

BINATIONAL EFFORTS FOR ECOLOGICAL RESTORATION: GREEN INFRASTRUCTURE AND TRANSBORDER BIOREGIONALISM

Frontera Fridays are quarterly events that connect leaders from both sides of the border to UC San Diego and serve as a platform for learning, networking and discussing opportunities and challenges that make our binational region unique. They are organized by the Center for U.S.-Mexican Studies (USMEX) at the School of International Relations and Pacific Studies (IR/PS) and the Urban Studies and Planning Program (USP) and honor the legacy of Chuck Nathanson and the San Diego Dialogue.



Urban ecological restoration is a critical need and focus for the U.S.-Mexico border region because border communities face heightened environmental and public health risks associated with ecosystem degradation, including risks arising from floods, fire, dust, water contamination and newly emergent disease vectors. Haphazard urbanization – especially building human settlements on steep, unstable slopes without adequate infrastructure – causes severe erosion during rain storms and ecological devastation on both sides of the U.S.-Mexico border. Climate change complicates matters. Local planning issues of water and air quality, solid waste disposal, waste water and storm water treatment are binational issues in our border region, where international boundaries bisect a single watershed.

The most recent report of the Good Neighbor Environmental Board, its 16th, emphasizes the importance of borderlands ecosystems and the services they provide as well as the need for better understanding and acknowledgment of the impacts of the cumulative pressure of human activities such as development, land use alteration, and water use on these ecosystems. The Board recommends incorporating landscape-level, ecosystem-based solutions into decision making and notes that multiple restoration scenarios are necessary for achieving environmental goals across large areas.

Specific recommendations call for (1) greater collaboration among local, state, tribal and national entities in the United States and Mexico to avoid resource damages through proactive approaches; (2) ecological restoration projects that develop governance and funding mechanisms applicable to landscape-scale restoration needs; (3) establishing a management framework on both sides of the border, and actively engaging collaborators at all levels of governance in urban and other trans-border initiatives; and (4) for the U.S. federal government to evaluate, consider and plan for flow management of water sources, such as irrigation and wastewater for ecological restoration benefits, considering state water law and water rights frameworks.

A topic under consideration for the GNEB's 17th Report is "Climate Change Resilience in the Border Region." The intent is to link the ecological restoration expectations established in the 16th Report with climate adaptation in the 17th Report. Along these lines, our work at UC San Diego with partner institutions in Mexico will examine what the National Science Foundation calls a TRILEMMA-- the interlocking food-water-energy crisis. A concerted effort to green the U.S.-Mexico border's twin cities and transborder bioregions can usher in a new era of innovative binational collaboration and sustainable development.

This issue brief leverages the findings of Good Neighbor Environmental Board's 13th report "A Blueprint for Action on the U.S.-Mexico Border" (http://www.epa.gov/ocem/gneb/gneb_president_reports.htm) and its 16th report "Ecological Restoration in the U.S.-Mexico Border Region" (<http://www2.epa.gov/faca/gneb>)