



### U.S. Army Corps of Engineers Institute for Water Resources

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#### **USACE IWR / ICIWaRM Director Attends Governing Board Meeting and Water Symposium Hosted by the International Center for Water Resources and Global Change**

ALEXANDRIA, VIRGINIA. Bob Pietrowsky, Director of the U.S. Army Institute for Water Resources (IWR) and its International Center for Integrated Water Resources Management (ICIWaRM), was honored to be appointed to the Governing Board of one of ICIWaRM's sister UNESCO Category II Centers, the International Center for Water Resources and Global Change (ICWRGC) which is hosted by Germany's Federal Institute of Hydrology (FIH) in Koblenz, Germany.

On 8-9 June, Pietrowsky attended the third meeting of the ICWRGC Governing Board, along with participating in an *International Symposium* hosted by ICWRGC and Germany's Federal Foreign Office, with both events taking place in Berlin. The Symposium was on *Preventive Water Diplomacy – Developments and New Concepts*, and included a plenary presentation from ICIWaRM's University partner, Dr. Aaron Wolf, Oregon State University, on the "main controlling factors, perceptions, and motivations for national positions in shared watersheds".

Other participants in the symposium and meeting included fellow Governing Board members drawn from other UNESCO Category II Centers, including: Professor Maciej Zalewski, Director, European Center for Ecohydrology (ERCE); Dr. Marian Neal Patrick, from the International Centre for Water Cooperation at the Stockholm International Water Institute (SIWI); Professor Toshio Koike, Director, International Centre for Water Hazard and Risk Management (ICHARM), which is hosting the Secretariat for the International Flood Initiative (IFI); and Seyed Ali Chavoshian, Director, Regional Centre on Urban Water Management (RCUWM), Tehran, Iran, which is hosting the Secretariat for the International Drought Initiative (IDI). Also attending the symposium was Dr. Neno Kukuric, Director of the International Groundwater Resources Assessment Centre (IGRAC), The Delft, Netherlands, which is also a UNESCO Category II Center.

The plenary and concurrent sessions during the *International Symposium* manifested a menu of conclusions and recommendations with regard to developments and new concepts for promoting water diplomacy, avoiding or resolving conflicts, and ensuring water security for shared water basins, including the following dozen points which were put forward by Mr. Pietrowsky as the contribution from USACE IWR-ICIWaRM:

1. The importance of collaborative approaches: the active participation of diplomats, conflict resolution specialists AND water professionals/scientists, all working in close collaboration is crucial to successful hydro-diplomacy.
2. The engagement of conflict resolution specialists to assist in the diagnosis of the broader context of the conflict (often beyond just trans-boundary or riparian water disputes) AND the design of an appropriate conflict resolution strategy is an important component of understanding the pre-condition and defining the solution space prior to initiating water diplomacy.
3. More attention to the preventive side of potential conflict can pay dividends by avoiding or minimizing legacy or emerging trans-boundary or riparian water disputes prior to escalation.

4. Water diplomacy activities are best approached at multiple levels, including bottom-up engagement with a broad range of interests from civil society, including: local water officials and multi-sector representation from related local agencies, the general public, academia, NGO's, monetary and donor institutions, and parallel levels of regional and national government officials.
5. The geographic context of the water diplomacy engagement should be broad enough to facilitate input on a water system basis - i.e., on a watershed, river basin or water /energy distribution or multi-sector basis.
6. Water diplomacy activities benefit from conflict resolution approaches which are transparent and inclusive.
7. A foundation of scientist-to-scientist trans-boundary collaboration, such as on sharing water data, developing mutually beneficial monitoring strategies, and/or joint modeling or studies, can help build trust between the various riparian interests and thus create strong basis for cooperation as an important pre-condition of water diplomacy.
8. A focus on a fair and reasonable assessment of the beneficial and adverse effects of alternative solutions to a water dispute for all parties, and the effective communication of such impacts is a prerequisite to any successful resolution mediation or arbitration process.
9. The use of technology and computer models to visualize and communicate decision impacts and tradeoffs in conjunction with a structured public involvement process can be furthered by the extent to which stakeholders are willing to participate with water professionals in building / understanding models and data sets - a process known as "Shared Vision Planning", which can help build trust and ownership of the conflict resolution process and thus increase likelihood of reaching an agreement.
10. The emergence of several contemporary water-related challenges / issues, particularly the need for adaptation to climate change, and/or the achievement of both more resilient communities and infrastructure and more environmentally sustainable outcomes, provide fertile opportunities for creating a safe solution space for addressing legacy or emerging trans-boundary/or upper versus lower riparian water disputes from the context of integrated water resources management.
11. Greater awareness of the complexities of bi-lateral and multi-lateral water conflict issues and the diagnosis of the sources of conflict by consensus building / conflict resolution professionals was encouraged through the recommendation of training for diplomats and embassy staff on water security and trans-boundary water conflict management.
12. Likewise encouraged was training in conflict resolution techniques for water management professionals, such as through the programs at UNESCO's Institute for Water Education (IHE), Oregon State University, ICIWaRM and the International Centre for Water Cooperation at SIWI.

#### **Learn More**

For more on USACE's Institute for Water Resources, visit IWR [www.iwr.usace.army.mil](http://www.iwr.usace.army.mil)

For more on the Institute's International Center for Integrated Water Resources Management (ICIWaRM), see <http://iciwarm.sites.usa.gov/>

For more on UNESCO's International Hydrological Program (IHP) see <http://www.unesco.org/new/en/ihp>, and for additional information on the various other Category II Centers within IHP's water family, please see <http://www.unesco.org/new/en/natural-sciences/environment/water/ihp/water-centres/>