



## 2010 Summer Board of Directors Meeting

### July 17, 2010 Minutes

\*\*Notes for the meeting are recorded by the CUAHSI user support specialist (Yoori Choi) as representation of the discussion topics and point and are not the opinion of the user support specialist

Call to Order: 8:45am

#### Roll Call

- 12 directors present, need 12 for quorum
- "X" indicates director is present

Present:

#### **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

#### **Term expires 12/31/2012**

Carol Johnston – South Dakota State University X  
Witold Krajewski – University of Iowa  
Larry Murdoch – Clemson University X

**Officers Present:** Richard Hooper (CUAHSI)

**Others:** David Kirschtel (CUAHSI), Yoori Choi (CUAHSI)

(1) Board engagement in Standing Committees and CUAHSI

- Review SC/BOD structure
- Clarify the role of BOD
- Review existing and suggest new activities
- SC needs to be well-informed what we can do
- Come up the long-term goals
  - Instead of coming the priority year by year
- “Community Service” - Need mechanics to gather about the sense of community
- What is expectation from SC?
  - Clarify about the charge
  - Feedback to SC what we are thinking about this
- Effective Governance:
  - Active polling of community wishes
  - Prioritization of planning activities by Board
  - Moving through development stages:
    - Conceptualization
    - Workshops to define service and achieve consensus
    - Piloting/developmental activities
    - Operational service
  - Keeping community satisfied with progress efficiency – clearly touching with community

(2) Review of Year 2 Budget and Proposed Year 3 Activities

1. Management Review Comments from Year 1 and Preparation for Mgmt Review Year 3. -> **Background Document: Review Comments, CUAHSI Response, NSF Response**
- Management Review – 2009
  - CUAHSI must develop
    - Strategic plan (V)
    - Comprehensive set of metrics: report to the community and then report back to NSF, BOD needs to provide about actively prioritize what CUAHSI needs to do
  - CUAHSI should
    - Reconsider Board organization
    - Improve structure/use of Standing Committees (V)
    - Use ad hoc committees - need to activate to build SC
    - Codify rules for use of SAC
    - Develop a succession plan
    - Fully document business practices (V) – want something more about policy
    - Develop a clear set of deliverables – e.g. workshop, workshop report

- Understand implications of operational component – coming out the activity from PI, not from CUAHSI
- Understand implications of managing a large project
- Review split of office
- Improve participation of early-career individuals
- Improve diversification of its leadership
- Formalize mechanisms for community input
- Broaden its funding base

## 2. Funded Activities

### ->Background Documents: Year 2 Budget as Awarded; Year 3 Budget as contained in Proposal; Proposal Year 3 Activities

#### a. Strategic Planning/Management Review

- Strategic plan
  - On track to produce plan by December, 2010
  - 15 comments received on the first review
  - August – release to SAC
  - September – release to community
  - Activity is on budget
  - Metrics – report completion/number and quality of comments
  - Year3 – management review preparation, execution, and responses

#### b. Community Outreach

- Website/newsletter
- Booth at professional meetings (CUAHSI attend the meeting at : Fall AGU, AWRA, GSA, NABS/ASLO, LTER, ESA)
- Fall AGU town hall meeting
- Representation on councils/boards
- Talks and invited talks
- Difficulties: website re-design; priority for August
- Metrics: number of hits/downloads; activity at booth, number of talks/invited talks; service on boards (NWQMC; NCED; TERENO); attendance
- Year 3: no change; Goldschmidt
- How to go to engage with other community? (need to go to the community with solid proposal)
  1. Which community
  2. What extent
  3. How to develop
- Ad hoc community need to take a look (explore) at the diversity, what other and how the community can be extended?
  1. Then generate SC for each area of community

2. Ad hoc – need motion to appoint and right to charge, identify and implement the outreach, charge to explain in detail, including some board and non board
  - a. Rick: Write the charge to ad hoc by August

[Community-Wide Meetings] – Item c, d, e

- c. Biennial Meeting
    - Suggestion: about 145 people registered, low number for workshop
      1. Targeting email to workshop individually
  - d. Dahlem Conference Planning
    - 3 people on committee, plan on this year
    - Small meeting – 40 participants
    - Proposed the meeting date on Spring, 2011
  - e. Summer Synthesis Capstone Seminars
    - Focus point for students attending Summer Synthesis Institute
    - Funding for travel, logistics, etc.
    - Didn't get great uptake, but some
    - Review by synthesis committee
- ⇒ Metrics : attendance; satisfaction (survey)
- ⇒ Year3: Biennial planning, Dahlem execution, no further capstones budgeted

[CUAHSI Data Service] – Item f

- f. CUAHSI Water Data Services and Informatics Standing Committee
    - User support: workshop, training, website, web forum, ontology development
    - More detailed update about HIS project including any issues to Standing Committee
    - How to distribute the information to the information/data manager?
    - Presentation about some technical issues to SC
    - Suggestion: Workflow on task to make our product operational: Internal staff discover issues and find out what they are -> SC make statement about issues -> SC deliver to BOD -> BOD deliver to NSF with fact/suggestion
      1. Physical SC informatics group to discuss
      2. Suggested: User group meeting
- ⇒ Metrics: number of workshops, users supported, web site hits; documentation of ontology; number of attendees; reports completed; SC meeting held and reports
- ⇒ Year 3: request to hire senior software engineer to move to operational system; other activities continue
- ⇒ Community outreach-support, data management plan

- g. Observatory Networks
  - Catchment comparison exercise
  - WATERS engagement
  - Standing Committee
  - Metrics: design of CCE/use of water data services
  - Year 3 activities: no funding requested
  - Observatory access from outside – (how to plug in outside to the existing observatory?) catalog, access for outside PI's
- h. CHyMP
  - Implementation workshop and report
    1. Workshop with smaller group
    2. clarify the role of CUAHSI: What PI's do and what CUAHSI do
    3. discussion about the term "national water model"
  - Metrics: number of attendees, report completion and effectiveness
  - Year 3: no CHyMP activities budgeted

