

Inter-American Water Resources Network (IWRN): a strategy for building partnerships in the Western Hemisphere

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Abstract Building on the momentum of the Earth Summit (United Nations, 1992), which stressed the need for mechanisms for water resources information exchange, the First Inter-American Dialogue on Water Management in 1993 called for the establishment of an Inter-American Water Resources Network (IWRN) to distribute and exchange information on water issues, promote technology transfer, and to share water management experiences in the Western Hemisphere. To date, 26 governments have officially designated water agencies to represent them on the IWRN as country focal points. Strategies to build partnerships in the Americas include: developing communication linkages between water managers using directories of water and water-related organizations and existing networks in the Western Hemisphere; linking academic institutions and research centres; publishing a newsletter; and operating an electronic forum and several World Wide Web sites on the Internet. To acquire substantive information and build databases of useful information, several regional centres need to be established in key locations of Latin American and the Caribbean. Future activities, defined in part by the Second Inter-American Dialogue on Water Management held in Buenos Aires in September 1996, will emphasize the establishment of regional and sub-regional Internet-based water information networks with linkages to the global water resources community, regional dialogues on water management, increased cooperation between all parties in transboundary river basins, and implementation of a number of recommendations for strengthening integrated water resources management. The Third Inter-American Dialogue on Water Management will be held in the Republic of Panama in March 1999.

La Red Interamericano de Recursos Hídricos (RIRH): una estrategia para crear vínculos de cooperación en el Hemisferio Occidental

Resumen Como consecuencia de la Cumbre de la Tierra (1992), en la que se destacó la necesidad de crear mecanismos para el intercambio de información sobre los recursos hídricos, el Primer Diálogo Interamericano sobre Gestión de Aguas (1993) instó la creación de una Red Interamericana de Recursos Hídricos (RIRH), a fin de distribuir e intercambiar información relacionada con los recursos hídricos, promover la transferencia de tecnología y compartir experiencias sobre la gestión de aguas en el Hemisferio Occidental. Hasta la fecha, 26 gobiernos han designado oficialmente la Agencia que los representará en la RIRH como Punto Focal de sus respectivos países. Las actividades que vienen siendo realizadas para crear y/o afianzar los vínculos de cooperación en las Américas se incluye la creación de enlaces de comunicación entre especialistas de recursos hídricos usando los Directorios de Organizaciones Relacionadas a los Recursos

Hídricos y redes sobre el tema existentes en el Hemisferio Occidental; la vinculación de instituciones académicas y centros de investigación; la publicación de un boletín informativo; y la operación de un fórum electrónico y diferentes páginas del Internet en el World Wide Web. Con la finalidad de obtener informaciones concretas y crear bases de datos que contengan informaciones de utilidad, es necesario crear centros regionales en lugares claves en Latinoamérica y el Caribe. Las actividades que se realizarán en el futuro, definidas en parte por el Segundo Diálogo Interamericano sobre Gestión de Aguas, realizado en Buenos Aires, en setiembre de 1996, estarán orientadas principalmente al establecimiento de redes de información sobre los recursos hídricos regionales y subregionales en el Internet, vinculándolos con los recursos hídricos de la comunidad mundial, la realización de diálogos regionales sobre gestión de aguas, el aumento y/o fortalecimiento de las actividades de la cooperación entre instituciones y organismos actuando en el manejo de las cuencas hidrográficas, y la implementación de acciones para fortalecer la gestión de los recursos hídricos integrados. El Tercer Diálogo Interamericano sobre Gestión de Aguas será realizado en la República de Panamá, en marzo de 1999.

INTRODUCTION

Stress on water resources caused by population growth and economic development is expected to become critical some time during the next century. In order to avoid a water crisis of global proportions, integrated water resources management must be implemented now. Society must find ways to fulfil human needs and aspirations for a better quality of life which is compatible with the maintenance of the health of aquatic ecosystems.

Several major international meetings during the past five years have defined guidelines for addressing this impending crisis. The United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro, Brazil in 1992, underscored the increasing deterioration of the environment and urged nations to follow an integrated path toward sustainable development. It focused attention on the impact of human activities on the biosphere and the need to establish integrated development programs that will provide future generations the same opportunities enjoyed at present. UNCED produced Agenda 21, a blueprint for global partnerships which integrates environmental and developmental needs (United Nations, 1992). It recognized that innovative partnerships are the building blocks for creating lasting changes and for implementing actions necessary to raise standards of living worldwide without harming the natural resource base. Agenda 21 also recognized the importance of giving stakeholders—nongovernmental organizations, businesses, women, workers, farmers, and local authorities—a voice in the water and environmental decision making process.

