

State of the Border Region Indicators Report 2005

BORDER 2012: U.S.-MEXICO ENVIRONMENTAL PROGRAM

State of the Border Region 2005 is the first of a series of environmental indicator reports produced by the United States-Mexico Border 2012 program. The report's indicators track environmental conditions and trends for water, air, land, public health, emergency preparedness and response, and enforcement and compliance in the U.S.-Mexico border region.

Background

The indicators reported in *State of the Border Region 2005* are an integral component of the Border 2012 program, providing information to guide planning and track progress. Border 2012 is a 10-year, binational environmental program signed by the United States and Mexico in 2003. It was developed by the United States' Environmental Protection Agency and Department of Health and Human Services, Mexico's Secretariat of Environment and Natural Resources (SEMARNAT) and Secretariat of Health, U.S. border tribes, and environmental agencies from states on both sides of the border. Border 2012 is the most recent initiative to be implemented under the 1983 La Paz agreement, in which the two countries committed to protect, conserve, and improve the environment in the border region. Border 2012 succeeds Border XXI, a five-year program that ended in 2000.

Under Border 2012, the United States and Mexico set concrete goals for improving environmental quality and health along the border and committed to using sound indicators to objectively measure progress. Border 2012's six goals are to:

- 1 Reduce water contamination;
- 2 Reduce air pollution;
- 3 Reduce land contamination;
- 4 Improve environmental health;
- 5 Reduce exposure to releases of chemicals and other hazardous substances; and
- 6 Improve environmental performance through compliance, enforcement, pollution prevention, and promotion of environmental stewardship.

The many agency and institutional partners in Border 2012 accomplish these goals through projects in the four U.S. and six Mexican border states. Projects have, for example, reduced particulate matter from aging truck fleets, eliminated enormous piles of discarded tires, trained workers in the safe use of pesticides, and developed emergency response procedures for sister cities along the border.

Using Indicators to Track Environmental Conditions and Trends and Program Progress

The indicators reported in *State of the Border Region 2005* track the collective impact of these projects on the environmental quality of the border and provide a means for measuring the achievement of the Border 2012 goals. They are also an important resource for understanding the status and trends of environmental quality and public health in the border region.

The process of developing the indicators involved a collaborative effort between the United States and Mexico, engaging federal, regional, state, and local governments as well as academic institutions, non-governmental organizations and others in planning and implementing activities to improve border environmental quality.

The Border Indicators Task Force defines an **Indicator** as a single variable or output value from a set of data that describes the state of the border region in a way that is meaningful for stakeholders. Example: yearly ozone concentrations by border monitoring areas.

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Border Environmental Pressures, Conditions, and Trends

The U.S.-Mexico border region is both dynamic and complex, consisting of culturally and environmentally rich areas. It is also under stress from population growth, economic expansion, and other forces. As described in *State of the Border Region 2005*, the border region's population grew twice as fast from 1990 to 2000 as it did in the United States or Mexico as a whole. Nearly 13 million people now live along the border, and that number is expected to grow to 19.5 million people by 2030. In the last ten years, exports from the U.S. to Mexico have doubled in value and exports from Mexico to the U.S. have tripled. There are now at least 19,000 regulated facilities in the U.S.-Mexico border region.

State of the Border Region 2005 shows responses implemented to address pressures with improvements in some areas, and it highlights the urgent need for concerted effort in other areas. The conditions and trends identified in the report reinforce the importance of a coordinated effort like Border 2012.

Key findings in the report include:

- In 2000, the percentage of households with access to indoor piped drinking water was 93% or higher in the U.S.; access in Mexican communities ranged from 61% to 84%.
- The number of days in 2005 in which air quality exceeded particulate matter (PM₁₀) standards ranged from none in the Lower Rio Grande Valley to 43 days in the Mexicali/Imperial Valley region.
- As of December 2005, over two million tires had been removed from five border region waste sites. This includes the complete clean-up of the INNOR tire pile, resulting in the removal of 425,000 tires. Removed tires were used in cement kilns as tire-derived fuel, in asphalt as crumb rubber, and in erosion control embankments, among other creative uses.
- Fourteen out of fifteen sister city pairs along the border have established Sister City Binational Emergency Response Plans. The plans provide local emergency response teams with a mechanism for cooperatively and appropriately addressing issues and concerns.
- Total enforcement actions in the U.S. side of the border region declined to 85 in 2004 from 143 in 2001. Between 2001 and 2004, Mexico's Annual Environmental Program of Inspection found 1,077 serious violations among the 11,059 inspected border facilities.

Next Steps

The next *State of the Border Region* report is expected to be released in 2008. The Border Indicators Task Force wants to develop additional environmental and health indicators and sharpen existing ones based on sound data. Expanding the current set of indicators will allow for more comprehensive communication on how the border region is responding to the environmental pressures. The Border 2012 program is committed to continuously improving the quality, timeliness, and comprehensiveness of the indicators such that improvement in public health and environmental conditions along the border can be better understood. In order for this effort to be successful, on the ground expertise from border states, tribes, and partner organizations is important.

Further information on *State of the Border Region 2005* and the Border 2012 program can be found at: www.epa.gov/border2012/indicators.htm or www.semarnat.gob.mx/dgeia/frontera_2012/

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