ Information only; no vote required

Zheng referred to Meeting binder
  Brief discussion on left over monies and what that means

Audit Status (Paul Thrasher)
  ➔ Information; want sense of board for audit resolution

  ■ Office of inspector general of NSF conducted an audit of CUAHSI for 2002-2004
    o Initial result was $90K disallowed costs
      ▪ Close to final resolution of $35K, of that CUAHSI has been reimbursed for $21K from AGU, of the remaining $14K, $4K is still under discussion
      ▪ Is the Board ok with this resolution?
Motion to approve up to $15K with the expectation that a reasonable effort will be made to negotiate the $4K in question: John Selker
Second: David Tarboton
Discussion: Amend January 31, 2007 as the reasonable time limit for negotiation of the $4K: John Selker
Second: David Tarboton
Approval: Yes

Corporate Policies and Procedures (Tarboton)
→ Need to establish corporate policy; motion and vote required

Regarding the Accounting Policies
- Board should not necessarily be concerned with all the details, but should be comfortable that the overall principles are sound
  - Tarboton suggests that people need to be identified instead of just saying “human resources”
Concerns: position titles used are generic, what happens in terms of medium disability or injury (under the organization’s discretion), do we need a more definitive indirect cost rate (at this time we choose not to calculate an a priori rate as an organization, leaving us most flexible)

Motion: Approve the corporate accounting policies subject to amendments already made by Tarboton – Tarboton
Second: Selker
Approval: Yes
Discussion: Sick leave policy should left as “reasonable” and not specific

Regarding the Employee handbook
Concerns: discrimination language (suggests that the employee may be able to report to any board member to give them flexibility)

Motion to accept the employee handbook: Tarboton
Second: Graham
Approval: Yes
Discussion: Little vague on words like “company” (who in the company?). Can anyone fire anyone? Maybe list it is as “continuing subordination”. Strike “typically”.

What about maternity leave? This is billable (really a variation of sick leave)
- The board would like to adopt a maternity leave policy and survey other organizations for a reasonable policy. Rick Hooper and CUAHSI staff will report back to the board by next physical Board of Directors meeting
ExDir Compensation (Wendy Graham)

**to preserve anonymity, Directors are letters A thru F.

* Establish basis for compensation; assess reasonableness; motion and vote required to establish “safe harbor”

CUAHSI must be deliberate as to how we compensate our executive director
- Board members are liable to pay back 10% of overcompensation to the director
- Therefore, we must develop a reasonable salary
- Dorn and Klamp, P.C. did a comparative study of compensation
  - Hooper’s current salary ($171,800, benefits add $32,100; this is on the high end of the middle 50%
    - That means that there are people getting paid higher and lower

- Director A – high end of 50% is ok, but what justifies the salary is success of CUAHSI (if CUAHSI fails, Hooper will have trouble interacting back into academics – this justifies the salary)
- Director B – salary should be based on performance
  - Is this a place to discuss the role of executive director?
  - Welty – there is a committee that reports on performance and reviews salary
    - This is not an evaluation session and anyone can give input to the performance evaluation committee
    - Salary must be based on some criteria (should be brought out here)
    – Kumar

- Director C – this is not a forum to decrease pay, but it is a forum to set pay raises
  - Should adopt the inflation indexing for raises
  - If we do have a new CEO, then we set reasonableness

*Remind ourselves that we are here to determine if this salary package is reasonable.*

How was the salary set initially? Director D
- Marshall Moss and John Wilson negotiated as part of hiring Rick Hooper
- A significant bonus and raise was given in the first two years

Director E – thinks it is important to talk about the performance against a criteria

Director B
- 3 concerns
  - Role of director is a synthesizer, not necessarily a PI but someone who delegates tasks to the community and then synthesizes
  - Office time
  - Popularity at NSF
  - Two different issues – performance and pay for that performance, our responsibility for defining the executive director’s role
Some Suggested Criteria
- Creative vision and Program milestones – e.g. Science Plan
- Standing at NSF (respect in two way street)
- Mastery of Corporation administrative detail – measuring this against the need to travel

Director F – performance must have been satisfactory until now b/c of the increases, but what about future? I need more information.

