



CUAHSI Board Meeting Minutes
July 14-15, 2012, Boulder, Colorado

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

Roll Call (Chris Graham, Secretary)

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

NO QUORUM

Term expires 12/31/2012
Robyn Hannigan, University of Massachusetts-Boston (Instrumentation Liaison; Chair Elect)
Carol A. Johnston, South Dakota State University (Informatics Liaison) X
Witold Krajewski – University of Iowa (Chair) X
Larry Murdoch – Clemson University (Past Chair) X
Aaron Packman – Northwestern University (Synthesis Liaison) X

Term expires 12/31/2013
David L. Freyberg, Stanford University (Education & Outreach Liaison) X
Brian McGlynn, Montana State University
Jim McNamara, Boise State University (Observations Liaison) X
Todd Rasmussen, University of Georgia (Research Applications Liaison)
Ying Fan Reinfelder, Rutgers University

Term expires 12/31/2014
Diogo Bolster, University of Notre Dame
Peter Troch, The University of Arizona
Scott Tyler, University of Nevada - Reno
Denice Wardrop, Pennsylvania State University
David S. White, Murray State University

Officers Present: Jennifer Arrigo (CUAHSI), Richard Hooper (CUAHSI), Kayla Berry (CUAHSI), Jon Pollak (CUAHSI), Chris Graham (Boise State University), Rina Schumer (Desert Research Institute)

Others: Ken Potter (University of Wisconsin), Tom Torgersen (NSF)

Saturday, July 14

Day 1: Brainstorming the Future: CUAHSI Renewal and Year 5 of the Cooperative Agreement

- 1) Pre-meeting discussion - Status of CUAHSI with NSF (Hooper)
 - a) CUAHSI seen as leader in Cyberinfrastructure
 - i) EarthCube domain science leader
 - ii) Powell Center
 - (1) Reinfelder, Hooper submitted proposal for end-user workshops
 - b) CZO renewal proposal as additional opening for CUAHSI into domain science (beyond CI)
 - i) 8 CZOs at \$1 million annually
 - ii) CUAHSI could act as community voice on future of CZOs – differentiating difference between CZOs and LTERs (for example)
 - iii) Network Office
 - (1) RFP expected in 2013, no current CZOs can apply
 - (2) NSF envisions science lead, rather than administrative lead
 - (a) Anticipate requirement for strong science component in proposal
 - (b) Network wide hypotheses are difficult in CZO framework, making science component difficult in network office proposal
 - (c) Surface Earth Processes require different type of central facility (more service oriented than science based) than other divisions of NSF (i.e. physics)
 - (d) CZOs were funded without central hypotheses
 - (3) Hooper suggests meeting with NSF and CZO reps before RFP
 - c) EarthCube, Data Center, CZOs all have significant CUAHSI participation
 - i) Participation will encourage community participation with CUAHSI
- 2) Call to Order (Krajewski)
 - a) No quorum for meeting
 - b) Anticipate more intensive conversations on present and future of CUAHSI
 - i) Renewal proposal (5 year)
 - (1) Opportunities and red flags
 - (2) Submitting Feb 1 2013, for funding beginning 2014
 - c) Krajewski has no instruction duties next term, so expects more travel opportunities and more interagency interactions
- 3) Unpaid members as of July 2014
 - a) 13 members have been dropped from membership due to unpaid 2011 and 2012 dues
 - i) **Packman suggests working on University of Alaska – Fairbanks due to large watershed projects**
 - b) ~15 members paid 2011 but not 2012
- 4) Themes for the CUAHSI Renewal proposal (Hooper)
 - a) Background Documents: CDT Discussion, Previous Renewal Proposal