The Earth Summit confirmed that water is a crucial natural resource which is often mismanaged. Agenda 21, particularly Chapter 18, called for concerted actions by governments to promote the principles of integrated water resources management—the application of integrated approaches to the development, management, and use of water resources and the implementation of planned development practices. It also outlined the necessity to formulate plans based on community needs and to establish priorities within the framework of national socio-economic development

policies. Clearly, Agenda 21 represents a watershed because of its impact on development philosophies, on national governments, and on international financial institutions.

The Earth Summit created a sense of urgency to establish a north–south dialogue on water management. This idea did not come from national governments following up on actions derived from the Summit, but rather from regional agencies in the State of Florida. The South Florida Water Management District (SFWMD), which had long been concerned with exchanging information and ideas with Latin American neighbours about issues, such as drought management, lake eutrophication and wetlands preservation, decided to organize an Inter-American Dialogue on Water Management in Miami in 1993.

The First Inter-American Dialogue brought together more than 400 natural resource professionals and policy makers from 19 countries throughout the Western Hemisphere to discuss water-related issues. These participants represented a very diverse group of government officials, non-governmental organizations, professional societies, and individuals from the private sector. The First Dialogue had two objectives: to increase awareness and understanding of the importance of integrated water resources management and sustainable development and to establish an Inter-American Water Resources Network (IWRN).

The Statement of Miami, prepared during the First Inter-American Dialogue on Water Management, recognized the crucial importance of water as a strategic resource and identified a number of critical water resources issues that need to be addressed immediately. These include research to support integrated ecosystem management and the development of educational approaches to exchange information and experiences between institutions and countries. The Statement also called for a hemisphere-wide commitment to address priority water resources issues, especially those pertaining to drinking water and sanitation, and the development of resource management policies that emphasize public education and stakeholder participation in decisions relating to sustainable resources. In addition, participants in the First Dialogue recognized that while legal frameworks, institutions, and the details of decision-making processes will vary from country to country, complex decisions involving ecosystems and water resources will be best made by applying integrated water resources management approaches to watersheds, using watersheds, where possible, as the basis for resource planning and management, and by ensuring that all stakeholders are represented in the planning process.

CREATION OF THE INTER-AMERICAN WATER RESOURCES NETWORK (IWRN)

The Statement of Miami also established the framework for a new information network that would combine existing water information resources and networks throughout the Western Hemisphere—the Inter-American Water Resources Network (IWRN). The IWRN was conceived of as a “network of networks” which would facilitate the transition from traditional views of economic development to the view of development which incorporated sustainable development (Palombo *et al.*, 1994). The following goals were established for the IWRN:

- (a) To build shared understandings of water issues that transcend political and ideological boundaries by promoting education and the open exchange of data and information between countries and organizations.
- (b) To clarify water resource needs and priorities at the hemispheric level.
- (c) To increase access to skills, knowledge and strategies for implementing integrated water resources management; to create a network of networks that will foster cooperation and collaboration between water management organizations.
- (d) To create collaborative partnerships.

Partnerships may encompass a wide array of different forms of collaboration between agencies, academic institutions, non-governmental organizations, the private sector and members of the general public. The common bond of such arrangements, however, is a desire to achieve broad economic growth, to improve the health and welfare of the people and to maintain the health and productivity of the environment.

ORGANIZATION OF THE IWRN

One factor in the success of the Dialogue and in the efforts to create the IWRN has been the existence of a multi-national Advisory Council and Executive Committee that have continued to provide guidance and continuity to the effort. In the months after the Dialogue meeting in Miami, the Advisory Council began to develop a strategy to establish the network. It was this group which encouraged the General Secretariat of the Organization of American States (OAS) to accept the responsibility of housing the Technical Secretariat for the network.

At present, the Advisory Council includes representatives of some 80 government agencies, professional societies, water networks, educational institutions, intergovernmental organizations, nongovernmental organizations, as well as private firms from North America, Latin America and the Caribbean. All water-related organizations who are willing to participate actively in the programs of the IWRN may join the Advisory Council. The Executive Committee of the Advisory Council is the governing body of the IWRN and meets two to three times each year. Day-to-day operations of the network are carried out by its Technical Secretariat, which is housed in the Unit of Sustainable Development and Environment of the OAS.

