

**National Information System on Water Quantity, Quality, Uses, and Conservation [SINA, its Spanish acronym]
[Sistema Nacional de Información sobre cantidad, calidad, usos y conservación del Agua]**

In Mexico, the water contained in rivers, lakes, and aquifers is the property of the nation. For its management, Mexico has two major instruments: the National Water Commission [Comisión Nacional del Agua, or CONAGUA, its Spanish acronym], the agency responsible for managing this resource, and the National Waters Law [Ley de Aguas Nacionales] (recently modified), which sets down principles and instruments for using and preserving water.

The National Waters Law modified was published on April 29, 2004 in the *Diario Oficial de la Federación* [official government gazette]; its most important statements related with water information management, are: water planning and programming will be grounded on an informational network; the integrated water resources management; and, the integration of local water data in order to achieve national water data level. All that, with participation of Watershed Organizations, also in coordination with States Governments and the Federal District and the River Basin Councils, and in concordance with the Transparency and Access to Governmental Public Information Federal Law, which allows the participation of the Government Entities and Water Users.

Similarly, the National Waters Law states the integration of the National and Regional Information Systems on Water Quantity, Quality, Uses, and Conservation [SINA/SIRA, its Spanish acronym respectively], the first is the CONAGUA responsibility, and the second are from Watershed Organizations.

In addition, the SINA implementation attend stipulations of: the National Water Program 2001-2006 [Programa Nacional Hidráulico 2001-2006]; the Ecological Balance and Protection of the Environment General Law [Ley General del Equilibrio Ecológico y la Protección al Ambiente]; the Statistical and Geographic Information Law [Ley de Información Estadística y Geográfica]; the Transparency and Access to Governmental Public Information Federal Law [Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental]; the National Development Plan 2001-2006 [Plan Nacional de Desarrollo 2001-2006]; and, the National Environmental and Natural Resources Program 2001-2006.

The National Water Commission, based on the legal framework, have to achieve in the near future, the integration of a water information network, which permits intercommunicate the SINA with regional and sectoral systems, with participation of Watershed Organizations, also in coordination with States Governments and the Federal District, River Basin Councils, Government Entities, and universities.

The general scheme to integrate the SINA, have been conceptualized by the Planning Department [Gerencia de Planeación Hidráulica], which is located in the Planning Division [Subdirección General de Programación].

General conceptualization of SINA and its relation with the SIRA, was developed with experts support from International Office for Water, France.

Actually, in the National Water Commission exists different information systems; furthermore, only two of them do separately the integration of statistical and geographic information related with the water management in Mexico; these systems are respectively: the Unified System for Basic Data on Water, and the Geographic Water Information System [Sistema de Información Geográfica del Agua or SIGA]. Similarly, the National Water Commission has two important documentary departments: the Balderas Library, and the Water Archive; places which paper documents are keeping.

In order to integrate the SINA and the water information network, five processes have been defined: P1. Inventory and development of data sources (preliminary stage to permit know unique data sources, and coordinate the production of information), P2. Common language (in order to do easy and comparable data interchanges), P3. Data and geographic information management (includes synthesis information based on that), P4. Documentary management (in order to manage and give access to document like: studies, reports, investigations, videos,...), and P5. Spread of the knowledge on the water (in order to divulgate the water information by different supports like web, papers, CD,...).

In order to integrate the SINA and the water information network, have had defined to evolve of four actual important projects in the CONAGUA: the Unified System for Basic Data on Water, the Geographic Water System, and the Library and Water Archive; these projects, by their path and characteristics, will become the SINA components: statistic, geographic, and documentary respectively.

According to the National Waters Law, the information for the national system will be integrated with information arising from regional systems, by the way, the SINA it's a normative system, while the SIRA are operative systems.

In general, four groups will be attended by the SINA: local, regional and federal institutions involved in water management; other users from federal, state and municipal level, like teaching centers, research, and non-government organizations involved in water sector; water users, organized society and citizens in general; and international level organizations.

On the other hand, the National Institute for Statistics, Geography, and Informatics [Instituto Nacional de Estadística, Geografía e Informática or INEGI], is the one who coordinates the integration of national systems on statistics and geographic information.

In this sense, in order to integrate the SINA, the National Water Commission interact with other institutions trough different participatory agencies, like the Technical Committee on Statistics and Geographic Information of the Environment and Natural Resources Sector, within this agency as well as the coordination, statistics information and geographic information groups, the Water Thematic Group was integrated taking into account the importance theme.

The main objective of the Water Thematic Group, is the integration of SINA; the National Water Commission is leading the Water Thematic Group, and takes into consideration the standards for the integration of statistical and geographic information of Environment Sector's (defined by the Committee); within the Group, the composition of thematic working subgroups has been defined, in which participates officials of the National Institute for Statistics, Geography, and Informatics [Instituto Nacional de Estadística, Geografía e Informática, or INEGI, its Spanish acronym], this is the normative entity of national statistics and geographic information systems, and the Ministry of the Environment and Natural Resources [Secretaría de Medio Ambiente y Recursos Naturales, or SEMARNAT, its Spanish acronym] leader institution Sector.

Into the activities done during 2005 for the integration of SINA, the most important results were: a database application for data producers on statistics and geographic information; a first version of Data Dictionaries on surface waters, groundwater, water quality, climatology, hydraulic infrastructure, and hydro-agricultural infrastructure; some SINA and SIRA technician were qualified on data bases management; there were Inter-institutional data interchanges; the conceptual document about "Organization of documentary and water information management"; and development of SINA web site.