- b) Synthesis Center(s) / Meetings
 - i) Possible organizing focus for CUAHSI beyond observatories / data management
 - ii) Water is generally a regional issue, rather than a national issue
 - iii) Regional synthesis centers
 - (1) Geographic vs. topic vs. environment focus
 - (a) Possible regional funding sources
 - iv) Ava Johnson was amenable to fund regional synthesis centers, with possible emphasis on community science
 - (1) Lots of community scientists collecting data, need help interpreting data
 - (a) Nutrient data from Hudson River
 - (b) Limnology
 - (2) Offered \$10,000 for development
 - v) Regional synthesis meetings
 - (1) Timely because of succession of calls requiring regional coordination
 - (2) CUAHSI would provide travel funds
 - vi) Regional synthesis meetings would be proposed for 2013
 - vii) Virtual networks of existing facilities / institutes
 - (1) Water Resources Research Institutes, existing Water Centers
 - (a) State institutes that do not appear to act at regional scale
 - (2) CUAHSI could act as catalyst to expand to regional scale
 - (3) Framework for virtual regional centers, with CUAHSI support
 - (a) Lower investment energy
 - (b) Need incentive for member participation
 - (i) Model access
 - (ii) Data assistance
 - (iii) Admin, travel grant processing
 - 1. These would be marginal additions to existing centers
 - (4) Possibility for regional groups getting national funding
 - (a) NSF Research Coordination Network (RCN)
 - (5) Improvement to science
 - (a) Increase geographic area
 - (b) Reduce logistic / political barriers to collaboration
 - (6) Potential EPSCOR funding for workshops
 - viii) CUAHSI would need to elucidate services for meetings
 - (1) Obtain facilities and meeting organization
 - (2) Facilitating science
 - (a) Data management
 - (b) Post-docs funded through CUAHSI and allocated
 - (i) Difficult through current NSF rules

- c) CUAHSI needs to expand set of activities (beyond Data Center) for future success and long term NSF funding
 - i) Need something big
 - (1) CZO network office
 - (2) Regional synthesis center
 - (3) Hydroinformatics Center
 - (4) Expansion to represent Earth Surface Processes
 - (5) Hydrologic education
 - (6) Identification of emerging trends in hydrologic science
 - (a) i.e. incorporating social science
 - (7) Facilitate community access to LTERs, COZs, WSCs
 - (a) Unclear how CUAHSI can force these sites to open shop
 - (b) No specific funding for sites to encourage community involvement
 - (c) Strength of CUAHSI role would vary between groups
 - (i) Strong with CZOs, weaker with LTERs
 - (ii) Peer to LTER network office
 - (8) CUAHSI act as cleanup for all unfunded mandates from NSF
 - (a) Education, data management, outreach
 - (9) Unification of Earth Surface Processes
 - (a) CUAHSI is the best current organization
 - (b) Need to make clear that CUAHSI will enable science, but not dictate science
- d) Liabilities for renewal proposal
 - i) Potential reviewer questions
 - (1) What is community?
 - (2) Why do we need CUAHSI?
 - (3) Why not give money to PIs?
 - ii) CUAHSI seen as occupying all NSF money for hydrology based (non-science) organizations
 - iii) Need to demonstrate CUAHSI progress in unifying community
 - (1) Member participation (dues)
 - (2) Meeting attendance
 - iv) Argument for additional facility funding
 - (1) CUAHSI is this facility
 - v) CUAHSI has not created (identified) consensus on instrumentation
 - (1) CZOs as way forward
 - (2) Research drilling
 - (a) Drilling, Observation and Sampling of the Earths Continental Crust (DOSECC) has portable drilling wells
 - vi) CUAHSI needs to establish unique position

- (1) IRIS, NEON, NCAR etc... represents other disciplines, CUAHSI represents everyone else.
 - (a) i.e. stream ecology
- e) Science Plan
 - i) Articulates need for facilities investment
 - ii) Beyond water science / hydrology
 - (1) Blue Book II as reference
- 5) Review of Activities and Progress from January Board meeting (Krajewski)
 - a) Background Documents: Strategic Prioritization Exercise; Action Items from January Meeting
 - b) New CUAHSI Science Justification
 - i) Scientific justification for facility investment via CUAHSI
 - (1) Facilities include Data Center, CZO network office
 - (2) Must have more credible linkage to what investments desired with justification
 - (a) Logical progression between investments
 - (3) Not an attempt to rewrite Blue Book
 - ii) Hooper will write draft for Board input**
 - (1) Can be developed in conjunction with renewal proposal
 - (2) Subset of Board will act as initial sounding board
 - (a) Chairs of Standing Committees, plus additional interested board members
 - (b) Working group on Central Desktop
 - (3) Draft release of 10 page document at annual membership meeting for community input by AGU, to serve as input to renewal proposal
 - c) Strategic Advisory Committee (SAC)
 - i) Role of Committee relative to Board remains undefined
 - (1) Charge was drafted and accepted by Board
 - (a) Role of Committee remains unclear
 - (2) Original intent was to serve as input from communities not represented by Board
 - (a) This role could be filled by Board meeting visits from outside representatives, or ad hoc committees
 - (3) Not a requirement from NSF
 - (a) Management review serves this position from NSF viewpoint
 - (4) Previous Committee has disbanded
 - ii) Disbanding of Committee is an option
 - (1) Would require formal Board action
 - iii) Advantage of Standing Committee is that action is more assured
 - (1) May be easier to get people to commit to Committee than meeting at specific dates
 - (2) Stronger engagement in general
 - (3) Develops connections with outside community