As presently configured, the IWRN consists of country focal points, topical (thematic) nodes, and network "members". To provide geographic structure and political support for the network, each member state of the OAS has been requested to appoint a country focal point of the IWRN that can speak with authority on water issues and policies and serve as a catalyst for national dialogues on water resources management. To date, the governments of 26 countries have named official focal points for the network. Responsibilities of a country focal point include:

- (a) collecting information about national water policies, programs, and activities for timely distribution to users through the IWRN;
- (b) distributing water information received through the IWRN to water organizations and others within the country;
- (c) assisting the IWRN to keep directories of water organizations, training opportunities, and other information compiled by the IWRN up to date;
- (d) coordinating IWRN-related activities within the country;

- (e) organizing periodic meetings of topical nodes and IWRN members to discuss water issues of interest and to make recommendations to the IWRN Advisory Council about needed activities and programs;
- (f) assisting the IWRN to identify potential topical nodes and network members within the country; and
- (g) forwarding topical node applications to the IWRN.

In addition, a search is underway to identify topical (“thematic”) nodes that can enrich the knowledge base of the network. Topical nodes are universities, research centres, professional societies, environmental organizations, or government agencies that serve as sources of information and expertise to the IWRN. If an organization serves more than one country, it may be referred to as a regional topical node. Responsibilities of a topical node include:

- (a) collecting and distributing information about water-related issues of interest to the IWRN;
- (b) providing guidance to the IWRN on technical and scientific issues related to water;
- (c) assisting the Country Focal Points in the coordination of IWRN-related activities;
- (d) promoting IWRN activities through contact with its clients and network.

Membership in the IWRN is open to any individual or organization interested in water resources whether they be managers, scientists, or members of the public. In short, anyone with an interest in water resources who can access the network by the Internet, fax, or mail is welcome to participate in the network’s activities.

STRATEGIES FOR BUILDING PARTNERSHIPS

Strategies for building partnerships include improving the access to information sources, water agencies and experts in the Western Hemisphere; improving the exchange of experiences and information about water activities of different countries and organizations by using list servers, World Wide Web pages, and newsletters to disseminate the information; and, finally, sponsoring regional seminars and workshops on water issues of interest and holding hemisphere-wide dialogues on water management.

Directories

The founders of the IWRN initially sought to build network membership throughout the hemisphere by working with existing water organizations and networks. To accomplish this, the OAS Technical Secretariat is compiling a directory of water resources organizations in the Western Hemisphere. The directories include the names, addresses (including Internet addresses), telephone and fax numbers, of points of contact in each organization and information on the organization’s services. It is hoped that they will increase access to information sources and experts in each country. These directories will be placed on the Internet as they are completed and may be searched and downloaded. The current address of directories for the United States is <http://www.uwin.siu.edu/iwrn/> and the address for the Caribbean, Central America and South America is <http://www.oas.org/l/iwrn.htm>.

In addition, the Center for Water in the Humid Tropics of Latin America and the Caribbean (CATHALAC), an IWRN regional node, is assisting in the preparation of directories of educational opportunities in Central America and the Caribbean, and the Florida Center for Environmental Studies (CES) and the Universities Water Information Network (UWIN) are compiling similar directories for North America.

List server

In establishing the IWRN, it became apparent that conventional forms of contact, such as newsletters and mail, are often too slow and that the use of telephone and fax is too labour intensive and expensive to be the backbone of communications for a large network. At the First Inter-American Dialogue on Water Resources Management, the Internet had been suggested as one of the principal means of communications for the IWRN, so early efforts were made to establish links using the Internet. The Center for Environmental Studies at Florida Atlantic University, a topical node on the network, now operates Dialog-Agua-L, the IWRN's electronic list server. This Internet-based forum provides the means for day-to-day exchange of information between IWRN members and anyone interested in water resources who subscribes to the list server.

World Wide Web sites

A major topical node of IWRN, the Universities Water Information Network (UWIN), brings a rich store of water databases and information to the network which is accessible from its web-site: <http://www.uwin.siu.edu>. Similarly, other topical nodes, such as the Florida Center for Environmental Studies (CES) (web site: <http://www.ces.fau.edu/>) and the Center for the Humid Tropics for Latin American and the Caribbean (CATHALAC) (web site: <http://www2.usma.ac.pa/~cathalac/>) maintain their own web sites on the Internet with information about the IWRN. Finally, the IWRN has its own homepage on the World Wide Web at <http://www.oas.org/l/iwrn.htm> which points to the Internet sites of IWRN Advisory Council members and other water networks and information resources.