[Instrumentation] – Item i, j, k, l, m

- i. Sensor Workshops
    - Not yet selected
  - j. University of Michigan/Nanotech for sensors
  - k. CRADA with USGS (development workshop)
  - l. Hydrogeophysics Node (University of Arizona Subcontract)
    - First round on Fall – having small travel grant, geophysicists travel to the potential field
  - m. Instrumentation Standing Committee
    - August 5 meeting
- ⇒ Metrics: workshop attendees; number of travel grants for HGP; activity of InstSC
- ⇒ Year 3: all activities continue

[Education and Outreach] – Item n, o, p, q

- n. E&O Standing Committee
  - Need to define the specific charge, engagement a problem
  - Broaden the membership – to have the broaden opinion/thought
  - Need some conversation about the ongoing activity such as Cyberseminars
- o. Pathfinder Fellowships
- p. Cyberseminars
  - Average Live attendance = ~20 people
  - Huge of downloading/hits
- q. Let's Talk about Water (Salary only)

- Plan to have UMass Boston event (Harvard, tufts, northeastern); website; film catalog; targeting for undergraduate (earn extra credits)
  - Each university highlight about water
  - Year 3: will get fund (salary only)
- ⇒ Metrics: Number of attendees/downloads; number of applications; frequency of meetings/reports

### 3. Proposed Activities

#### a. NEON Coordination

- Propose workshop on either October or November
- Trying to the deployment of water data services
- Engagement with community

#### b. Senior Software Engineer

### 4. Unfunded standing committee

#### a. Synthesis

#### b. Research Applications

- Web research survey

### (3) Proposed Changes for Full Members

->**Background Document: Draft Letter to Membership containing policies, procedures, amendments, and justification for proposed changes**

- Engagement issue within university – even though the university is the member of CUAHSI, people in that university don't know
  - How do we forward? – need to provide the encouragement for best practice for representatives
  - How to handle losing the interest from membership, need to broaden the community

### (4) Procedures for Corporate Affiliates

->**Background Document: Draft Letter to Membership containing policies, procedures, amendments, and justification for proposed changes; Draft Procedures for Annual Dues; Draft Procedures for Corporate Affiliates**

1. Election procedure for acceptance of corporate affiliates
2. Rights and responsibilities of corporate affiliates
  - [changes]Chair of CAB will be an ex officio member of the board directors
  - Rewrite the bi-law based on the change
3. Proposed amendments to by-laws

### (5) Corporate Affairs

1. Use of Standing Committees for review of Status and Outlook reports and Strategic Planning. Experiences from Informatics Standing Committee on project review.

**->Background Document: Sample Status and Outlook Report for Synthesis; Standing Committee Report**

- Example: We community need “physical synthesis center”.
  - Academic and federal agency
  - What is the role of CUAHSI?
- BOD needs to see all report from each committee

2. Senior Advisory Committee composition and use

**->Background Document: Current Charge to SAC**

- SAC – doesn’t have clear idea what their role/charges are
- [Advisory] After the completion of strategic plan doc, SAC is reviewing the activity which was providing on strategic plan documentation and provide the feedback
- SAC is very important to NSF
- Composition of SAC
  - Currently targeting people in specific field, need to broaden
  - Need to implement the rotation
  - Potential representation from czo
- Suggestion
  - For next Biennial meeting or other major meeting, SAC are invited and present about their work.
  - Currently have single meeting per year, after report (strategic planning doc) comes out, will have meeting for their review/discussion

3. Recruiting New Board Members for December Election

**->Background Document: Current Roster of Standing Committee members**

- BOD - Need to think about the nominate
- Need to have name recognition
- Retired member will be running again?
- Tasks for BOD teleconference after 2 weeks: review the membership list and come up the nominate
- **TO DO: Send Larry Murdoch list of past BOD members**
- Suggestion: Select the nominate from SAC

4. Recruiting Officers for December Election

- Need to ask to current officers first – will re-run?
- See the past candidates who are not elected
- **TO DO: Send Larry Murdoch list of past candidate who are not elected**

5. Engagement of Government Agencies
  - a. Broadening CUAHSI funding base
    - Army corps – stage on renovating the research
    - Go with one of BOD member to the agencies – speak about strategic planning doc
    - Weather service
    - David Lesmes

: Distribute strategic planning doc to people mentioned at the above and invite

**Tasks:**

1. Write the charge for ad hoc and committees and SAC
2. Identify ad hoc committee
3. What is the role of standing committee - usability of HIS to HIS Standing Committee
  - a. How to move forward Informatics
  - b. Yoori Choi prepare the presentation for physical Informatics Standing Committee meeting – about Informatics issues
4. Better defined role of liaison to Standing Committee
5. Schedule Standing Committee chair to attend one of BOD meeting to report
6. We need software engineer since we found the weakness of system – HIS project ends on the end of 2011, need to hire before the project ends
  - a. No major re-allocation
  - b. Try to get better support for software engineer for new resources
7. Develop the graduate student counselor proposal to E&O committee
8. **TO DO: Send Larry Murdoch list of past BOD members**
9. **TO DO: Send Larry Murdoch list of past candidate who are not elected**

**Adjourned:** 5:15pm

**July 18, 2010 Minutes**

Call to Order: 9:15am

**Roll Call**

- 11 directors present, need 11 for quorum
- “X” indicates director is present

Present:

**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  
Jennifer Jacobs - University of New Hampshire X

**Term expires 12/31/2012**

Carol Johnston – South Dakota State University X  
Witold Krajewski – University of Iowa  
Larry Murdoch – Clemson University X

**Officers Present:** Richard Hooper (CUAHSI)  
**Others:** David Kirschtel (CUAHSI), Yoori Choi (CUAHSI)

**Motion to approve all changes made in By-laws**

Motion to Approve: Patricia Maurice  
Second: David Freyberg  
Discussion: No  
Approval: Yes (unanimous)

Suggestion for SAC member:

1. AC-GEO Rep (Foufoula)
2. John Wilson
3. Peter Gleick
4. John Braden
5. Diane McKnight
6. Perry McCarty
7. Don Sparks
8. Mary Anderson

**Motion to approve Steve Running to be on SAC**

Motion to Approve: Ken Potter  
Second: David Freyberg  
Discussion: No  
Approval: Yes (unanimous)

**Motion to approve CIMA Foundation as International Affiliate Member**

Motion to Approve: Jennifer Jacobs  
Second: Patricia Maurice  
Discussion: No  
Approval: Yes (unanimous)

Ad Hoc Committee:

- SAC composition and role (October report)
  - **Larry B.**, Tissa, Witek, Larry M.
- Succession (October)
  - **Ken**, Larry M.
- Split Office (September)
  - **Jay**, Ken, 3<sup>rd</sup> to be named
- Compensation (October)
  - **Jay**, David F.
- Nominating Committee (September)
  - **Larry M.**, Jennifer, Jim, Gordon Grant
- Disciplinary Diversity and Member engagement (Charge-August; January)
  - **Patricia**, Scott, Diane McKnight, Barbara Minsker

**\*\*Note: August meeting (BOD) – please check the calendar for Fall schedule**

**Adjourned:** 11:00am (BOD continued to discuss and work on Strategic plan documentation afterwards.)

BYLAWS OF THE CONSORTIUM OF UNIVERSITIES FOR THE ADVANCEMENT OF  
HYDROLOGIC SCIENCE, INC.

*ADOPTED THROUGH ACTION-WITHOUT-MEETING USING WEBSURVEYOR. FINAL VOTE  
RECEIVED JANUARY 4, 2006.*

**PROPOSED AMENDMENTS, AUGUST, 2010. DELETIONS INDICATED BY ~~STRIKE THROUGH~~.  
ADDITIONS INDICATED BY *RED ITALICS RELATING TO CORPORATE AFFILIATES* AND BY *BLUE  
ITALICS RELATING TO MEMBERSHIP*.**

Article I

*Name*

**Section 1. Name:** The name of the Corporation is Consortium of Universities for the Advancement of Hydrologic Science, Incorporated.

Article II

**Member Institutions**

**Section 1. Membership:** Universities, including single or multiple campuses of multi-campus university systems, chartered in the United States with graduate degree programs in hydrologic sciences and a major commitment to research in that field may become Members of the Corporation. The current list of member institutions shall be maintained by the Secretary.

**Section 2. Election:** An institution applying for membership must be qualified as an educational and not-for-profit institution recognized as exempt from Federal income tax as an organization described in section 501(c)(3) of the Internal Revenue Code, according to criteria adopted by the Board of Directors. Qualified institutions may be elected as Members by the affirmative vote of at least two-thirds of the entire Board of Directors, or by unanimous vote of the Executive Committee of the Board of Directors. Once admitted, each Member shall designate a *up to three* Representatives to participate in all activities in the governance of the Corporation, including serving on the Board of Directors. *Each member shall have 3 votes in elections and on all motions put before the membership.* The rights and privileges of Members with respect to participation in the scientific activities of the Corporation shall be set forth according to policies established by the Board of Directors.

**Section 3. *Non-profit* Affiliation:** Research institutions and other not-for-profit organizations in the United States that are engaged in hydrologic science and closely related fields, but that do not otherwise qualify for CUAHSI membership, may be elected as *Non-profit* Affiliates for an indefinite term by the affirmative vote of at least two-thirds of the entire Board of Directors or by a unanimous vote of the Executive Committee of the Board of Directors. Once admitted, each Affiliate shall designate a Representative to participate in all activities in the governance of the Corporation, other than serving on the Board of Directors or serving in a position specifically restricted to said Directors. *Each Non-profit Affiliate shall have one vote in elections and on all motions put before the membership.* The rights and privileges of Affiliates with respect to participation in the scientific activities of the Corporation shall be set forth according to policies established by the Board of Directors.

**Section 4. International Affiliation:** Research and educational institutions and other foreign, not-for-profit organizations may be elected as International Affiliates for an indefinite term by the affirmative vote of two-thirds of the members of the entire Board of Directors or by a unanimous vote of the Executive Committee of the Board of Directors. *Each International Affiliate shall have one vote in elections and on all motions put before the membership.* Once admitted, each International Affiliate shall designate a Representative to participate in all activities in the governance of the Corporation, other than serving on the Board of Directors or serving in a position specifically restricted to said Directors. The rights and privileges of International Affiliates with respect to participation in the scientific activities of the Corporation shall be set forth according to policies established by the Board of Directors.

**Section 5. Corporate and Professional Affiliation:** For-profit organizations and businesses may be elected as Corporate Affiliates for an indefinite term by the affirmative vote of two-thirds of the members of the entire Board of Directors ~~or by a unanimous vote of the Executive Committee of the Board of Directors~~. Once admitted, each Corporate Affiliate shall designate a Representative, *who shall serve on the Corporate Advisory Council as described in Article VII, Section 10. Corporate Affiliates may attend membership meetings, but their presence does not count toward quorum nor do they have the right to vote on motions before the membership or to propose motions.* ~~to participate in all activities in the governance of the Corporation other than serving on the Board of Directors or serving in a position specifically restricted to said Directors.~~ The rights and privileges of Corporate Affiliates with respect to participation in the scientific activities of the Corporation shall be set forth according to policies established by the Board of Directors. The Board is authorized to establish more than one class of Corporate Affiliation membership.

**Section 6. Affiliate:** In the remainder of these bylaws, the term "Affiliate" refers to all classes of affiliation created under Sections 3, 4, and 5 of this Article unless specifically restricted.

**Section 7. Resignation or Removal:** Any Member or Affiliate may resign at any time by giving written notice to the Chair, President or Secretary of the Corporation. Such resignation shall take effect upon receipt of the notice, or at any later time specified therein. Given sufficient cause any Member or Affiliate may be removed by the affirmative vote of two-thirds of the entire Board of Directors. Any resigning Member or Affiliate, or Member or Affiliate being removed, shall remain liable for any amounts due, pursuant to Article IX of the Bylaws.