- iv) Commit to schedule of outreach where CUAHSI identifies annual accomplishments and send to individuals that would have been on SAC and ask for feedback
 - (1) Leaders of other consortia, senior scientists, funding agencies
- v) **Hooper and Arrigo will develop two alternatives to current plan for SAC**
 - (1) New Committee
 - (2) No Committee
- vi) **Add to agenda of August Board Meeting**
 - (1) Recommendation is to revisit charge and existence of Committee
- d) Cyberseminar Organizer
 - i) Hooper will put out call to board / invite candidates
 - ii) Possible themes
 - (1) Advances in instrumentation
 - (a) Tyler, Ferre, Adam Ward, Christine Hatch
- e) Executive Director Evaluation process
 - i) Procedure developed by Murdoch and Freyberg
 - (1) cuahsi.centraldesktop.com/p/aQAAAAAA4W4S
 - ii) Previously, evaluation was ad hoc. Board and Hooper requested more formalized process, with some flexibility
 - iii) Performance assessment is currently divorced from compensation determination
 - (1) Small subcommittee will evaluate salary
 - (a) Requirement in order to keep 501C status
 - (b) Formal salary survey needed to ensure ED's is reasonable
 - (i) \$500-1000
 - (ii) Last survey ~ 3 years ago
 - (c) Need formal procedure for compensation determination (documentation)
 - (d) Three chairs will serve as compensation committee
- 6) User survey (Ken Potter)
 - a) Determining gaps in hydrological activities
 - b) Survey developed and ready to go
 - i) Who are respondents?
 - ii) What research has been helpful for practice?
 - iii) What needs to be done?
 - iv) What would help translate research to practice?
 - c) Sampled on Wisconsin practitioner group (~200 people)
 - i) 30 responses
 - ii) No hostility between practitioners and research
 - iii) Found specific studies that helped with management helpful, rather than general research
 - d) Taking survey national
 - i) Desire 1000+ responses

- (1) Mechanisms for improving response rates
 - (a) Prizes
 - ii) American Water Resources Association (AWRA)
 - (1) Could publish results in Journal of AWRA as incentive for AWRA participation
 - iii) Other sources anticipated to be more difficult to work with
 - iv) Other disciplines (biologists, ecologists, wetlands)
 - (1) Associations of State Wetland Managers
 - (2) North American Limnology Management Society (NALMS)
 - (3) Ecological Society of America (ESA)
- 7) Year 5 Budget Discussion
- a) Background Documents: Briefing from Hooper; Year 5 Draft Budget; HGP report; prospectus on USGS Technical Exchange workshop program; report on Hands-On workshops
 - i) Year 4 Award: \$1.50M
 - (1) Includes \$0.35M subaward to San Diego Computing Center
 - ii) Year 1 Data Center: \$1.02M (2013)
 - iii) Year 5 Base Request: \$1.05M (2013)
 - (1) Operations and all current programs
 - b) CUAHSI funding priorities:
 - i) Future of CUAHSI Hydrogeophysics (HGP) Program (~\$40,000)
 - (1) Waiting for review from Information Standing Committee
 - (2) Two awards for 2012
 - (a) \$10,000 travel grants
 - (b) \$15,000 Ferre salary
 - (c) 11 requests over 3 years
 - (i) All in some form of approval
 - (3) Ferre is generally acting as consultant sheparding grants through
 - (4) Funded grants have led to additional to NSF proposals
 - (5) Few applications
 - (a) Growth of program is questioned
 - (b) Geophysicists are difficult to find, while interest from hydrologists is high
 - (i) Program should serve as a match maker service
 - (c) A lot of effort for small return (~\$3,000 travel funds)
 - ii) Regional meetings
 - iii) Expansion of instrumentation workshop activities (~\$10,000)
 - (1) Funding for one hands-on workshop per year
 - (a) Leveraged with other funding
 - (i) Penn State workshop provided \$10,000 (50%)
 - 1. Techniques for looking at stream – groundwater interactions
 - (2) USGS sensor workshops