One objective of the IWRN is to link all the country focal points, topical nodes, and network members electronically. An obstacle to this is the different languages spoken by network members. However, with patience and effort, this barrier will gradually be overcome. Access to the Internet is also limited at present in some Latin American and Caribbean countries. At the rate that the Internet is expanding, however, this problem will also diminish.

Newsletter

The IWRN also uses a newsletter, *Dialogue Update*, to maintain contact with country focal points and advisory council members and to encourage the exchange of

information about water resources activities. *Dialogue Update* is published three times a year and sent to more than 1500 water professionals and members of the interested public.

Second Inter-American Dialogue on Water Management

On 1–6 September 1996, the Government of Argentina hosted the Second Inter-American Dialogue on Water Management in Buenos Aires with the theme “Integrated Water Resources Management for Sustainable Development in the Americas”. The meeting attracted over 260 water experts from 26 countries of the hemisphere including the official government representatives of the 26 country focal points of the IWRN. The Second Dialogue was unique from several perspectives. In addition to plenary sessions with topical speakers, the bulk of the meeting was devoted to working groups which discussed one-page issue statements submitted by participants prior to the meeting. These statements were available at the meeting in both Spanish and English. Over 80 issue statements were prepared on integrated water resources and river basin management, legal and economic water policies to support sustainable development, and strategies for sharing and exchanging experiences and expertise with water technologies.

The Second Dialogue also offered the opportunity for technical experts from the hemisphere to review and comment on a technical report prepared for the Hemispheric Summit on Sustainable Development to be held in Santa Cruz de la Sierra, Bolivia in December 1996. This process produced a substantial set of conclusions which form the basis for the Declaration of Buenos Aires and the Recommendations of the Second Inter-American Dialogue on Water Management. The Declaration and the Recommendations may be accessed on-line at <http://www.oas.org/iwrn.htm>.

The Declaration of Buenos Aires asserts that even though there are many pressing water issues challenging governments of the Western Hemisphere, the solutions to many of the problems are known. In the past five years alone, at least eight major international meetings have discussed water issues and have called for initiatives and actions. The Declaration calls for commitments by governments, international financial institutions, and the public and private sectors to develop and implement coordinated action plans that address water issues. However, without a greater degree of cooperation and political partnership, it will be difficult to make progress toward attaining a sustainable environment for water resources.

The Second Dialogue supported the full implementation of the IWRN as soon as possible and encouraged the OAS to support the IWRN and to facilitate partnerships to promote and implement sustainable development in the Americas. Dialogue participants called for the establishment of regional and sub-regional water information networks, increased cooperation between governments and international financial institutions in transboundary river basins, establishment of regional dialogues to facilitate the formation of partnerships on regional problems, improvement of integrated management of water demands, and the organization of a Third Inter-American Dialogue on Water Management to be held in the Panama City, Panama in March 1999.

Initial experience with the IWRN suggests that, given today's emphasis on empowering local communities and nongovernmental groups, a water resources network created and maintained by stakeholders is very appealing. The network is also appealing because foreign assistance to developing countries is diminishing. For a number of reasons, governments in the future will no longer be able to afford to spend large amounts on the development of large water projects. Aid and technical cooperation will continue, but it will be increasingly supplemented by the use of information networks which can transfer knowledge and experience. Technical experts will still be consulted, but their visits will be fewer in number. Instead, the growing amount of knowledge that has accumulated in developing countries as a result of practical experience in water management will be exchanged via the Internet and by other means of communication.

While much can be done to improve collaboration, communications, cooperation and financial commitment among those who have interest in inter-American water resources issues, the reality is that the IWRN must address specific geographic issues to be fully effective. To this end, the IWRN supports information exchange efforts as an integral part of future prefeasibility river basin studies of water projects. The initial field focus should be on international river basins where there are explicit objectives and common interests. In this context, the network will be able to offer access to water resources technology that has been successfully employed elsewhere and access to the experts who planned, implemented and currently operate that technology.

In the long run, a member of the IWRN will have access to a far richer source of expertise than can be provided by conventional forms of technical assistance. However, this source of expertise need not and should not be limited to the Western Hemisphere. The IWRN will look to other global networks, such as the World Water Council and the Global Water Partnership as sources of expertise, ideas, and assistance.

REFERENCES

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