**Section 8. Executive Officer:** The term "Executive Officer," referred to in Section 9, is a Senior Officer of a Member above the level of Department Head, or, in the case of an Affiliate, any executive officer or manager of the administrative unit of the organization or business.

**Section 9. Representatives and Alternates:** An Executive Officer of a Member *shall designate up to 3 representatives* and an Executive Officer of Affiliate members ~~or Affiliate~~ shall designate a *single* Representative, to serve for the term specified by such written designation. ~~The~~ *Each* Representative shall be the holder of an academic, *research, or teaching* appointment (for university members) or other science-related position (for non-university members), with major responsibilities for instruction and/or research in hydrologic science, in a department, program or other organizational unit of such Member or Affiliate. *Regardless of the number of Representatives appointed by a Member, each Member shall have 3 votes as described in Section 2 which shall be allocated at the discretion of the Representatives. The intent of multiple Representatives from Member universities is to broaden the disciplinary representation in the Consortium to reflect the multiple scientific disciplines which contribute to water science. Members are encouraged to appoint representatives representing earth sciences, engineering, ecology, social sciences and other disciplines with interest in water. Member universities are also encouraged to rotate appointment of Representatives among faculty members and to appoint early career and under-represented groups as Representatives.* The Executive Officer may also appoint an Alternate *for each Representative* to attend all meetings and exercise all the rights, powers and privileges in the Representative's absence. In the case when neither the Representative, nor the Alternate, is available to attend a meeting, or in the case where a Representative is not available to attend a meeting and an Alternate has not been designated, the Representative or an Executive Officer of the Member or Affiliate may authorize as a replacement an individual, otherwise qualified to serve as the Representative, to attend the meeting and exercise all the rights, powers and privileges in the Representative's absence. Written authorized notification that a replacement is to serve as Representative to attend the meeting is to be received by the Secretary of the Corporation before the meeting is called to order.

**Section 10. Member Representatives for the Purpose of Election to Board of Directors:** The Representatives of a Member, for purposes of standing for election to the Board of Directors, must have served as the Representative at least sixty (60) days prior to the Annual Membership Meeting.

### Article III

#### Meetings of Membership and Election of the Board of Directors

**Section 1. Annual Meeting:** There shall be an Annual Membership Meeting, of the Members and Affiliates, for the election of Directors and the transaction of such other business as may properly come before it, on the first Monday

in December in each year, or on such other date during the months of November or December as the Board of Directors may designate.

**Section 2. Notice of Meetings:** Notice of the Annual Membership Meeting shall be given to the Representative(s) of each Member or Affiliate by the Secretary, or by an officer directed by the Chair of the Board of Directors or the President to give such notice, by delivering to him or her personally, or by first-class mail, postage prepaid, addressed to him or her at the address of his or her member institution, a written or printed notice not less than thirty (30) nor more than sixty (60) days before the date fixed for the meeting. Notice of any meeting need not be given to any Representative, however, who submits a signed waiver of notice, before or after the meeting. Attendance of a Representative without protesting prior to the conclusion of the meeting the lack of notice thereof shall constitute a waiver of notice by him or her. When a meeting is adjourned to another place or time, it shall not be necessary to give any notice of the adjourned meeting if the time and place to which the meeting is adjourned are announced at the meeting at which the adjournment is taken.

**Section 3 Quorum:** At all meetings, one half (1/2) of Members, *Non-profit Affiliates and International Affiliates (but not including Corporate Affiliates)* shall constitute a quorum. If a quorum is not present, a majority of the Members present may adjourn the meeting without notice other than by announcement at said meeting, until a quorum is present. At any duly adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally called.

**Section 4. Nominating Committee:** No less than ninety (90) days before the Annual Membership Meeting, the Executive Committee of the Board of Directors shall appoint a Nominating Committee, which shall prepare a slate of one or more nominees for each opening on the Board of Directors to be filled. The Secretary shall send notice to the Members and Affiliates reporting the composition of the Nominating Committee, the names of eligible Representatives for election to the Board, and will solicit names of suggested nominees. *Multiple Representatives from the same Member University may appear on the ballot, but only 1 Representative from any given Member university may ultimately serve on the Board, pursuant to Article IV, Section 2. Representatives from Member universities which are already represented on the Board in the succeeding year are not eligible to run.* Eligible candidates may be placed on the slate by the Nominating Committee *or* upon receipt *by the Nominating Committee* of a written ~~nomination~~ *petition* signed by five Member Representatives at least sixty (60) days before the Annual Meeting. Names of Directors serving as Chair-Elect/Chair/Past-Chair whose term as Director expires before their term as officer shall be automatically entered on the ballot for another three-year term, marked as “Mid-Term Officers.” The Nominating Committee shall submit the ballot to the Secretary forty-five (45) days prior to the Annual Meeting; the Secretary shall certify that the nominees are eligible to stand for election.

**Section 5 Ballot:** The ballot prepared by the Nominating Committee shall be included in the Notice of Meeting. *Each Member shall receive three ballots and each non-profit affiliate and international affiliate shall receive one ballot.*

**Section 6. Election of Directors:** Election of Directors shall take place at the Annual Membership Meeting. Election shall be made by written or electronic ballot that may be cast in person by a Representative of a Member or Affiliate attending, or may be submitted by mail or facsimile, if received by the Secretary before the meeting. Election shall be valid if ballots are received from one-half of the Membership in accordance with Section 3 of this Article.

**Section 7. Method of Voting:** In the election of Directors, a valid ballot shall contain no more votes than vacancies being filled; election to each vacancy shall be determined in sequence in favor of those qualified nominees with the most votes. *If more than one Representative for the same Member University should receive sufficient votes to otherwise serve as a Director, only that Representative with the most votes shall be elected to Board to meet the conditions of Article IV, Section 2. The remaining Representatives from that Member University shall be skipped over in favor of candidates from distinct Member universities.* If electronic ballots are used, the polling system must contain an authentication method, such as a unique password for each Member or Affiliate.