- (a) Hydro-acoustics (60 attendees)
 - (b) Optical sensors (63 attendees)
- (3) Future trainings
 - (a) Optical sensors
 - (b) Real time sensor networking (wireless, etc...)
- (4) Charges for Instrument Standing Committee
 - (a) Splitting USGS instrument meetings from community meetings
 - (b) Formalize evaluation of workshops
 - (c) Developing incentives for instructors
- (5) CUAHSI role
 - (a) Conduct post workshop survey to identify topics
 - (b) Identifying instructors
 - (c) Develop funds for instructors
 - (d) Fund some graduate student / early career attendees
 - (e) Focus on hands on instrumentation
- iv) Education workshops and materials
 - (1) Education Standing Committee met
 - (a) Report not submitted
 - (2) Online resources
 - (a) Library of presentations for general hydrology
 - (b) Pilot project for hydrological education
 - (i) Beyond MoCHA
 - (ii) Demonstrates method for teaching topic, rather than facts taught
 - (iii) Lectures are dead – focus might be better served on other learning methods
 - 1. YouTube videos
 - 2. Laboratories
 - 3. Active learning exercises
 - 4. TED style 15 min talks
 - (iv) Characteristics desired for website
 - 1. Broad range of approaches for given topic
 - 2. Topic based
 - (v) nanoHUB, EcoEd as models
 - (c) Potentially high effort
 - (i) Curation
 - (ii) Quality control
 - (iii) Web design
 - (d) Hydrology education is a disconnected discipline
 - (i) CUAHSI is well positioned to connect
- (3) Staff action items

- (a) Assemble links to previous attempts from other disciplines for EO Committee
 - v) Projecting Staff capacity
- c) Outcome: Prioritization of Year 5 Budget Request Items
 - i) Discussion items for August Board meeting
 - (1) Request justification from Ferre regarding HGP program
 - (2) Proposal for additional instrumentation meetings
 - ii) Requested items for August meeting
 - (1) Discussion on plans made during January Board meeting, what has been done, and decisions need to be made
 - (2) Timelines of activities
- 8) CUAHSI's Role as Representative for Community
 - a) How will CUAHSI be represented at various meetings
 - i) Hooper cannot attend all meetings
 - (1) Hooper encourages Board representatives to talk about CUAHSI at meetings
 - (2) Standalone display
 - ii) Sample meetings
 - (1) Conclusion of the PUB initiative
 - (a) CUAHSI connection via national scale hydrologic modeling
 - (2) 50 Years of Watershed Modeling
 - (3) LTER ASM
 - b) Future of dialogue with CZOs
 - i) Network office solicitation expected next year after CZOs are selected
 - ii) CZO funding eight sites for one year
 - iii) CUAHSI community letter or editorial (EOS letter)
 - (1) Separate science from facilities
 - (2) Manage all long term sites as portfolio of resources
 - (a) CZOs, WSCs, LTERs
 - (3) Sites should be community resources and managed accordingly
 - (a) Not all sites act as good community partners
 - c) CUAHSI's role in engaging Congress
 - i) No changes in funding / priorities expected until after November election
 - ii) Next AGU policy and science conference should have CUAHSI representation
 - (1) High level agency representation
 - (2) Policy, networking emphasis, rather than science
 - (3) Likely occurring again
 - iii) CUAHSI sponsored events in DC
 - (1) Cannot use NSF funds, unless invited by congressional member
 - (a) Need unrestricted funds (e.g., CUAHSI Corporate Members)
 - (2) Hooper can visit Hill, in educational context
 - (3) Need government affairs specialist

