



**Training Institute on Adaptive Management of Water Resources
under Climate Change in Vulnerable River Basins**

8-17 October 2012, La Serena, Chile

*Inter-American Institute for Global Change Research (IAI), Center of Excellence for Water Security (AQUASEC) and
Water Center for Arid and Semiarid Zones of Latin America and the Caribbean (CAZALAC)*

What?

Advanced conceptual and practical training in adaptive water resource management (AWM) by international experts, with emphasis on arid and semiarid environments. This will be complemented by a seed grant program that allows participants to implement the lessons learnt in their own locations.

Why?

- Increasing pressure on water resources, especially in dry regions;
- Climate change and hydroclimatic variability add risk;
- Population growth, urbanization, rising demands for food increase societal vulnerability;
- Ecosystem water needs are often ignored or unknown.



Huasco River Valley, Chile. CAZALAC, 2011

Who?

Up to 25 participants including: 1) decision-makers from local, state or federal levels from water resources councils and water management agencies; 2) professionals from hydrology, climate, land use, socioeconomic research and policy institutions; 3) stakeholders - NGOs, community organizations, business, and local practitioners in basin management; 4) early career scientists and technicians.

Objectives: Assist participants to evaluate potential impacts of climate variability and change on water security, specifically:

- 1) integrate hydrological, climatic, social and economic development analyses;
- 2) develop a network of researchers and decision-makers who work on watershed and aquifer management in regions vulnerable to water shortages;
- 3) develop flexible and effective methodologies to enhance the governance of water in its multiple uses;
- 4) assess economic valuation integrated with AWM principles;
- 5) address uncertainty from climate change through application of scenario planning;
- 6) promote the use of decision-making tools in the management of water resources under conditions of uncertainty;
- 7) develop a regional knowledge network for the inclusion of AWM principles in the management of basins vulnerable to water scarcity.

Content: 1) Climate variability and change impacts on vulnerable basins in arid and semiarid environments of the Americas; 2) Basin resource exploitation and the challenges of multiple use options; 3) Water economic value concepts as an integrated view of basin management; 4) Integrated impact assessment looking at ecological and environmental flows, surface and groundwater hydrology, climate variability and climate change; 5) Water security incorporating multiple approaches; 6) Governance and institutions and the role of different actors (public, private and social sectors, basin residents, international organizations) to support decision making.

The program (lectures, hands-on exercises, field trip) will be carried out in English and in Spanish. Therefore, applicants should demonstrate proficiency in both languages in order to understand, communicate, and participate in all activities.

Seed Grant Program: The program will fund projects (approx. US\$ 20,000 for 9-12 months) for training institute participants to join the AQUASEC network (www.aquasec.org) and continue engaging with colleagues; strengthen and foster multinational and multidisciplinary collaboration; and promote application of research ideas and knowledge imparted in the training. The objectives are: 1) further encourage network building; 2) promote the application of the training provided on pressing real-world issues that have a significant global environmental change dimension; 3) foster multinational and multidisciplinary collaboration; 4) develop proposal writing skills; 5) develop and strengthen management capacity for international grants; 6) increase the participation of small countries in IAI research program.

Application process:

Applications must be submitted on line. For further information about the application requirements, visit the website:

<http://iaibr3.iai.int/twiki/bin/view/TIAdaptativeManagementWaterResources2012>

Applications are due **May 30, 2012 at 17h00 São Paulo time, Brazil.**