

SUMMARY NOTES

MEETING OF THE STANDING COMMITTEE ON EDUCATION OF FUTURE ENVIRONMENTAL AND WATER RESOURCE PROFESSIONALS

SUNDAY, JULY 22, 2003

ADAM'S MARK HOTEL – GETTYSBURG 2 ROOM – PHILADELPHIA, PA

Participating: Cassie Klumpp, Chair
Margaret Peterson, Past Chair
Don Frevert, Vice-Chair
Otto Helweg
Joe Orlins
David Brandes
Cheryl Signs
Raphael Quimpo
Conrad Keyes (part time)
Carol Gerard (part time)

Summary of Meeting:

The meeting was called to order at 6:15 pm EDT. All participants introduced themselves.

The status of the white paper was discussed briefly. It was distributed in September of 2001 and some of the material is probably outdated by now.

Cassie Klumpp noted that some of the contributions the committee could make might include sharing information with K-12 teachers on curricula, science fairs and other competitions and working through EWRI to set up websites focusing on environmental and water resources for students and teachers.

Massachusetts now requires that engineering be taught along with science at the K-12 level. In Pennsylvania, water receives considerable attention at the K-12 level, but not in an engineering context. In many western states, water conservancy districts play a prominent role in the K-12 water resources education effort, while in many of the eastern states, watershed associations fill that role. The group generally agreed that there is a need to give engineering more exposure in the curriculum at the K-12 level.

Conrad Keyes described the work of the New Mexico based WERC consortium. WERC has involvement by Ricardo Jacquez, who is the Interim Dept Head of Civil & Geological Engineering at New Mexico State University. Tim Ward of the University of New Mexico serves as a Deputy chair of WERC. Conrad serves as the liaison from the Institutes to the ASCE Education Activities Committee and will be providing additional information to Cassie in the future.

It was also agreed that the committee should be contacting ASCE sections to get a better idea about K-12 educational practices in their areas. There may be the possibility of getting local sections to fund science fairs. The websites maintained by some TV stations may also have good information. The committee may also be able to help in promoting the ExCEED education excellence program, which has been implemented at the US Military Academy in West Point, University of Arkansas, and at Northern Arizona University.

Action: Cassie Klumpp will contact Ricardo Jacquez (NMSU) or Tim Ward (UNM) about the WERC consortium program and share what she learns with the committee.

Action: Cheryl Signs will contact the city of Aurora and Northern Colorado Water Conservancy District to find out about their programs.

Action: David Brandes will contact the Water Resources Research Centers (WRRC's) in his vicinity to find out about Project WETT and share what he learns with the committee. David has subsequently checked and it seems that there is no project WETT in Pennsylvania. He will be looking into statewide or regional environmental, water science or engineering fairs and competitions to determine whether there are opportunities for EWRI to participate/encourage engineering careers.

The group agreed that a national competition for basin specific science projects would be desirable at future EWRI Congresses. This should be worked through the ASCE Council of VicePresidents.

EWRI has a power point display on K-12 education available on the web. Carol Gerard has additional information about the website. An e-room alert could be sent out to all student chapters to invite them to visit the EWRI website. (During the 2003 Congress, Keyes gave an ASCE CD on K-12 material to Joe Orlins for distribution. This CD was provided to Keyes from Jim Rossberg early on Monday morning.)

It was moved, seconded and agreed to that the group would a) compile readily available resources on K-12 education nationally and b) describe educational events which are going on in our geographic regions where we can give an engineering context.

Action: David Brandes will look into national K-12 competitions where there may be potential for a water and environmental engineering contest and report back to the group.

The SAHRA (Sustainability of semi-arid Hydrology and Riparian Areas) program based at the University of Arizona has been active in educational outreach. The SAHRA group could provide resources for a session on K-12 education outreach at next year's EWRI Water Congress in Salt Lake City.

Action: Margaret Peterson and Don Frevert will contact the SAHRA group to see if they are willing to participate in a session at the 2004 Water Congress.

Action: Don Frevert will visit the ASCE website and submit a proposal for such a session by July 15th. This has subsequently been done and suggestions from Margaret Peterson, Conrad Keyes and others will be used to develop the set of speakers for the session.

Action: Joe Orlins and David Brandes will submit a proposal for a session on Environmental and Water Resources engineering curricula.

Action: Don Frevert and Cassie Klumpp will draft up the summary notes for the meeting and distribute them for comment.

Action: Cassie Klumpp will submit the expense claims for the meeting.

The meeting was adjourned at 9:45 pm EDT.