Motion: Whereas the Board has approved this salary and benefit level one year ago and whereas this position is not as secure as other positions of non-profits as evaluated by Dorn and Klamp, and whereas we have a process by which we will consider in detail the performance by committee – we accept and support the current pay level as being appropriate to this position and we continue performance evaluation with the expectation that future increases will not exceed cost of living – Selker

Second: Scatena
Selker – amendment to eliminate the amount or manner for which we assign raises

Final Motion:
Whereas the Board has approved this salary and benefit level one year ago and whereas this position is not as secure as other positions of non-profits as evaluated by Dorn and Klamp, and whereas we have a process by which we will consider in detail the performance by committee – we accept and support the current pay level as being appropriate to this position

Second: Scatena
Approved: Yes, 1 abstention

Discussion:
Director D – set the tone that there should be modest increases unless there is significant growth

Director G – are there formally stated metrics for the position? Graham – Yes

Director H – uncomfortable with salary vote and the increases (should be based on performance)

Director I – bear in mind that we are at risk with increases (said by Dorn and Klamp)

Director J – dangerous for us to vote that the salary is inappropriate, but at the same time we must consider
- The salary is appropriate for this position based on what we expect from CUAHSI
- Appropriate for “position”
Director K – maybe the procedure we use to do a performance evaluation could be done without email (by phone)

Director B – given my concerns about what he is doing the board should have more input to the executive director activities

What is the minimum motion we need?
Director I – we need to understand what he has been paid, look at comparable data and determine if the compensation is reasonable

Director E – Board needs to make a statement of corporate priorities

- Place on the schedule to discuss this tomorrow

II. Review of Program Activities and Status

Education and Outreach (Claire Welty)
- David Tarboton board liaison to standing committee
- Status report and pending proposals distributed
- Appointment of E&O Standing Committee; motion and vote for approval

Motion to approve the current listed E&O standing committee with Martha Conklin as chair: Kumar
Second: Tarboton
Approval: Yes
Discussion: this is a large committee but it is very good, do we have an implied tenure? (will set the default at 3 yrs)

Policy point: What about taking money from corporations for the education series?
- There is precedence for non-profits to take corporate money
- Are there any initial concerns?
  - Careful who you take from
  - Expect that any donations would be accepted as they past the muster as being prudent as long as the corporation doesn’t use us for profit making or that the organization has objectionable corporate practices – Selker

Directors please give feedback on the 3 educational videos – Hooper
- Should be getting input from the general membership as well – Pasternack
- Let the education and outreach committee handle this – Kumar

HMF (Claire Welty)
- Pasternack liaison to standing committee
- Information brochures distributed
Governance structure – Need for recommendation for review process (Hooper)

There is a draft governance structure in the directors’ binders

- The standing committee should play a role in accepting or amending the governance structure and report back to the board – Pasternack
- The board will then review that information and the accept or reject
- Action item – the standing committee is to report back to the executive committee by March 1

Roger Bales selected as standing committee chair
- Have finalized committee membership
- Met at Fall AGU
  - Talked about the different node proposals
  - Each node seemed to take a different approach to what a node means
- Is the board liaison a secretary for this committee or what is the role?
  - Role is to facilitate and be present, give voice of the board and report back to the board
- Need to track how many times and where the instruments in the HMF proposal are used, if funded
- Charge to Committee
  1. Provide review and oversight of the HMF
  2. Provide vision over the long-term of what CUAHSI wants from an HMF

HIS (Claire Welty)
- Need board liaison to standing committee
  - Juan Valdes volunteers to be board liaison to HIS
- Status report distributed

Policy on use of commercial software and licensing of software developed by CUAHSI – Need for recommendation for policy development process (Hooper)
- Some pressing nature b/c of users already asking to use products

Subcommittee to review this policy
- Ogden – form a small ad hoc committee to work on the problem and volunteer to serve
- Kumar – agrees to serve with Ogden
- Valdes – agrees to serve
NSF Changes – Doug James

- Margaret Leinen talked to EAR sub-directors yesterday about a new division director
  - Art Goldstein formally replaces Herman Zimmerman
    - One of the first things a division director does is state a vision of where the community should go
      - Must communicate our vision to Art so that the vision will be realized
  - Now a search committee to fill Margaret Leinen’s position

Status of Science Plan (Hooper)

- Discussion of proposed revised structure; motion and vote for approval
- Identify volunteers to contribute science questions

