Big Bend-Río Bravo Collaboration for Transboundary Landscape Conservation

Long-term Impact Assessment

Executive Summary – December 2021



Overview



Big Bend-Río Bravo.

From 2011 to 2015, the Commission for Environmental Cooperation (CEC) conducted the project *Big Bend-Río Bravo Collaboration for Transboundary Landscape Conservation*. Its objective was "conserving the unique biological diversity in the Big Bend-Río Bravo region of Mexico and the United States, using sound scientific data on challenges to ecosystem resilience to address the region's growing vulnerability to biodiversity loss and ecosystem degradation, and providing a model for collaboration among different decision makers and partnerships focused on transboundary conservation work in other areas" (CEC, 2011).

The first stage of the project was implemented during 2011 and 2012, and was motivated by the US-Mexico Presidential Declaration of May 2010 to preserve the Big Bend-Río Bravo area (The White House, 2010). The region hosts rich natural and cultural resources and covers 11 interconnected protected areas on public and private lands (CEC, 2014a). The project was intended to conserve the unique biological diversity in the Big Bend-Río Bravo (BBRB) region on both sites of the border by addressing the region's growing vulnerability to ecosystem degradation and, consequently, to biodiversity loss.

Due to its successful implementation, in 2013 the CEC began implementing a follow-up two-year (phase 2) project which was intended to further not only the health and resilience of transboundary ecosystems but also of communities in the BBRB region. It was to do this by restoring habitats and reestablishing connectivity, thus increasing the climate change resilience of ecosystems shared by both nations.

Now, six years after the project's end, the CEC is carrying out this performance assessment to evaluate the project's achievements and identify aspects that could have been improved or managed more effectively.

Assessment Methodology

The assessment compares the expected outcomes for the two project phases against the activities that were executed. The following table presents the expected outcomes for each phase that were assessed:

PROJECT PHASE 1 (2011–2012)

Environmental outcome: Improve ecosystem functioning and increase the resiliency of 250 river miles of the Rio Grande/Río Bravo (from Ojinaga, Chihuahua, Mexico/Presidio, Texas, USA, to Amistad Reservoir) and Chihuahuan Desert grasslands in the Big Bend-Río Bravo region. This included, by 2015:

- 1. River rehabilitation/restoration projects to enhance and maintain habitat and biodiversity
- 2. Doubling the river miles of RGRB, riparian habitat treated to remove invasive vegetation and increasing native plant species in treated areas by 50 percent
- 3. Increasing biodiversity in riparian and aquatic habitats
- 4. Improving the status of the endangered Rio Grande silvery minnow
- 5. Recruiting additional landowners for implementing grassland restoration
- 6. Increasing economic resiliency and environmental health of rural communities while protecting ecosystems, by encouraging citizen involvement in binational conservation efforts

PROJECT PHASE 2 (2013–2014)

Short-term outcomes (at project's halfway point, 2013–2014)

- 1. A North American network of transboundary conservation partnerships, comprising stakeholders from federal and state land management agencies, NGOs, universities, community organizations, corporate entities, private landowners, and riverside and border communities
- 2. Information sharing on conservation and climate change adaptive management planning
- 3. First phase of climate change adaptive management planning in the BBRB region

Longer-term outcomes (by the end of the project)

- 1. Increased regional and trilateral capacity and knowledge related to adaptive management and restoration of ecosystems to benefit people and native species in the face of a changing climate and other large-scale drivers of ecosystemic change
- 2. Conservation, monitoring and restoration actions in degraded ecosystems, and education and outreach activities with private landowners, park visitors, the public, and other partners in the region

Longer-term, environmental outcome (post-project)

- 1. Increased regional and trilateral capacity to implement binational, coordinated adaptive management to improve ecosystem and community health and resiliency, given climate change and other drivers of change
- 2. Improved status of conservation targets (species and physical processes) identified in the BBRB Conservation Assessment
- 3. Improved resiliency of ecosystems and communities in the BBRB region, and beyond
- 4. Improved public and visitor understanding of, connection with, and support for protected areas, other ecosystems, and their conservation in the region
- 5. Reduced dependence of local communities on unsustainable economic activities in the BBRB region

The assessment also includes the impact on the BBRB region in the years following the project. Finally, the assessment collects lessons learned and provides recommendations on what could have been done to make future interventions more effective.

The methodology is based on a qualitative, descriptive and interpretative approach to elicit, understand and cluster the information. After a literature review, 47 interviews were conducted, using assessment questions to gather the perspectives of key participants. Opinions and other information gained from different interviews were compared and crosschecked to ensure that they were realistic and reliable. The project assessment was carried out with the highest ethical standards and in close collaboration with the CEC Secretariat to facilitate compliance with CEC guidelines and expectations (CEC, 2014c).