**Section 8. Counting of Ballots:** If paper ballots are used, ballots shall be counted by the Secretary and one other Director present at the meeting. If an electronic polling system is used, the Secretary shall operate the system and

record the vote tabulation. If the Secretary is a candidate for any office in the election, he or she shall be replaced by the Chair or a representative designated by the Chair for the duties described in this article.

**Section 9: Special Elections:** The procedures set forth in Sections 2 through 9 8 shall apply in the case of a Special Election held to fill the vacancy of a Director that has resigned or been removed pursuant to Article IV, Sections 5, 6 and 7.

**Section 10: Special Meetings:** The Board of Directors, or the Executive Committee acting on its behalf, may call a Special Meeting of the Membership for the purpose of a special election of Directors and/or for the transaction of such other business as may properly come before it.

**Section 11: Participation by Conference Telephone:** In any meeting, any one or more Representatives may participate by means of a conference telephone, or similar communications equipment allowing all persons participating in the meeting to hear each other at the same time. Participation by such means shall constitute presence in person at a meeting.

## Article IV Board of Directors

**Section 1. Powers:** Full power in the management of the affairs of the Corporation is vested in the Board of Directors. To this end and without limitation of the foregoing or of its powers expressly conferred by these Bylaws, the Board of Directors shall have power to authorize such action on behalf of the Corporation, make such rules or regulations for its management, create such additional offices or special committees and select, employ or remove such of its officers, agents or employees as it shall deem best. The Board of Directors shall have the power to fill vacancies in, and change the membership of such committees as are constituted by it.

**Section 2. Composition:** The Board of Directors shall be comprised of 15 individuals, hereafter called "Directors," who are Representatives of 15 distinct and separate Members. Directors shall serve in their individual capacities, however, tenure as Member's Representative is required for service to the Board. Any Director who, after election, is removed as the Member's Representative, shall no longer be qualified and shall be removed immediately from the Board of Directors, except if the Director should transfer to another university, in which case the procedures of Section 7 (this article) shall hold

**Section 3. Election of the Board:** The Board of Directors shall be elected by the Members and Affiliates at the Annual Membership Meeting (Art III).

**Section 4. Term of Office:** The term of office of Directors newly elected at the Annual Meeting is three years, with terms staggered so that one-third of the Board is elected annually. The Directors shall take office at the Annual Meeting of the Board of Directors following the Annual Membership Meeting (Article V) and serve until their successors take office. Directors elected by Special Election shall take office immediately and shall serve the remainder of the term vacated.

**Section 5. Resignation:** Any Director may resign at any time giving written notice to the Chair, President or Secretary of the Corporation. Such resignation shall take effect upon receipt of the notice, or at any later time specified therein.

**Section 6. Removal:** A Director shall be removed by the Board of Directors if he or she is no longer the designated Representative of a Member, with the exception of Section 7 herein. A Director may also be removed by a two-thirds (2/3) vote of the Members and Affiliates.

**Section 7. Transfer:** Should a Director transfer employment to another Member during his/her term of office, he/she shall notify the Chair, President or Secretary of the Corporation in writing prior to the transfer. That Director shall remain a Director provided that, within sixty days of the transfer, his or her new employer is a Member and does not already have a designated Representative who is a Director at the end of the sixty day period, and the

Director is designated by his new employer to serve as its Representative. Otherwise the subject Director will be removed.

**Section 8. Vacancies.** The remaining term of a resigned or removed Director shall be filled by Special Election, unless the next Annual Membership Meeting is scheduled to take place within 180 days of the date of resignation; in which case, the remaining term will be filled at the time of Board election during the Annual Membership Meeting.

#### *Article V*

### **Meetings of the Board of Directors**

**Section 1. Annual Meeting:** The Annual Board Meeting shall be held within the sixty days following the Annual Membership Meeting, for the election of officers and transaction of such other business as may properly come before it.

**Section 2. Special Meetings:** Special meetings may be called by the Chair of the Board of Directors, or by the President, or shall be called by the Secretary upon written request of at least three Directors.

**Section 3. Place of Meetings:** The Chair of the Board of Directors or the President shall designate the place of the annual meeting or any special meeting, which may be either within or without the District of Columbia, and shall be specified in the notice of meeting or waiver of notice thereof.

**Section 4. Notice of Meetings:** Notice of such meeting of the Board of Directors shall be given to each Director. For the Annual Board Meeting, notice shall be given to all Directors and to all nominees at the Annual Membership Meeting preceding the Annual Board Meeting. Notice shall be given by the Secretary, or by an officer directed by the Chair of the Board of Directors or the President to give such notice, by delivering to him or her personally, or by first-class mail, postage prepaid, addressed to him or her at the address of his or her member institution, a written or printed notice not less than thirty (30) nor more than sixty (60) days before the date fixed for the meeting. Notice of any meeting need not be given to any Director who signs a waiver of notice, before or after the meeting. The attendance of any Director at a meeting without protesting prior to the conclusion of the meeting the lack of notice thereof shall constitute a waiver of notice by him or her. When a meeting is adjourned to another place or time, it shall not be necessary to give any notice of the adjourned meeting if the time and place to which the meeting is adjourned are announced at the meeting at which the adjournment is taken.

**Section 5. Quorum:** Except as may be otherwise expressly required by law, the Certificate of Incorporation or these Bylaws, at all meetings of the Board of Directors two thirds (2/3) of the Directors in office shall constitute a quorum. At all meetings of any committee of the Board of Directors, a majority of the members of that committee shall constitute a quorum. For the purposes of election of Officers and Executive Committee members, a quorum shall be determined in accordance with Article VIII. If a quorum is not present, a majority of the Directors present may adjourn the meeting without notice other than by announcement at said meeting, until a quorum is present. At any duly adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally called.

