



## Environmental Information Resources Workgroup

With the development of the Border XXI Framework document the need was voiced by the public and the working groups to establish an information workgroup to oversee overall information needs of the program. To this end, Environmental Information Resources Workgroup was formed to improve and increase public access to information, assist in the development of environmental indicators, promote environmental education in the border communities, and promote Geographic Information Systems (GIS). The workgroup also has taken the lead in working with the other Border XXI workgroups to institutionalized effective communication and information sharing.

The EIR Workgroup has established the following objectives:

- Establish an environmental information inventory
- Create effective information sharing mechanisms with government agencies and among Border XXI Workgroups
- Provide increased public access to information
- Establish a unified GIS for the border
- Promote environmental education in border communities
- Develop environmental indicators to evaluate the effectiveness of environmental policies



### The Border XXI Program

The Border XXI Program (Border XXI) is an innovative binational effort between the United States and Mexico to protect the natural resources and environment of the border region. The mission of Border XXI is to achieve a clean environment, protect public health and natural resources, and encourage sustainable development along the U.S.-Mexico border.

Border XXI is implemented through nine binational workgroups. The nine workgroups under the Border XXI Program are *1 water, 2 air, 3 hazardous and solid waste, 4 pollution prevention, 5 contingency planning and emergency response, 6 cooperative enforcement and compliance, 7 environmental information resources, 8 natural*

The EIR Workgroup recently produced an environmental indicators report on environment and human health quality in the border region, *United States-Mexico Border Environmental Indicators 1997* (EPA909-R-98-001). The EIR Workgroup is implementing or overseeing a number of other projects such as collecting and organizing geospatial data for the GIS, expanding public access to border-related environmental and human health information, and creating a U.S.-Mexico Border XXI Program homepage on the World Wide Web.

# Fact Sheet

# EIR Workgroup Activities



## Environmental Education

EPA Region 6 is establishing a sister city centered Binational Border Environmental Education Network along the Texas border. Towards this end Region 6 staff has met with four communities along the border; El Paso, Brownsville, Laredo and Harlingen; to begin the process of establishing a network. The focus is to enhance the efforts of all network members by improving the communication, collaboration and partnerships. Locally communities in each sister city hub will share the responsibility to identify their EE needs, then evaluate and implement potential solutions.

The Environmental Education Exchange, based in Tucson, Arizona is working in conjunction with the EIR Workgroup to meet some of the workgroup objectives by providing a series of workshops that will promote and expand environmental education in border communities. The workshops are designed to bring educators together from the border region in Arizona and Sonora to create new, locally based, environmental education program plans. The focus is on identifying and empowering educators from diverse sectors who are willing to plan environmental education initiatives, support international alliances, and enhance bi-national communication mechanisms. Workshops have been held in three Sonoran border cities: San Luis Rio Colorado, Nogales, and Agua Prieta. The workshops are designed to offer specific training to facilitate future transcultural work, strengthen a shared sense of place and environmental values, and promote better understanding of the importance of working and planning environmental education programs on a bi-national basis.

In the California-Baja California region, the San Diego Natural History Museum is collaborating with the workgroup in a project designed to assist local environmental educators develop an environmental education action plan for the San Diego/Tijuana Region. The project focuses on finding and coordinating environmental education programs and ideas, and identifying the region's needs. It will also create an information and action network to carry out the needed environmental education strategies that will provide improved delivery on environmental information and community access to resources. This will be accomplished by creating an Environmental Education Council.

## Geographic Information System (GIS)

A GIS uses computer hardware and software to place multiple layers of data on the same map. This enables users to evaluate geographic relationships between different types of data. For example, air emissions data from the maquiladora industry and occurrences of respiratory illness could be compared geographically to see if a correlation exists. Spill response teams could also use GIS to locate any endangered species that may live near where a spill has occurred.

Current and consistent geospatial databases are not available for the border region. The EIR workgroup established a GIS/ Geospatial

Subgroup to address this and other geospatial issues for the US/Mexico Border Region. Through cooperation among federal, state, and local agencies current and consistent geospatial databases are being created for the border region. The databases are being created from an aerial photography initiative lead by USGS. This data will build the foundation for subsequent binational digital mapping efforts. The geospatial /GIS subgroup is also promoting compatible standards, addressing standards and policy issues and are identify and prioritizing binational geospatial data issues. More detailed information about geospatial/ GIS activities that are underway is available in the GIS subgroup Fact Sheet.