- iv) AGU organizes short courses on working with Congress
 - (1) Recommend using individual representatives
 - (2) Need deliverable to get representative's attention
 - v) Long term survival of CUAHSI will require funding beyond NSF
- 9) NASA interactions
- a) Mission based organization
 - i) 4-5 of 12 Earth based NASA science goals are water related
 - b) When approaching NASA, demonstrate how collaboration would assist NASA
 - i) NASA data is relatively difficult to access, interpret, reformat
 - (1) Data is having lower impact than possible
 - (2) CUAHSI can act as conduit for data access
 - (a) Cyberseminar series on the use of platform products in hydrology
 - (b) Training sessions on appropriate use of data, data access
 - (c) Market using HIS data download statistics
 - ii) Architecture of hydrologic modeling (EarthCube EAGER grant)
 - iii) Coordinate ground validation for remote sensing missions
 - (1) Soil moisture data for SMAP mission
 - iv) NASA Observatories
 - (1) Remote sensing validation testbeds
 - (2) Each mission needs ongoing validation
 - (a) SMAP, MODIS
 - (3) Site access, data collection, operation of observatory
 - (4) Contact mission commander and determine NASA's problems with validation
- 10) Nominations Committee
- a) Hannigan chairs Nomination Committee
 - b) Hannigan and Krajewski running as chair and past chair
 - c) Murdoch, Packman, Johnston terms expiring
 - i) Let Hannigan know if running again
 - d) Board encouraged to submit nominations
 - i) Some self-nominations already
 - ii) Krajewski has possible nominations from 2011 search
- 11) Wrap Up
- 12) Adjourn for Group Dinner

Sunday, July 15
Near Term Opportunities and Priorities
(Tom Torgersen)

- 13) Call to Order (Krajewski)
- 14) Status of the IWRSS Effort
 - a) National water model
 - b) Collaboration with federal agencies
 - i) National Weather Service leading effort
 - ii) USGS supportive of project and CUAHSI engagement
 - iii) US Army Corps of Engineers position less clear due to organizational issues
 - (1) Approve of small scale functionality for permitting
 - c) Follows three CUAHSI workshops and additional CUAHSI funded activities on CHyMP
 - d) Conference calls and in person meetings attended by CUAHSI representatives
 - e) Presentations at Biennial will update community on current status of project
 - f) Three motivations of project
 - i) Hypoxia (in Gulf of Mexico and elsewhere)
 - ii) Extremes
 - iii) Water security
 - g) Goal: Prediction anywhere, everywhere
 - i) Scaled from hillslope to continental
 - ii) Hillslope scaled modeling system able to scale up
 - iii) Model not expected to run constantly
 - (1) Will be available for use anywhere
 - h) Agencies require help from the academic research community
 - i) CUAHSI acting as conduit between agencies and academic communities
 - ii) A concrete plan for National Water Model remains unclear
 - iii) Anticipated meeting between agencies, CUAHSI and NSF for planning
 - iv) CUAHSI identifying scientific aspects of project, items of interest for academic community / NSF
 - i) Next phase
 - i) Scoping phase – determining people, strategy
 - j) Discussion with Torgersen
 - i) Agencies not participating
 - (1) EPA, BLM
 - (a) EPA expected to join in later
 - ii) Connection with EarthCube
 - (1) Modeling activities are concrete potential uses of EarthCube activities
 - (2) IWRSS data efforts will help EarthCube goals
 - iii) Coupling of surface and groundwater
 - (1) Key component of model for drought / water extraction functionality

- iv) IWRSS needs to be coupled / informed of activities of other efforts (WRF, EarthCube, Digital Crust)
 - (1) Significant overlap
 - (2) CUAHSI appreciates challenge of linking efforts
 - (3) EarthCube appears most cognizant of linkages
 - (4) NSF would assist with travel from one group to another
 - (5) Best mechanism for interactions between efforts
 - (a) CUAHSI staff will track projects
 - (b) NCAR post doc
- v) CUAHSI led initiating efforts
 - (1) Management now issue, with many agencies furthering efforts
 - (2) CUAHSI seen as effective use of funding
 - (3) Need to ensure that hydrological community have enough input that it can be dispersed to other agencies to maintain foot in the door for future funding