**Section 6. Voting:** Each Director shall be entitled to one vote. Except as otherwise expressly required by law, the Certificate of Incorporation or these Bylaws, all matters shall be decided by the affirmative vote of a majority of the Directors present at the time of the vote, if a quorum is then present.

**Section 7. Action Without a Meeting:** Any action required or permitted to be taken by the Board of Directors, or the Executive Committee, may be taken without a meeting if all members of the Board of Directors, or the Executive Committee if such action may be acted upon by the Executive Committee, consent in writing authorizing the action. The written consents shall be filed with the minutes of the proceedings of the Board of Directors or the Executive Committee.

**Section 8. Participation by Conference Telephone:** In any meeting of the Board of Directors or any committee thereof, any Director or committee member may participate by means of a conference telephone or similar

communications equipment allowing all persons participating in the meeting to hear each other at the same time. Participation by such means shall constitute presence in person at a meeting.

## Article VI

### Officers

**Section 1. Officers and Qualifications:** The officers of the Corporation shall consist of a Chair, Chair-Elect, and Past-Chair of the Board of Directors, a President, a Secretary, a Treasurer and such other officers as the Board of Directors may from time to time establish and appoint. The Chair, Chair-Elect, and Past-Chair shall be members of the Board. Unless otherwise specified by Board action, other Officers need not be Directors or Representatives.

**Section 2. Chair:** The Chair of the Board of Directors shall, when present, preside at all meetings of the Board of Directors and shall perform such other duties and exercise such other powers as shall from time to time be assigned by the Board of Directors.

**Section 3. Chair-Elect and Past-Chair:** The Chair-Elect shall succeed as Chair at the completion of the current Chair's term of office. The Past-Chair is the person who served as Chair in the term immediately preceding the current Chair. In the event of absence of the Chair, the Chair-Elect shall preside at all meetings of the Board of Directors. In the event of absence of both the Chair and the Chair-Elect, the Past Chair shall preside at all meetings of the Board of Directors. Both the Chair-Elect and the Past Chair shall perform such other duties and exercise such other power as shall from time to time be assigned by the Board of Directors.

**Section 4. President:** Except as otherwise provided by the Board of Directors, the President shall be the chief executive officer of the Corporation, and unless authority is given by the Board of Directors to other officers or agents to do so, he or she shall execute all contracts and agreements on behalf of the Corporation. It shall be his or her duty, insofar as the facilities and funds furnished to him or her by the Corporation permit, to see that the orders and votes of the Board of Directors and the purposes of the Corporation are carried out. In the absence of the Chair, the Chair-Elect, or the Past Chair of the Board of Directors, the President shall preside at meetings of the Board of Directors. The President may appoint advisory committees or panels to assist in carrying out the business of the Corporation.

**Section 5. Secretary:** The Secretary shall give notice of meetings of the Board of Directors, record all actions taken at such meeting, and perform such other duties as shall from time to time be assigned by the Board of Directors. The Secretary or other such person appointed by the Board of Directors shall maintain the corporate minute book containing meeting minutes, and resolutions that are in force and binding on the Board, the officers, and the Corporation.

**Section 6. Treasurer:** The Treasurer, subject to the control of the Board of Directors, shall collect and receive, and have charge and custody of, the funds and securities of the Corporation. He or she shall have such other duties as are customary to the position of Treasurer in a corporation of this type and such as shall from time to time be assigned by the Board of Directors.

**Section 7. Election and Term of Office:** The Board of Directors shall select one of its members to serve a three-year term, in which he or she serves one year as Chair-Elect, followed by one year as Chair, and then one year as Past Chair. The Past Chair is not eligible for immediate re-election as Chair-Elect at the expiration of his or her term. If during this cycle, the term of office as a Director of the Chair-Elect/Chair/Past-Chair expires, this person shall automatically be entered onto the ballot for re-election to another three-year term as a Director. In the event that person is not re-elected as a Director and that person is about to become the Chair, then the term of the current Chair will be automatically extended by 1 year, even if that requires extending his or her term on the Board of Directors by 1 year. The position of Past Chair will remain vacant for the next year. If the person who is not re-elected is about to be Past-Chair, then that position shall remain vacant for the next year. All other officers of the Corporation shall be elected by the Board of Directors for terms not to exceed three years or until their successors are chosen and qualify, and they shall be eligible for reelection. All officers shall assume their position upon election at the Annual Meeting.



**Section 8. Resignation:** Any officer 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.

**Section 9. Removal:** Any officer may be removed at any time either with or without cause by vote of two-thirds of the Board of Directors.

**Section 10. Vacancies:** Any vacancy in any office of the Corporation shall be filled by special election unless the next Annual Board Meeting is scheduled to take place within 120 days of the date of vacancy; in which case, the remaining term may be filled at the Annual Board Meeting. Any vacancy in any office of the Corporation may be filled on an interim basis by a majority vote of the Executive Committee of the Board of Directors, if a quorum of the Executive Committee is established.

#### *Article VII*

#### **Executive Committee of the Board, Other Committees and Advisory Council**

**Section 1. Committees:** The Board may, by resolution adopted by a majority of the Directors in office, designate and appoint one or more committees, each of which shall consist of 2 or more Directors, to have and exercise the authority of the management of the Corporation. Other committees not having and exercising the authority of the Board may also be established. Each committee shall have only the lawful powers specifically delegated to it by the Board.

**Section 2. Executive Committee of the Board and Terms of Office:** There shall be established an Executive Committee of the Board comprising the Chair, the Chair-Elect, the Past Chair and two at-large members. The at-large members shall be elected at the Annual Board Meeting for the remainder of their term as Directors and shall take office immediately. The at-large members may succeed themselves if they are re-elected to the Board. Members of the Executive Committee must be members of the Board of Directors.

