

American Society of Civil Engineers

ENVIRONMENTAL & WATER RESOURCES INSTITUTE (EWRI)

Information Report to the Board of Direction

For the Period January 1, 2003 – December 31, 2003

The Environmental & Water Resources Institute Governing Board (EWRI GB) met in person on April 9, 2003 (Washington, DC), August 23, 2003 (Denver, CO), and December 13, 2003 (Washington, DC).

On September 27 and 28, 2003 (New Orleans, LA) the EWRI GB also held a Strategic Planning Meeting.

1.0 RESOLUTION RESPONSES

No responses are pending.

2.0 ASCE ANNUAL ELEMENT ACTIVITIES

(Enhance the understanding, delivery, and exchange of technical information.)

In 2003 EWRI sponsored the following conferences and workshops as described below.

- ***EWRI – Weather Modification Association (WMA) Hail Suppression Workshop, April 25, 2003, Reno, NV***
EWRI partnered with the WMA to produce a second workshop entitled “Atmospheric Water Management”. The workshop resulted in a small bulk sale to the workshop of the ASCE “Atmospheric Water Management” Standard.
- ***The 2003 World Water & Environmental Resources Congress June 23-26, 2003, Philadelphia, PA***
EWRI organized and held its third annual World Water & Environmental Resources Congress on June 23-26, 2003 in Philadelphia, PA. The conference was well attended with just over 850 registrants and 29 exhibitors. Nearly 900 abstracts were received, which enabled Congress planners to select only the most excellent for poster or oral presentation. The program covered a wide variety of environmental and water resources topics in twelve concurrent sessions, with nearly 600 presentations. Tracy Mehan, the former EPA Office of Water Administrator, provided the keynote address at the opening plenary.

Approximately 35 EWRI technical committees met at the Congress, and EWRI hosted several committee oriented events (e.g. a committee open house and reception) aimed at stimulating active participation and attracting new members to participate in committees activities.

➤ **Co-Sponsor the 2003 UCOWR Conference, July 30-August 1, 2003, Washington, DC**

The EWRI GB agreed to collaborate with the Universities Council on Water Resources (UCOWR) as a non-financial co-sponsor of the 2003 UCOWR conference. EWRI members provided significant support and guidance to the joint conference planning committee as co-Chairs responsible for technical program development.

➤ **Dam Removal Workshop, August 18-19, 2003, Baltimore, MD**

Dam Removal: "Lessons Learned" was the first of several interactive workshops to focus on a hot topic facing water professionals. This workshop focused on what has been learned from the actual dam removal process. Conducted in six plenary sessions held over two days, the workshop used audience participation as the vehicle for information exchange. Each session featured two speakers who presented their experience on key issues associated with dam removal followed, by roundtable discussions amongst the attendees. The workshop attracted 75 attendees most of whom were not engineers or ASCE/EWRI members.

➤ **2003 ASCE Annual Conference, Nashville, TN**

Through the collaborative efforts of the ASCE IAC and EWRI, the 2003 ASCE International luncheon and round-table discussions promoted "International Water Day" during the 2003 ASCE Annual Conference. EWRI members developed the program and secured speakers to offer relevant perspectives on financial and investment implications to the world and engineering community of the "Water Resources Sector Strategy", released in 2003 by the World Bank Board of Executive Directors. John Briscoe, Senior Water Adviser at the World Bank was the keynote luncheon speaker. EWRI arranged for a panel of international water policy leaders to initiate a roundtable dialogue among the delegates who represented civil engineering societies from around the world.

Also at the 2003 ASCE Annual Conference, EWRI hosted two workshops on the topic of Bio-solids Management Practices. Authorities in the field of Biosolids Management discussed the processes currently employed to disinfect and reduce the vector attractiveness of sewage sludge intended for beneficial reuse on land.

➤ **Co-Sponsor US Committee on Irrigation and Drainage (USCID) 2003 Conference**

Several EWRI irrigation and drainage committees supported the 2003 USCID conference by contributing sessions and presenting several papers previously published in the ASCE Irrigation and Drainage Journal. Five EWRI committees met at the conference, and the ASCE Royce Tipton Lecture and Award were presented at the USCID event.

Philip Burgi, EWRI GB member, and Brian Parsons, Director, met with the USCID Board to explore options for a formal affiliation. The Boards of each organization subsequently agreed to pursue a partnering agreement to build a working relationship over the next three years as a precursor to a formal affiliation.