15) EarthCube

- a) Earth systems modeling group
 - i) Only domain based / led EAGER grant
 - ii) Coupling Water Research and Forecast Model (WRF) to Community Surface Dynamics Modeling System (CSDMS)
 - (1) Technical work beginning
 - (a) Performance
 - (b) Numerical Stability
 - (c) Inputs and outputs identified for each model component
 - iii) EarthCube PI meeting
 - (1) Lot of uncertainty
 - (2) Not enough domain science – too much technical focus
 - (a) CUAHSI efforts to promote domain science
 - (i) End user workshops
 - (ii) Pilot project (modeling coupling)
- b) Working groups collaboration
 - i) Need to unify vision of EarthCube, interpretation of management
 - ii) Community groups no longer funded, but participating virtually
 - iii) Focus on integrating across EAGER grants
 - (1) Smaller push to communicate with domains
- c) NASA / Weather Service
 - i) Hooper as co-PI
- d) End user workshops
 - i) Requested workshops for end users to define problems
 - ii) CUAHSI encouraged to run Digital Crust workshop
 - (1) Develop plan for prototype of Digital Crust

- (2) Create web service of GIS models
 - (3) Identifying whether existing technology is sufficient
 - (4) 50 person workshop
 - (a) Planned for Shapardstown, after January Board Meeting
 - (b) Virtual participation
 - e) Discussion with Torgersen
 - i) More interagency communication required
 - (1) Confused messages to be expected
 - (2) NSF EarthCube needs interagency buy in and collaboration
 - ii) Torgersen requested 1 pager with links on CUAHSI work on different modeling / data efforts
- 16) Year 5 Budget Overview and Indirect Cost Rate
- a) Data Center
 - i) Start date February 1
 - (1) Same as year 5 start date
 - ii) \$1.02 M budget request
 - b) Year 5 Base Request: \$1.05M
 - i) Funds for HGP (\$40 k)
 - ii) Initiate series of regional meetings (\$70 k)
 - (1) Hands on engagement with membership
 - (2) Regional synthesis centers
 - (a) Leverage existing water centers
 - (3) CUAHSI activities
 - (4) Communication with new reps
 - (5) Assist regional collaboration
 - (6) Potential EPSCOR funding
 - iii) Reformatting instrumentation workshop
 - (1) Separate USGS developmental workshops from hands on workshops
 - (a) Additional funding for hands on workshops
 - (i) Currently \$15k – not sufficient for instruction prep and time
 - (ii) Videography for broader impact
 - (b) Cyberseminar series
 - iv) No major new initiatives
 - v) Discussion with Torgersen
 - (1) Hope is for flat budget, with considerable uncertainty
 - (2) Award of Data Center uncertain, will color renewal funds
 - (a) Data Center will be under IF
 - (i) Will have opportunity to grow
 - (ii) Hydro will be expected to contribute funds
 - (3) CUAHSI budget request is reasonable

17) CUAHSI Overhead Issue

- a) NSF has reassigned overhead determination
 - i) If overhead is higher than arrangement with NSF, CUAHSI will supplement with non-NSF funds
 - ii) If overhead is lower than arrangement, CUAHSI will keep excess
- b) Indirect cost rates constant
- c) CUAHSI projects overhead rate to decline
 - i) Temporary increase in income
 - ii) 2013 67% projected
 - (1) ~45% expected
- d) CAAR Audit group sets fixed rates
 - i) CUAHSI hoping to arrange with NSF to change rates from pre-determined to provisional
 - (1) Adjustment will require approval
 - ii) Board can decide to bill below pre-arranged rate
 - (1) Risks getting fixed at a low rate
 - (2) Risks going over rate, incurring penalty
- e) Data Center and Base request have different overhead rates
 - i) Unclear whether this will remain
- f) Currently have \$92k excess due to change in accounting
 - i) Unrestricted funds
 - ii) Potential cushion for further budget cuts
- g) Board will wait until meeting with CAAR before making determination of action on overhead rate
 - i) Torgersen suggests development of plan for either billing 67% or 45%
 - ii) Board is concerned that any funds returned would go to HS