**Section 3. Powers of the Executive Committee of the Board:** Unless otherwise provided by resolution adopted by the affirmative vote of a majority of the entire Board of Directors, the Executive Committee of the Board may have and may exercise all the powers of the Board of Directors, except that it shall not have authority as to the following matters:

- (a) the creation of new (Art. VII, Sections 5 & 6) Standing Committees of the Corporation;
- (b) the amendment or repeal of the Bylaws, or the adoption of new Bylaws;
- (c) the amendment or repeal of any resolution of the Board of Directors, which by its terms shall not be so amendable or repealable and
- (d) the levying or assessment of fees and dues on members, affiliate, or international affiliate members. The Board shall determine fees and dues on Corporate Affiliates.

***(e) the election of Corporate and Professional Affiliates members to the Consortium***

At all meetings of the Executive Committee of the Board, the presence of a simple majority of its members then in office shall constitute a quorum for the transaction of business.

**Section 4. Vacancies in the Executive Committee:** Any vacancy in the membership of the Executive Committee shall be filled by special election by the Board, unless the next Annual Board Meeting is scheduled to take place within 120 days of the date of vacancy; in which case, the remaining term shall be filled at the next Annual Board Meeting of the Board. Any vacancy in the membership of the Executive Committee may be filled on an interim basis by a majority vote of the Executive Committee of the Board of Directors, if a quorum of the Executive Committee is established.

**Section 5. Internal Audit Committee:** The Board of Directors shall create a standing Internal Audit Committee comprised of a minimum of three members, the majority of whom also must be Member Representatives. Neither officers of the Corporation nor members of the Executive Committee of the Board of Directors may serve on the Internal Audit Committee. The Chair and membership of the Internal Audit Committee shall be appointed by the Board of Directors. The Internal Audit Committee shall be responsible for the selection of external auditors, for the oversight of the auditing process, for presentation of audit results to the Board of Directors annually, for making recommendations to the Board of Directors for improvement of business, accounting, and audit policies, and for other duties as assigned to the Internal Audit Committee in its charter from the Board of Directors. The Internal Audit Committee shall have unlimited access to all financial and management documents of the Corporation.

**Section 6. Special Committees:** The Board of Directors or the Executive Committee acting on its behalf may create such Special Committees of the Corporation as may be deemed desirable, the members of which shall be appointed by the Chair of the Board from among the Directors, with the approval of the Executive Committee.

**Section 7. Standing Committees:** By resolution adopted by the Board of Directors, the Board may designate one or more Standing Committees for each major scientific, educational or research program to which the Corporation provides scientific counsel and advice or management direction. Each such committee shall serve at the pleasure of the Board.

**Section 8. Other Committees:** The Board of Directors, or the Executive Committee acting on its behalf, may create committees other than Standing or Special committees to be Committees of the Corporation. Such committees shall be elected or appointed in such a manner as may be determined by the Board of Directors or Executive Committee and shall have such lawful duties as may be specified by the Board or Executive Committee.

**Section 9. Advisory Council:** The Board of Directors may establish an Advisory Council to serve as an experienced advisory body to the Board. The size, responsibilities, and terms of members shall be determined by the Board of Directors.

*Section 10. Corporate Advisory Board. The Board of Directors may establish a Corporate Advisory Board, consisting of Representatives from Corporate Affiliates to provide advice to the Board. The size of the Corporate Advisory Board is determined by the number of Corporate Affiliate members according to a formula established by the Board of Directors.*

## Article VIII

### Election of Officers and Executive Committee at the Annual Meeting of the Board of Directors

**Section 1. Officers and Executive Committee:** Officers and Executive Committee members shall be elected by the Board of Directors at the Annual Board Meeting as necessary, in accordance with the procedures established in this Article.

**Section 2. Nominating Committee for Election of President, Secretary and Treasurer:** No less than ninety (90) days before the Annual Board Meeting, the Executive Committee shall appoint a Nominating Committee (which may be the same committee as in Article III, Section 4), which shall prepare a slate of one or more nominees for open positions of President, Secretary and/or Treasurer. The Secretary will send notice by electronic mail to the Directors, Members, and Affiliates, reporting the composition of the committee and the eligibility requirements. The notice shall solicit names of suggested nominees, and notify Directors, Members and Affiliates that eligible candidates shall be placed on the slate by the Committee upon receipt of written nomination, signed by five Member Representatives, at least sixty (60) days before the Annual Board Meeting. The Committee shall submit a completed ballot to the Secretary at least forty-five (45) days prior to the Annual Board Meeting.

**Section 3: Mailed notice of election and ballot:** The ballot for President, Secretary and Treasurer, prepared by the Nominating Committee, shall be included in the Notice of Meeting (Art V, Sec. 4).

**Section 4. Nomination of the Chair-Elect and At-Large Executive Committee members: Nominations for Chair-Elect** and at-large Executive Committee member(s) **shall be taken from the floor at the Annual Board Meeting** . Each floor nomination must be seconded by at least one of the Directors present.

**Section 5. Election:** Election shall take place at the Annual Board Meeting. Election at the meeting shall be by written or electronic ballot that may be cast in person by a Director. Individual ballots may, be submitted by identified voice vote, without the benefit of hidden ballot, upon request to the Secretary during the meeting. Election shall be valid if ballots are received from one-half of the membership of the entire Board of Directors in accordance with this Article, even if a quorum is not present for the purpose of conducting other business.

**Section 6. Special Election:** In the event that an Officer or At-Large member of the Executive Committee is removed or resigns under Article IV, Sections 5, 6 and 7, or Article VI, Sections 8 and 9, a special election shall be held at a Special Meeting (Article V, Section 2) to fill the vacancy, pursuant to the procedures outlined in this Article to solicit nominations.

**Section 7. Method of Voting:** In the election of Officers and At-Large Executive Committee Members, a valid ballot shall contain at most one vote for each office; election shall be decided in favor of the nominee receiving a plurality of votes. In the election of Executive Committee members, a valid ballot shall contain no more votes than vacancies being filled; election to each vacancy shall be determined in sequence in favor of those qualified nominees with the most votes.

