

# Integrated Water Resources Management

Department of Sustainable Development

## UNESCO/OAS ISARM Americas Programme TRANSBOUNDARY AQUIFERS OF THE AMERICAS



*The Integrated Water Resources Management Section (IWRM) of the Department of Sustainable Development (DSD) of the Organization of American States supports Member States in their efforts to improve the management, conservation, and sustainable use of both superficial and groundwater resources by promoting social and economic growth in these regions. Specific actions include the promotion of water governance, assistance in the development of policies, laws and regulations for integrated water resources management, capacity building in regional, national and local institutions, and the support of the exchange of information through specialized networks in water resources.*

This initiative has identified 73 Transboundary Aquifer Systems (TAS) in the region, including: 4 in the Caribbean, 18 in Central America, 21 in North America, and 30 in South America. The program has 24 participating countries, each of which selected a National Coordinator (NC) knowledgeable about water resources. These Coordinators have provided valuable technical data and other relevant information to the programme. With this information, three books have been published, in the series entitled "ISARM Americas." These publications are the product of Annual Workshops and other technical meetings in which the NCs gathered to evaluate the

The "Internationally Shared Aquifer Resources Management" (ISARM) Programme was launched at the 14th Session of the UNESCO International Hydrological Programme (IHP) Intergovernmental Council in June 2000, in cooperation with several other international organizations. The Western Hemisphere initiative of this global program, the ISARM-Americas Programme, is jointly coordinated by UNESCO IHP and the Integrated Water Resources Management Section (IWRM) of the Department of Sustainable Development of the Organization of American States (DSD/OAS).



*The ISARM-Americas Programme aims to promote the recognition and understanding of transboundary groundwater resources and foster collaboration among the countries sharing aquifers, in order to achieve consensus on legal, institutional, socioeconomic, scientific, and environmental aspects.*



*"IHP is UNESCO's international scientific cooperative programme in water research, water resources management, education and capacity-building, and the only broadly-based science programme of the UN system in this area. IHP's primary objective is to act as a vehicle through which Member States, in conjunction with cooperating professional and scientific organizations, develop techniques and approaches to better define hydrological phenomena." --IHP Mission*

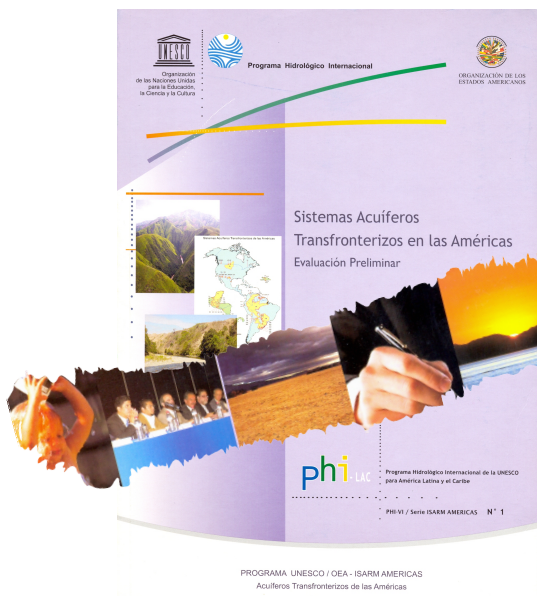
progress and validate the contributions made by participating member countries. Annual Workshops also served to promote cooperation and the exchange of information and knowledge among participating Member States.



## BOOK 1 “Preliminary Inventory of Transboundary Aquifer Systems in the Americas” (2006)

A major objective of the programme is to raise awareness about the fundamental resource of Transboundary Aquifer Systems (TAS) in the Americas. Book I represents the first attempt to compile and synthesize up-to-date information of TAS in the Americas, including their locations, environments and state of management. The book also contains information pertinent to the geographic interactions between the environment and water.

Book I was prepared due to the need for information of various groups, including decision makers within the countries that share TAS, regional agencies involved in multilateral agreements, such as the OAS and UNESCO, as well as other agencies concerned with sustainable development. The book also attempts to identify gaps in TAS information in the region, thus providing the basis to support countries toward sustainable usage and protection of this natural resource, which will lead to sustainable economic growth.



## BOOK 2 “Legal and Institutional Framework for the Management of TAS in the Americas” (2008)

During the Second Annual Workshop in El Paso, Texas in 2004, the NCs expressed that the legal and institutional aspects of TAS in the Americas should be considered. Accordingly, they requested the ISARM Americas Executive Committee assist them in a new publication, which would compile and exchange experiences in groundwater resources legislations and treaties in the region, thereby strengthening institutions. A group of legal experts was appointed to help in developing a questionnaire, including not only the national regulations in each country and the actual state of their legal frameworks, but also the current agreements and/or treaties in place. The same legal experts thoroughly reviewed the contributions from the questionnaire and this information was validated by government entities in each country. This publication is viewed as a significant resource for decision makers, international organizations, donors, and academics, within the countries sharing transboundary aquifers.



## BOOK 3 “Socioeconomic, Environmental and Climatic aspects of the TAS in the Americas” (2010)

A group of well informed experts was convened to prepare the third questionnaire for this book. The group decided to incorporate many elements in the questionnaire, including: maps of each TAS, illustrating various data, such as population, extension and groundwater uses, as well as water availability and quality, current and future climatic variations, protected zones and economic benefits. The results of this questionnaire were discussed in depth during the 2008 and 2009 workshops, which were held in the Dominican Republic and Ecuador, respectively. The data and maps provided were integrated in one single TAS “ficha.” While it was challenging compiling this third book, given the amount of information and the complexity of the task, it has finally been concluded. The publication will be distributed in Santa Fe, Argentina during the VIII Annual Coordination Workshop.