  - Version 2.6 is provided in the Board binder
  - Most of the contention has been what to do with section 2
    - Under the current document it is rather difficult to get to specific science questions
    - Section 2 needs restructuring
  - Kumar – was there something deficient in the charge in summer 2005 that has caused this result?
  - Hooper – not useful to send this particular document out for wide review at this time (need a more complete document first that is more strongly structured and more detailed)
  - Tarboton – Suggests that we select someone who wrote a book to help complete
  - Scatena – Maybe do an executive summary of this, get it to NSF and the send out for more review
  - Selker – when the charge was made it was made clear that it must be a tractable science plan
    - Peer review should be a part of complete plan (i.e. how will the actionable items in a plan be adaptable)
  - Famiglietti – need to just send out for review
  - Hooper – can the current form serve as a charge for input?
    - That is, can we get 5-yr horizon questions from the community
  - Ogden – one of the key things missing from this document is timely, important issues
  - Kumar -- One document that puts out the community’s agenda and then a second that lays out implementation over the next 5, 10, 15 yrs
  - Foufoula – one more round of feedback (give to original SAT committee, announce it will go for external review)
Motion to take the current document, show to the SAT committee and announce it will be released for review: Graham
Second: Kumar
Approval: Yes
Amendment
  o Lakshmi sends comments from the Board, Selker and Hooper to the SAT as a member of the SAT and not a representative of the board
    • Lakshmi then helps to collate comments from the SAT (receive them on February 1)
      o Next will send out to external reviewers with context for review (Rick Hooper will work on the review form) by February 15th
Hooper to inform the SAT immediately of the process

Discussion: Add Rick Hooper’s and John Selker’s documents as an appendix or supplemental material

Add original reviews from the Board in August

CUAHSI staff received comments from the Executive Committee and the Board – incorporated the easier comments but multiple orthogonal responses on higher level issues did not lead to a consensus that could be implemented on all comments

Need to name a responsible party to pull it together from here
  o This was decided as Rick Hooper and Venkat Lakshmi

Right now NSF is at a critical point
  o Does CUAHSI need to write a letter to NSF about the process?

**Synthesis** (Welty)

- Need board liaison to standing committee
  Larry Murdoch volunteers as the liaison to the Synthesis standing committee

- Proposal project summaries distributed (Kumar and Vörösmarty)

Selker – the synthesis activities seem to serve the community openly

- Discuss how CUAHSI can support Synthesis activities (Hooper)

Hooper – CUAHSI could possibly sponsor an additional meeting for the groups so that more of the funds could be saved for science
Would like to have an introductory meeting of all PIs on both grants to collate ideas
  • This helps defray the cost of community engagement
  • Travel grants that allow people to participate who are not directly involved
  • Jami Montgomery – possible involvement here from the WATERS project office

Ogden – looking for a more formal interface mechanism so that CUAHSI could facilitate leveraging better of people who want to participate

*NSF Program Officers to join meeting*

**Observatories** – Continued

→ WATERS Conceptual Design Report (Graham)
  o CLEANER is at a decision point where they want to rename the office as WATERS which is a joint venture between CUAHSI and CLEANER
  o WATER is on the hook to produce a Integrated Science and Education plan this summer 2007 and a CDR by next summer 2008 (Goal is to be in President’s budget by 2012)
    ▪ If CUAHSI decides to become a full time partner CUAHSI would need to spend significant time on it
      • This would entail about ½ of Hooper’s time and other staff
  o It is reasonable to expect that with a new AD in Geoscience it may even be declared that there is not to be any new MREFC projects as there are others already running
    ▪ Bear in mind that an MREFC would be 50% Engineering and 50% Geoscience so this may not be completely prohibitive
  o What influence has CUAHSI had so far?
    ▪ There is a joint conceptual design team for which CUAHSI has half membership with CLEANER
      • Rick Hooper is working directly with Jery Schnoor one-on-one next month in Iowa
  o CUAHSI did a review of all the CLEANER reports with direct input
    ▪ Nothing really very objectionable about the reports
    ▪ 3 Critical overarching documents
      • Conceptual Design
      • Traceability Matrix
      • Integrated Science and Education Plan
  o Selker – sees value in a corporation dedicated to MREFC (sees that benefit from NEON)
    ▪ Favors investing significant resources to this effort
Tarboton – why do we need another entity?
- There are some aspects that are not purely hydrologic and are engineering

Hooper – key decision point is by about August 2007 when there is a perceptively new AD (need an objective read from the Board)
- Must present to Engineering and Geoscience ADs a notional proposal