**Section 8. Counting of Ballots:** Ballots shall be counted by the Secretary and the Chair of the Nominating Committee.

## Article IX

### Fees and Assessments

**Section 1. Initial Membership Initiation Fee:** Each Member shall contribute an initial membership fee of ~~two thousand dollars (\$2,000)~~ *as determined by the Board of Directors*. Each Affiliate and International Affiliate shall contribute an initial membership fee equal to one quarter of the current *initiation* fee for regular membership. Each Corporate Affiliate shall contribute an ~~initial membership~~ *initiation* fee according to policy that is established by a majority vote of the Board of Directors.

**Section 2. Assessments:** In addition to the initial membership fee, every Member, Affiliate, and International Affiliate shall pay such fees or assessments, annual or otherwise, as may be authorized from time to time by majority vote of the entire Board of Directors; provided, however, that for each class of Membership and Affiliation such assessments shall be levied equally on all members of the class, ~~and shall not exceed two thousand dollars (\$2,000) per calendar year, or a total of ten thousand dollars (\$10,000) per Member, Affiliate or International Affiliate~~. Corporate Affiliates shall pay such fees or assessments, annual or otherwise, as may be authorized from time to time by majority vote of the entire Board of Directors; provided that for each level of Corporate Affiliation such assessments shall be levied equally on all members of the level, and for each level shall not exceed an amount per calendar year to be established by a majority vote of the entire Board of Directors. A Member, Affiliate, International, or Corporate Affiliate that has resigned from the Corporation shall not be liable for any assessments levied after the effective date of its resignation.

**Section 3. Arrears:** Any Member, Affiliate, International Affiliate, or Corporate Affiliate failing to pay any fees or assessments ~~within one hundred eighty days (180) after such fees or assessments are payable~~ may be removed from membership or affiliation ~~for such nonpayment by the affirmative vote of two thirds of the entire Board of Directors~~ *if payment has not been received within a reasonable period of time as determined by the Board. The Board of Directors shall establish procedures for reinstatement of members who are in arrears, penalties for late payments, and other processes concerning payment of initiation fees and recurring dues.*

## Article X

### Compensation

**Section 1. Compensation:** The Board of Directors shall have the power to fix the reasonable compensation and fees payable to officers and employees for services rendered to the Corporation; provided, however, that no Director shall be paid any compensation for serving as Director. All Directors may be reimbursed for the actual expenses incurred in performing duties assigned to them by the Board of Directors.

**Section 2. Dividends:** The Corporation shall not pay dividends or distribute any part of its income or profit to its Members, Directors or Officers.

## Article XI

### Indemnification

**Section 1. Right to Indemnification:** Every individual who is or shall be or shall have been a Director, or Officer, or key employee, as determined by the Board of Directors, of the Corporation or his or her personal representative shall be indemnified by the Corporation against all costs and expenses reasonably incurred by or imposed upon him or her arising out of or proximately related to any action, suit or proceeding to which he or she may be made a party by reason of being or having been a Director or officer of the Corporation or of any subsidiary or affiliate thereof. It must be determined by the standard required by Article XI, Section 2 of these Bylaws, that the Director or officer has acted in good faith and not to have been liable by reason of gross negligence in the performance of duty as such Director or officer. Costs and expenses shall include, but without limiting the generality thereof, attorney's fees, damages and reasonable amounts paid in settlement.

**Section 2. Determination of Good Faith Conduct:** The officer or Director seeking reimbursement must be found, in the manner provided below, that he or she acted in good faith, in a manner he or she believed to be in the best interest of the Corporation, and with such care, including reasonable inquiry, as an ordinarily prudent person in a like position would use in similar circumstances. The determination that the officer or Director did act in a manner complying with this section shall be made by:

- the Board of Directors by a majority vote of a quorum consisting of Directors who are not parties to the proceeding; or
- the court in which the proceeding is or was pending. Such determination may be made on application brought by the Corporation, the officer or Director seeking reimbursement, or the attorney rendering a defense to the officer or Director, whether or not the application is opposed by the Corporation.

**Section 3 . Insurance:** The Board of Directors may adopt a resolution authorizing the purchase and maintenance of insurance on behalf of any officer or Director of the Corporation against any liability asserted against or incurred by the individual in such capacity or arising out of the individual's status as such, whether or not this Corporation would have the power to indemnify the individual against that liability under the provisions of this Article XI.

**Section 4. Liability:** The Consortium Members, Affiliates, International Affiliates, and Corporate Affiliates are bound to each other by a duty of good faith in achieving the goals of the Corporation. Joint and several liability shall not attach to the Members, Affiliates, International Affiliates, and Corporate Affiliates so that no entity shall be responsible for the actions of another. The Consortium Members, Affiliates, International Affiliates, and Corporate Affiliates disclaim any liability for consequential, indirect, incidental, or special damages.

**Section 5. Disclaimer of Warranties:** The Consortium Members, Affiliates, International Affiliates, and Corporate Affiliates disclaim any express or implied warranties, including without limitation any warranty against infringement of intellectual property rights or any implied warranty for merchantability and fitness for a particular purpose, to each other, to any agency and to third parties for actions, omissions, products, non-conformities, defects, liabilities, or infringement arising out of the activities of the Corporation.

## Article XII

### Fiscal Year

**Section 1. Fiscal Year:** The fiscal year shall begin on the calendar year, unless otherwise determined by the Board of Directors.

### **Article XIII**

#### **Seal of the Corporation**

**Section 1. Seal:** The seal of the Corporation shall be circular in form and shall bear the words and figures: “Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. – District of Columbia 2001” or words and figures of similar import. The form of such seal shall be subject to alteration by the Board of Directors.

### *Article XIV*

#### **Amendments to the Bylaws**

**Section 1. Amendments:** All Bylaws of the Corporation shall be subject to amendment or repeal and new Bylaws may be made by the affirmative vote of sixty percent (60%) of the Members ~~Universities~~ at any annual or special meeting, the notice or waiver of notice of which shall have specified or summarized the proposed amendment, repeal or new Bylaws.