The 2004, 2005, & 2006 EWRI conferences and workshops being organized and/or approved

in 2003 include:

- ***2004 EWRI World Water and Environmental Resources Congress, June 27 – July 1, 2004, Salt Lake City, UT***
- ***EWRI/WMA Fog Dispersal Workshop, Summer 2004, Fresno, CA***
- ***EWRI Precipitation Enhancement Workshop, TBA 2004, Salt Lake City, UT***
- ***2005 EWRI World Water and Environmental Resources Congress, May 15-19, 2005, Anchorage, Alaska***
- ***2005 Watershed Management Conference, July 19-22, 2005, Williamsburg, VA***
- ***2006 EWRI World Water and Environmental Resources Congress, TBA, 2006 Omaha, NE***

(Establish a program of greater interaction and partnering between the Institutes of ASCE and Section and Branch technical groups.)

To establish greater interaction with ASCE sections and branches EWRI solicited proposals from ASCE Zone 3, and Mexico, to host and organize the 2006 World Water and Environmental Resources Congress. The proposal submitted by the Omaha, Nebraska section was selected.

Dennis Richards, Chair of the EWRI Sections and Branches Council represented EWRI as a member of the ASCE Task Committee on Institute Affiliation with Local Groups. In response to the TCIALG report the EWRI Section and Branch Council developed a workshop intended to foster interaction between the Institute and ASCE technical groups. The workshops titled “Starting and Sustaining a Water Resources Group” will first be offered at the 2004 Congress in Salt Lake City, UT.

Other ASCE Local Groups being considered for presentations on EWRI activities include Pittsburgh, Kansas City; Colorado, Los Angeles, Florida, and Nevada.

(Accomplish the second year elements of the implementation plan developed by the Task Committee for Academic Prerequisites for Professional Practice (TCAP³) for the implementation of ASCE Policy 465. – Task Committee on Specialty Certification (TCSC))

- **EWRI Water Resources Certification Task Committee** – In the spring of 2002 ASCE created and charged the Task Committee on Specialty Certification (TCSC) to develop a model and business plan for an ASCE specialty certification academy. EWRI Treasurer, C. Dale Jacobson is Chair of the committee comprised of representatives from four other Institutes, CPP, and TCAP³.

In support of ASCE specialty certification efforts, the EWRI Governing Board formed a Water Resources Specialty Certification Task Committee to establish the first ASCE post-licensure specialty certification program. The committee continues working to establish the first ASCE Certification Academy during fiscal year 2005, already having drafted Bylaws, and currently developing the body of knowledge for specialty certification in water resources engineering.

The Academy intends to be operating and open to receiving applications by October 1, 2004. By January 1, 2005 the Academy should be issuing certifications.

(Develop Leadership to broaden our members' perspectives and to enhance their career growth. Position our members for success by providing leadership opportunities, training, and tools.)

- The EWRI GB hosted its 4th Annual EWRI Leadership Workshop on June 22, 2003 at the 2003 EWRI Congress. Incoming Committee chairs met with GB members and staff to discuss EWRI operations and to develop skills for leading productive meetings.

Similar to the EWRI workshop for incoming committee chairs, on February 7, 2003, EWRI hosted Council Weekend – an event designed to develop leadership skills, and to foster cooperation and coordination between all EWRI Councils and their constituent committees. EWRI Council Weekend assures that all Councils (especially the Technical Councils) are meeting and are engaged with leading EWRI committees to achieve stated goals. The event facilitates Council communication with the Institute leadership (GB and EXCOMS) as well as inter-council communication.

(Be the primary source of technical information. Lead the development and promotion of standards for worldwide application.)

- **2003 Publications:** In support of this objective EWRI published through ASCE the following titles:

[Watershed Management: Proceedings of the Third International Conference Watershed Management](#), Taipei, Taiwan

[2001 Long-Term Groundwater Monitoring: The State of the Art](#)

["Henry P. G. Darcy and Other Pioneers in Hydraulics: Contributions in Celebration of the 200th Birthday of Henry Philibert Gaspard Darcy"](#), Philadelphia, PA, June 2003

["World Water and Environmental Resources Congress 2003" \(CD ROM\) Proceedings](#), Philadelphia, PA, June 24- 26, 2003

["Groundwater Quality Modeling and Management Under Uncertainty," Proceedings of the Probabilistic Approaches & Groundwater Modeling Symposium held during the World Water and Environmental Resources Congress](#), Philadelphia, PA, June 24-26, 2003

[Standard Guidelines for the Design and Operation of Hail Suppression Projects](#)

[Regulated Riparian Model Water Code](#)

Standard Practice for Design and Operation of Precipitation Enhancement Projects

- **Partner with WEF and AWWA to develop guidelines and standards for reducing risks to water systems from malevolent events.**

On behalf of ASCE, EWRI worked with WEF and AWWA to prepare an unsolicited proposal to the EPA Office of Water. As a result, in 2003 EPA awarded \$1,160,842 to ASCE for the development of security guidance documents and training materials to support water and wastewater utilities in implementing security standards to protect the public from potential bio-terrorism and other threats. EWRI together with AWWA and WEF are currently working to develop guidance that covers the design, construction, rehabilitation, installation, operation and maintenance of water, wastewater and storm water infrastructure systems. The guidance materials will aid water and wastewater utilities in mitigating the vulnerabilities of their systems to man-made threats and natural disasters, mitigating potential disasters throughout the design and construction of new systems, and the operation and maintenance of existing ones.