Kumar – very hard to distinguish hydrology from something else which is water
- Two distinct entities causes profound problems in the future of hydrology
- Need to debate from one platform with different objectives, not two objectives and two platforms, etc

Hooper – University Consortia have two functions
- Operating agency for large projects
- Articulating science aspiration for the community
  - Implications for CUAHSI Staffing (Hooper);
    - motion and vote (deferred until tomorrow)
      - 1. Recommend to put Wendy Graham on full month salary, up from ½ month
      - 2. Take ½ of Rick Hooper’s time
      - 3. Hire Senior Program manager (~$150, $70K salary)
  - Critical Zone Observatories (Welty/Hooper)

Art Goldstein General Comments
- Continuing Resolution during 2007 – not anticipating a passed budget this year
  - So flat funded from last year
    - Needs to find $4.32M for Earthscope during this flat funding (the total in 2008 will be about 1/8 of the project budget and 1/6 of Geoscience’s total budget)
- Leinen’s replacement will be crucial in deciding whether the MREFC will move forward in light of what Geoscience already has going on
  - O&M is the biggest hurdle in getting an MREFC to move forward

- Midterm Management review of CUAHSI
  - Process the Hydrology Program Director will operate
    - Do not have to do it, but it helpful
    - Purpose is to indicate the strengths and weaknesses to guide the renewal proposal

What will be the Process for the Renewal?
- Defined by program Director
- Will convene a special emphasis panel – no 15 pg limit
  - Review first with mail review and then the special emphasis panel
The Community has been interested in the WATERS process as a project direction

- We also have the example of the CZOs with a good science feel
- Therefore, we have two approaches where one is a science driven call for proposals and another is MREFC for establishing science-driven longer term observations in the field
  - Which is better?
    - Response from Goldstein
      - CZOs
        - Knew it could be done quickly if the budget was slim at ~$8.5M
        - Short time lines, requires fast turn around and results
      - MREFCs
        - Cannot define science goals quite as precisely because of the sheer size and time length
        - Geoscience’s experience has been limited to Earthscope
        - Unintended positives in some good science quickly and some enabling results
        - Do not follow the NEUSE model
          - Define science drivers and define a facility from it
        - The amount of money provided in a MREFC would require many questions framed broadly in terms of “hydrologic response to climate change” and other such broad themes
          - Underneath there are many more questions the community finds interesting
            - More broadly the network would also provide data that people find useful for other questions not posed, etc
        - Are there lessons we can learn from NEON?
          - Learn from the pitfalls and take another path
        - Also, interact with ORION and Earthscope to learn management and design paths

- Any formal plans for science community input into synergism between directorates?
  - First working on how to best proceed within EAR
  - The general operating ethic has been not to make dramatic changes and take from one program to increase the budget of another
    - So, will make small changes at first and any large changes will come from community and will come slowly
What has been the community input on predicting and responding to hydrologic disasters like Hurricane Katrina?
  o NSB has come up with a hurricane science document
  o No perceived pressure from the Corps of Engineers, ASCE, or other high-level requests

How will a continuing resolution affect CZOs?
  o Will take the proposals, review them and those that are not fundable will be declined
  o Those chosen for funding will be funded if a budget is approved in 2007. if not, in 2008

In terms of the Science Plan, what is more useful for NSF?
  o Whatever it takes to make a convincing case
  o Would want a science plan and executive summary by approximately January 2008 when a new AD is present
  o Should focus on the next five years and then a short expanded view of overall vision for the future
  o A realistic vision is flat funding or slow growth

**CUAHSI has a significant role to play in informing congress on the issues related to water and it is perhaps the most important thing CUAHSI can do – not asking for money in hydrology but in support for NSF in general**

On CLEANER/CUAHSI
  o Only one water-related MREFC will move along
  o If we choose to move along, must move along with CLEANER
  o Concerned about the O&M, even if it is shared with Engineering

What has CUAHSI produced that is exciting
  o Continually HIS as a productive, well-run project

What are the things that have to go right for WATERS to happen?
  o The science plan must be very convincing
  o The new AD must be willing to support it
  o The EAR budget must increase

CUAHSI Renewal Proposal (Hooper) – Deferred until tomorrow
  ➔ Existing grant proposal and reviews distributed
  ➔ Information on components (options), budget, timing, review process