18) Discussion of CZO Solicitation

- a) Recent call for proposals
 - i) Eight CZOs including six existing sites up for renewal
 - ii) CUAHSI would like to compete for CZO Network office
 - (1) CZOs intended to be both observatories and places for interactions
 - (2) Specific call for modeling
 - (3) No guarantee of existing sites for reapproval
 - (4) Requirement for work with network office
 - (5) Network Office
 - (a) Requirement for leading scientist
 - (b) Provide a lot of services to and for CZOs
 - (c) CUAHSI must position to provide scientific leadership and support for network (rather than observatories)
 - (6) Solicitation is assured

- iii) Unfunded mandates for CZOs
 - (1) Expected portion of funding for management
 - (a) Data publishing, site interactions
 - (2) Network would allow for combined effort to increase impact
 - (3) Network would lead some activities, and provide services to Observatories
- iv) What is the incentive of individual CZOs to interact with network office (conduct network activity)?
 - (1) Interaction with network office is mandated in call
 - (2) Integrated hypotheses, common data also mandated in call
 - (a) Broad definition of common data, rather than specific instrumentation
 - (3) Winners of call would be identified would meet to identify common ground and interests. Meeting will also direct input on network office
 - (a) Network office winner would not have been determined at this time
- v) Science direction as component of Network Office
 - (1) Is lead of Network Office an executive director, or a science leader?
 - (a) LTER Network office undertakes some network science
 - (i) Some internal (LTER) disappointment with arrangement
 - (b) Torgersen envisions executive director format
 - (i) Services
 - (ii) Scientific Leadership
 - (iii) Education Opportunities and Outreach
 - (c) Both community and PIs would have input via board
 - (2) Leadership of Network Office not seen as full time position
 - (a) Science leader is facilitating cross site comparisons, acting as advertiser of CZOs – 3 month position, likely leader is housed at a university
 - (b) Leadership is likely to rotate
- vi) Two extreme scenarios
 - (1) CUAHSI takes lead, does everything independently
 - (2) CUAHSI acts as service provider to actual PI
- b) Plan is for a strong and viable array of CZOs across range of environments
 - i) Long term investment / commitment from NSF
 - ii) Requires availability of independent PIs to work at Observatory
 - (1) Resources available for community use of sites?
 - (a) Money will be assigned, but not necessarily new money
 - (2) Incentives for community involvement need to be spelled out.
 - (3) Extra investment required for individual CZOs to facilitate community access
 - (a) Agreement among Program Officers to support community access
 - iii) Management will require 0.5 program officer's time
- c) Would CUAHSI participation in an individual CZO make CUAHSI ineligible for Network Office?

- i) If CUAHSI is identified PI, then ineligible.
- ii) If CUAHSI is providing service to one or more CZO, would remain eligible
- iii) Goal of verbiage in call was to make scientific leadership of Network different from that of an individual CZO.
- iv) Network Office will be re-competed
- d) CUAHSI may need to change perception of smaller communities to further goal of hosting network office
 - i) CUAHSI has leadership design capabilities in Hydro
 - ii) Reasonable liaison with other disciplines
 - iii) Difficulty speaking for some outside disciplines
 - (1) Other groups do not have similar organizations
 - (2) CUAHSI would need standing to lead communities
 - (a) Alternatively, CUAHSI would serve as administrative
 - iv) CUAHSI could dissolve and reform, with a broader focus beyond ESP
 - (1) Would this change anything with respect to Network Office?
 - (a) Timing is likely impossible
 - (i) Network Office solicitation in 6-8 weeks
 - (2) New CUAHSI could better bring in smaller groups
 - (a) May need to go to other organizations for funding
- e) Separate funding sources for CZOs
 - i) Observatories
 - ii) Data
 - iii) Network Office
 - iv) Promoting community involvement
- f) EPSCoR data management system
 - i) Montana and Kentucky
 - ii) VOEIS

19) Adjourn

20) Graduate Student Reception