(Expand ASCE's global network through partnerships and coalitions.)

International Association of Hydraulic Engineering and Research (IAHR)

EWRI takes great pleasure in being named the host of the XXXIII Biennial Congress of the International Association for Hydraulic Engineering and Research (IAHR). The International Congress will be held in North America in August 2009. On behalf of the EWRI GB, EWRI representatives Adnan Alsaffar and Brian Parsons proposed to the IAHR Council that EWRI be selected to host the prestigious Congress in North America.

By 2009, it will have been twelve years since an IAHR Biennial Congress was held in North America. The last one hosted by ASCE and held in North America was in 1997 in San Francisco, California. It was well received and attracted well over 1000 registrants.

EWRI believes that a west coast North American location (such as Seattle, Washington; Portland, Oregon; or Vancouver, British Columbia, Canada) will provide a stimulating setting for a successful Congress. EWRI is seeking the co-sponsorship of the Canadian Society of Civil Engineers.

Water Associations International Liaison Committee (WAILC) – formerly known as Water Association Worldwide (WAW)

In association with EWRI ongoing participation with the Water Associations International Liaison Committee (WAILC) – formerly known as Water Association Worldwide (WAW), Governing Board Member (C. Dale Jacobson) and member Gerald Sehlke represented EWRI at the 2003 World Water Forum, held in Kyoto Japan. Jerry Sehlke presented a paper titled “The Role of Technical Professionals in Translating Visions into Concrete Actions”.

Global Water Partnership

EWRI became a member of the Global Water Partnership, joining hundreds of organizations in support of the Dublin-Rio principles that recognize that:

- Freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment
- Water development and management should be based on a participatory approach involving all users, planner and policy-makers at all levels
- Women play a central part in the provision, management and safeguarding of water
- Water has an economic value in all its competing uses and should be recognized as an economic good.

3.0 PROGRAM ASSESSMENT AND EVALUATION SYSTEM (PAES)

EWRI continued the use of a modified version of the ASCE PAES this year to develop a listing of the Institute's products and services. It used PAES as a tool to streamline its committee structure, and to assist in the FY04 budget process. Staff and the EWRI Executive Committees collaborated to adapt PAES for EWRI use in planning, reporting, and evaluating committee projects, and in determining how best to allocate its resources.

4.0 AWARDS

EWRI's Awards Committee recommended, and the ASCE Awards Committee approved, the following individuals to receive ASCE National Awards, as tabulated below.

ASCE NATIONAL AWARD	LOCATION OF AWARD PRESENTATION
Arid Lands Hydraulic Engineering Award	Dr. Richard H. Hawkins
Ven Te Chow Award	Dr. Norman H. Crawford
Hans Albert Einstein Award	Dr. Sam Shu-Yi Wang
Simon W. Freese Environmental Engineering Award and Lecture	H. Gerard Schwartz, Jr., Ph.D., P.E., F.ASCE
Samuel Arnold Greeley Award	Christopher T. Cleveland Thomas F. Seacord Dr. Amy K. Zander
Rudolph Hering Medal	Dr. Craig D. Adams Dr. Michael T. Meyer Yong Wang Keith A. Loftin
Karl Emil Hilgard Hydraulic Prize	Professor Rodney J. Sobey
Julian Hinds Award	Professor Uri Shamir
Walter L. Huber Civil Engineering Research Prizes	Dr. Marc A. Edwards Professor Barbara S. Minsker
Hydraulic Structures Medal	Professor Pavel Novak
Wesley W. Horner Award	Not Awarded

ASCE NATIONAL AWARD	LOCATION OF AWARD PRESENTATION
J. C. Stevens Award	Not Awarded
Royce J. Tipton	Dr. Richard G. Allen
Hunter Rouse Hydraulic Engineering Lecture	George E. Hecker

5.0 REPORTS OF CONSTITUENT COMMITTEES/EXTERNAL LIAISONS

10.1 American Academy of Environmental Engineers Board of Trustees

ASCE Past-President Gerald Schwartz served as the new ASCE Appointee to the AAEE Board of Trustees. He was replaced by C. Dale Jacobson.

10.2 American Association for the Advancement of Science

Patrice G. Malleus was appointed as the Liaison to AAAS. The outgoing Liaison, Adnan Alsaffar submitted to the BOD the report of the External Liaison to the American Association for the Advancement of Science.

Respectfully submitted,

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Report prepared by: Brian K. Parsons, P.E., M.ASCE, and Director