Adjourned: 5:15 pm (Claire Welty)
III. Elections

8 am – Call to order (Claire Welty)

Approval of minutes from October 2006 (Welty); Motion and vote
  Motion to approve: Selker
  Second: Lakshmi
  Approval: Yes
  Discussion: No

Election of President (Welty)
  ➔ Nominations
  Rick Hooper

  ➔ Candidate statements
  ➔ Balloting
  Rick Hooper: Elected, receiving majority

Chair-Elect (Welty)
  ➔ Nominations: Efi Foufoula, Venkat Lakshmi, Fred Ogden, David Tarboton
  ➔ Candidate statements
  Efi Foufoula
    • Every community has senior leadership that has earned their place
      • Some of these people have left CUAHSI and are not involved (e.g. Eagleson)
      • We have failed to leave a legacy that is secure for the next generation
      • Want to see if the 5-10 people that carry weight can be brought back to help secure CUAHSI’s future
  Venkat Lakshmi – must be the change you talk about
    • Closer relationship with CUAHSI and its deliverables
      • Science Plan
      • CUAHSI National Meeting
    • Closer relationship with NEON and WATERS
    • Close relationship with Art Goldstein
  Fred Ogden
    • Have not clearly demonstrated that we need HOs
    • We have missed some punch by not articulating the societal issues
      • May want to go to foundations or other organizations that have societal issues as a focus
    • Merging with CLEANER for the MREFC process is dangerous to our mission
David Tarboton
- CUAHSI has been primarily created for infrastructure in support of large scale hydrologic science, founded on community and openness
- An annual meeting about science is important for identity
- Responsible to sort out the relationship with NEON and WATERS
  - Not NSF or Congress

  - Candidates left the room for discussion of the remaining board members

   → Balloting

   **Efi Foufoula carried the majority and is chair-elect**

**IV. Planning**

**WATERS Engagement**
- We are in the conceptual design phase of the MREFC leading to a CDR
- Traditional need is to explain the kind of instrumentation to be acquired and the plan for distributing that in the landscape
  - This includes a crude cost estimate
- Need a briefing to the ADs by September 2007
  - Hooper proposes to work with WATERS until then and see what the reaction is
- The next step is a Preliminary Design Review (PDR) which will cost about $500K to $1M for us due to detailed costing exercises
- John Selker has introduced a resolution
  - Defines the reasoning behind the decision of what to do with WATERS
  - Resolution would be not to provide ½ FTE of Hooper’s time and senior manager and that we would provide insight and help whenever feasible
  - Kumar – science plan and other activities can seen as short-term
    - CUAHSI is a long-term infrastructure initiative
      - HIS, HMF and Synthesis in support of observatories
      - Either we fully engage in WATERS or we do not engage at all
      - The Renewal proposal will reflect this decision
  - Hooper – in short-term, our role at the table is to make the plan acceptable by the Geo directorate
  - Efi Foufoula – difficult sell to Geo
    - Table active engagement with WATERS for a year until our priorities are taken care of
    - Given a limited level of engagement, what would WATERS see as priority info from CUAHSI
- Tarboton – if we are going to engage with WATERS they should be subsumed into CUAHSI and we should own it (in this sense, WATERS would be one of the observatory efforts)
- Graham – either fully engage or disengage
- Famiglietti – agrees with Tarboton
- Pasternack – keep options open at minimal funding if needed; involve reclaiming the effort by subsuming WATERS
- Toran – already has cost us to have this token amount of effort; we need to decide if we want to continue that cost
- Ogden – MREFC is risky; subsuming the WATERS group is a good strategy if we can do it; timing is not right (tight deadline will yield a poor proposal)

Hooper
- Are we ready for an MREFC Plan?
- Can we achieve the time frame?