## Indicators

One of the key objectives of the Border XXI Program, as outlined in the 1996 Border XXI Framework Document, was to develop environmental indicators for use in evaluating the effectiveness of its border environmental initiatives. Environmental indicators are direct or indirect measures of environmental quality that can be used to assess status and trends in the environment's ability to support human and ecological health. The report also includes performance

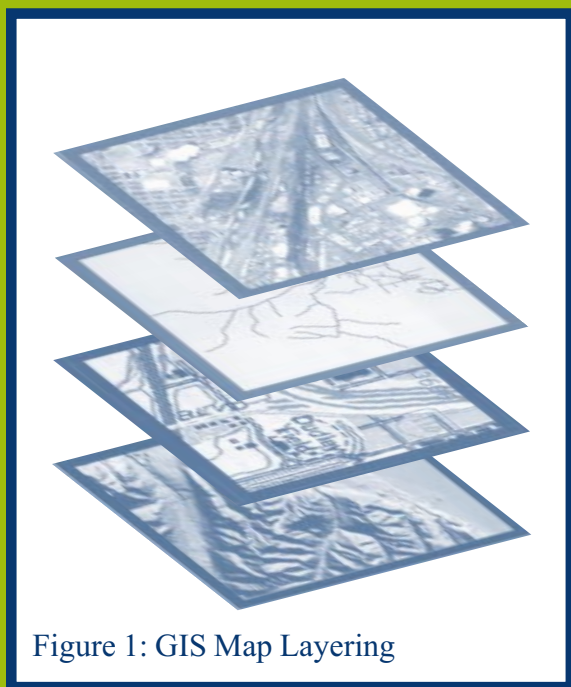


Figure 1: GIS Map Layering



indicators which are direct or indirect measures of the achievement of the intended purpose of a program, expressed as either an environmental result or program activity.

The EIR Workgroup uses the Organization for Economic Cooperation and Development (OECD) framework to classify indicators into categories of (1) pressure indicators, (2) state indicators, and (3) response indicators. Pressure indicators are measures of pressure on the environment caused by human activities. State indicators are measures of the quality of the environment and the quantity of natural resources, and include the health effects caused by the deterioration of the environment on human populations and ecosystems. Response indicators are measures of the efforts undertaken by society to respond to environmental changes and issues. The EIR Workgroup classified indicators according to the OECD model so that environmental and human health conditions in the border area could be evaluated from a cause-effect or action-response perspective.

### Access to Information

The EcoWeb is an environmental inventory that is being developed on the Internet. This multi-year project is addressing the growing need for public access to environmental information in border communities by compiling a comprehensive inventory of information that is accessible on the Internet. Citizens, students, researchers, and governmental and nongovernmental organizations are expected to be the primary users of this information. The EcoWeb will include environmental data; a directory of project descriptions; and points of contact at federal, state, local, and international groups involved in border environmental activities. The EcoWeb will be produced in Spanish and English and the EcoWeb URL is <http://www.borderecowweb.sdsu.edu>.

### Outreach

The EIR Workgroup has initiated a number of outreach activities in the United States and Mexico to provide information on Border XXI Program activities to border communities and solicit feedback from the communities. In the United States, EPA has established a toll-free number (1-800-334-0741) that border residents can use to order Border XXI documents or to talk directly to Border Liaison Office staff in El Paso, Texas and San Diego, California. EPA has established 27 repositories in border communities in the United States, which it supplies with relevant information about Border XXI. Repository locations are listed on the insert included in this fact sheet.

In addressing the need for public access to information, the EIR Workgroup created a Border XXI homepage in 1996. All Border XXI documents are available to view and download. In 1997 the website included documents in English and Spanish. New additions for 1998 are the Border XXI workgroup directory of contacts, the environmental indicators report and a calendar of events. The URL is <http://www.epa.gov/usmexicoborder>.

The EPA Region 6 produces a quarterly newsletter—Border Bulletin. This newsletter updates the border community on issues and activities in the New Mexico and Texas border region. The Bulletin is on the Region's Border Homepage (see Border on the Web) and you can be added to the mailing list by writing to: Border Bulletin, Region 6 EPA, U.S.-Mexico Border Program (6WQ-D), 1445 Ross Avenue, Dallas, Texas 75202-2733.

## Border on the Web



To increase access to information the EIR Workgroup created the Border XXI homepage. The purpose of the homepage is to provide access to Border XXI documents in Spanish and English and to provide links to other border-related web pages. A short list of border-related websites is provided below:

1. Border XXI Homepage: <http://www.epa.gov/usmexicoborder>
2. Instituto Nacional de Ecología (INE): <http://www.ine.gob.mx>
3. Secretaría de Medio Ambiente Recursos Naturales y Pesca (SEMARNAP): <http://www.semarnap.gob.mx>
4. EPA Region 6 Border Homepage: <http://www.epa.gov/earth1r6/6bo/6bo.htm>
5. EPA Region 9 Border Homepage: [http://www.epa.gov/region09/cross\\_pr/compendi/index.html](http://www.epa.gov/region09/cross_pr/compendi/index.html)
6. U.S.\_Mexico Information Center on Air Pollution (CICA): <http://www.epa.gov/oar/oaqps/cica/>
7. U.S.-Mexico Hazardous Waste Tracking System (HAZTRAKS): <http://www.epa.gov/earth1r6/6en/h/haztraks/haztraks.htm>
8. Interagency Coordinating Committee for U.S./Mexico Border Environmental Health: <http://www.epa.gov/orsearch>



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