If we decide to disengage, what will happen next is that the CLEANER project office will complete their documents and present to Engineering. It would be the only project involving water and will focus on pipes and treatment plants
- If they go forward and then fail, there is a new horizon

Motion extend discussion for 15 minutes: Ogden
Second: Kumar
Approval: Yes
Discussion: No

Motion to have 15 minutes of “the committee of the whole”: Famiglietti
Second: Welty
Approval: Yes (8 aye, 5 no)
Discussion: No

**Hooper’s Options**
- **Option 1: Disengage Now**
- **Option 2: Proceed with WATERS with commitment of resources**

Motion to fully engage with the goal as incorporating WATERS as a project of CUAHSI:
Ogden
Second: Kumar
Discussion: such a motion would only make sense if we have an idea of what WATERS feels about such a merger; the CUAHSI membership voted to engage with WATERS; must weigh how scalable this model is
Approval: No, Motion Withdrawn by Ogden and Kumar
Listing of options to vote on
Option 1: Withdraw active participation in the development of the WATERS Conceptual Design for one year
Option 2: Actively pursue corporate merger with WATERS – new board, new leadership
**Option 3: Hire a 1/2 FTE PhD (senior level scientist) and fully engage WATERS in the MREFC process as a joint project**
Option 4: Form volunteer subcommittee to fully engage with the WATERS project
Option 5: 2 week white paper process on options

Motion to vote on Options 1-5 (above): Lakshmi
Second: Pasternack
Amendment: this would be the sense of the board of how we would proceed and that we will pursue a meeting with WATERS leadership and NSF irregarding the result and then report back to the executive committee
- Amendment not accepted: Pasternack

Voting Results
- Option 1: 4 aye
- Option 2: 2 aye

**Option 3: 5 aye (this motion did not carry. Majority vote is needed)**
- Option 4: 1 aye
- Option 5: 1 aye

As an add-on to the above vote on Options:
Motion to hire someone else other than Rick Hooper to engage the WATERS Process:
Graham
Second: Selker
Approval: Yes (1 Nay, 1 abstention)
Discussion: propose to Doug James the amount and put an ad in EOS; AEESP has a huge community to poll for the job; should send an email to the membership
Plenary Discussion

This is a brainstorming session to get ideas on the table. We are not seeking consensus at this point, but rather a listing of opinions.

What has CUAHSI been good at?
- HIS Success
  - Confidence, success
- Community Formation
- HPC Report success
- Cyberseminar series
- Synthesis activities
- CZO solicitation
- Democratization
- Academic Voice
- Water Centers
- Educational Videos
- Community based process that support a community proposal in HMF
- USGS HIF facility

What has been bad?
- False starts w/HO and synthesis
- Hijack by CLEANER
- Currently Incomplete Science Plan
- NSF changes
- Overall experience of committees (productivity)
- Involvement from upper echelon of the community
- Communication problem with the members

What has been missed altogether?
- Other funding opportunities
- Communicating successes
- Ability to bring the gravitas from the members to bear
- Washington Intelligence
- An activity that examines the ability or inability for the existing network to answer questions
- Student scholarship
- Publications in high level journals like “Science” or “Nature” to communicate the successes of CUAHSI or hydrologic science in general
- Congressional lobbying
- Engagement with 4-yr and 2-yr colleges
- An International Component
- Communicating with high-level university administration such as the Vice President
Strategic Planning: Break-out 2 (Hooper)

Background: We need to define short-term (5-year) goals that are exciting and useful to the community to justify CUAHSI’s existence. Given the items from the previous break-out session, sketch out where CUAHSI should be in 5 years. This vision will form the basis for the renewal proposal.

Break-out group assignments
Group 1: Graham, Pasternack, Foufoula, Murdoch, Dressler (Board room)
Group 2: Welty, Kumar, Ogden, Selker, Zheng (Room C, one end)
Group 3: Tarboton, Famiglietti, Lakshmi, Toran, Valdes (Room C, opposite end)

→ Charge to groups
  Where should CUAHSI be in 5 years?
  What are our goals?

The following is the report back from Group 3

Group 3
Where should we be in 5 years?
- Have a network of observatories which is widely perceived by the community as a vital research resource
  o Need access to data from observatories
  o a cross test bed demonstration analysis (CUAHSI encouragement)
- Impact from test beds – report the science
- Have better reputation and clout as community
- Facilities and demonstrated use
- Fund early career fellowships. Put money in hands of grad students and post docs
- Signature papers – high impact papers, special issues, Paper that uses CUAHSI facilities that has high impact (science/nature)
- Advise and interact with synthesis
- What are the indicators of success
  o Hits on website
  o GB of data downloaded (NASA DAAC uses this)
  o Papers that use data and cite it.
  o Mention of CUAHSI in papers
  o Proposals received by NSF that draw upon CUAHSI facilities (Observatories, HIS, HMF etc)
  o Pressure for use of CUAHSI facilities
- Find out from CUAHSI facility leaders as to what use of facilities can be accommodated
- What did NSF give funds to do that have found significant answers
- Test bed support
- CUAHSI repository for national outcomes from SAHRA
What are our goals?
- Increase impact of what we do on education. Educational modules
- EO as a 5th box for CUAHSI
- Keep new ideas flowing. Can we be a venue for adoption of new ideas.

Jon Duncan synthesizing the results from group 1 and 2 (not shown here)

The following three subjects are addressed below
Priorities for 2007 for Staff and ExCom (Hooper)
CUAHSI Annual Meeting?
Fall Cyberseminar Series focusing on science

Prioritize goals -- discuss in plenary (Hooper)
\[\Rightarrow\] Items for discussion:
How do we achieve these goals?

Useful objective is writing the renewal proposal (broad brush elements)
- Need to talk about our basic operating strategy

Leave Meeting with immediate action plan
- Renewal Proposal
  - Form committee to address the questions we are putting out to the community along with a context document that explains what we are doing
  - Date of Draft Proposal, etc
  - August 1st 2007 formal submittal of renewal proposal to Doug James
    - One activity within the proposal – Cross-comparison questions
      - July 1st informal reviews from NSF and CUAHSI
      - June 10-11 retreat
      - Raw proposal to BOD on June 1
      - 2 Pager Responses from Teams by May 25
      - Teams Selected April 15th
      - Formulate the questions to send out by March 1st

General Comments
- Laura Toran suggests that we spend our resources on getting those constituents who are not involved otherwise, involved in existing sites
This is just one small aspect of the overall proposal and we do need to bring others who are currently not involved

Murdoch – Picking teams is not sponsoring spontaneous growth
  • Given the time limit however, we may not be able to do anything else

Selker – We do not even know yet what the larger elements of the proposal are going to be

Tarboton – focus on what the community facilities are going to be and who is going to write the proposal
  • Should come from the core elements
    o HIS, HMF, Synthesis, Observatories

Hooper – get a budget by year for each of the 5 elements
  • HIS, HMF, Synthesis, E&O, Observatories

Foufoula – suggests an alternative structure
  o Research Progress and Catalyzation
  o Young PI Opportunity
  o New Collaborative Opportunities
  o Community Activity
  o Then map in the 5 elements within these sections

Selker suggests a science lead and a small committee responsible for key components
  o Board should select that committee and set the deliverables

Motion to identify a small committee of people to work with Rick Hooper and set benchmark dates: Selker
Second: Tarboton

Amendment: Modify to empower executive committee to perform this task by January 25th and run a trial outline by Doug James by February 5th

Approval: Yes (6 aye, 3 nay)

Discussion: If possible look for people outside of the board; chair and chair-elect should probably be heavily involved b/c they are charged with implementing whatever is decided; need the leads of the of the 5 elements; suggest high-level outline and show to Doug James by February 1st; having the board of directors aware of the people writing the proposal and the timelines is a good proposal

Quorum was called by Laura Toran at 2:35 pm
  o At this time there are 9 members, not enough for quorum
  o Therefore, meeting is adjourned at 2:35 pm
  o After the conclusion of the Board meeting and through subsequent discussion in person at the meeting and through email exchanges in the following months, it was determined that the quorum call was out of order
The following was conducted originally as Unofficial business after the quorum call

Do we want a CUAHSI Annual Meeting?
  o Really important for community engagement
  o August is a good time for an Annual Meeting b/c of general schedule availabilities for general membership
    ▪ May, however want to do this next summer 2008 due to the renewal proposal
  o Attract people to meeting by making it scientific; let people present own work related to CUAHSI programs
  o Maybe invite Marshall Moss as a sort of Emeritus
  o Strongly consider student travel scholarship but not for other meeting attendants
  o CUAHSI focused science and CUAHSI business
  o Need a volunteer to organize the meeting
    ▪ Have ExCom select an individual and provide guidance
    ▪ Need immediate mailing to CUAHSI membership to announce
  o Could have one activity of the meeting to review the renewal proposal and provide input

Cyberseminars
  o Hooper desires a strong science-related group of cyberseminars
    ▪ Be good to align with the science plan and Continental Water Dynamics
    ▪ Maybe distributed materials ahead of time to use as teaching materials and involve students
  o David Tarboton and John Selker will think this over and then work with Rick Hooper