Chinati Mountains, Texas



Llano las Amapolas, Chihuahua



Town of Boquillas, Coahuila



Río Bravo

Marieke Ijsendoorn-Kuïper

MAIN FINDINGS

Binational coordination and cooperation yielded great results

The project fostered binational collaboration to define common issues and goals, forming a unified region perceived as a corridor of Protected Areas. It succeeded in reactivating and improving technical exchange between the conservation teams from both sides of the border—yielding a collaborative and integrated

ecosystem management approach for the region. The project provided benefits besides conservation, such as building trust, establishing friendships and relationships, and creating sustainable economic opportunities.

Adaptive management helped to achieve results in terms of conservation

Constant adaptive management allowed for the selection and tailoring of ecological restoration and field monitoring techniques to respond to project needs. Successful efforts were carried out in the area of ecological restoration through actions to control invasive species, reforestation, and fire management in riparian ecosystems and grasslands. Finally, the project supported the continuation of previous conservation efforts, strengthening its potential to achieve its objective.

Research and capacity building

was strengthened

Desert Bighorn Sheep

Research and scientific information were generated and promoted to address the region's vulnerability to biodiversity loss and ecosystem degradation. Project publications (CEC, 2014a; and CEC, 2014b) are still the foundation for the activities and research efforts in the area. Important capacity building benefits were identified on different topics and at different levels. For example, capacity building for local actors (including communities) on ecological restoration and ecotourism was strengthened.

The project's performance is considered "moderately satisfactory"

The evaluation of both the project's execution and long-term impact revealed shortcomings. For example, during the river rehabilitation/restoration projects to enhance and maintain habitat and biodiversity, a course on stream restoration for the Big Bend Río Bravo Conservation Cooperative partners had to be canceled. Also, in some cases, the quality of the implementation did not match expectations. For example, the expected outcomes (see table above) were not fully achieved for the ecotourism components of the project. Nevertheless, the project created the foundation for future efforts to achieve the project's expected outcomes. Also, before the pandemic, the number of visitors from the United States to the BBRB region had increased.

Institutional suitability of the CEC to conduct the project

The project matched the CEC's institutional objective of "building multi-agency and multi-partner collaborative relationships to improve the management of transboundary environments: Terrestrial and marine, as well as watersheds" (CEC, 2010). By providing support to disseminate achievements, lessons learned and long-term recommendations for future projects, the CEC could inspire the implementation of similar efforts in other parts of the world that share transboundary protected areas.

AREAS OF OPPORTUNITY AND LESSONS LEARNED

Setting feasible and measurable goals, a project's baseline, and a monitoring and evaluation system to measure progress could have strengthened the project. Also, an exit strategy should have been considered to ensure sustainability of the activities.

Language was perceived as a limitation for sharing and comparing information. Personal contact through in-person meetings was crucial.

Involving collaborators early in the process facilitated project development and helped build trust and relationships.

Including other sectors, such as agriculture, could have supported the project's activities and results. Also, it would have been beneficial to involve state, municipal and local government institutions on both sides of the border.

KEY PROJECT ENABLERS

- 1. The project's regional focus and bottom-up approach led to a huge buy-in from partners.
- High-level political acceptance and commitment from both countries was key to its success.
- 3. Important adaptive management capacities were demonstrated by both the project steering committee and Secretariat staff.

Involving landowners was challenging. The *Conservation Assessment* documents the experience of involving landowners in such an undertaking.

Bringing in experienced companies to support local communities can strengthen ecotourism. It is important to clearly communicate to the communities what can be achieved to avoid creating false expectations about ecotourism business opportunities.

RECOMMENDATIONS

Projects should consider delays associated with conditions on the ground. This includes distances, access to private property, or permits associated with specific activities at the border).

Collection, systematization and standardization of geographic information processes on both sides of the border should be improved to facilitate collaboration and comparison of results. Reports should be available in both languages and should avoid using technicisms.

A website should be maintained, even beyond the project duration, hosting the project's studies and results. This should facilitate future coordination and collaboration. Free access to such information could facilitate the project's assessment, replication or scale up.

Future efforts should tackle the topic of environmental flows. The *Conservation Assessment* document lists recommendations and research needs for this important corridor.

Communities should be more involved in conservation efforts through outreach and education activities. Efforts should keep identifying opportunities and challenges for the region, including regulatory, legal and/or political challenges.

Efforts to recover the integrity of the protected areas and long-term landscape monitoring are of utmost importance. Also, protected areas should not be prioritized based on single species.

Ecotourism infrastructure needs further improvement and expansion, following the regulation of activities in protected areas, since they have a strong potential for the activity. Historical and cultural sites should be included in the ecotourism concept.

REFERENCES

CEC. 2010. Commission for Environmental Cooperation's 2010-2015 Strategic Plan. Document 10115. Montreal, QC: Commission for Environmental Cooperation. 19.

CEC. 2011. Operational Plan 2011-2012 of the Commission for Environmental Cooperation. Document 16099. Montreal, QC: Commission for Environmental Cooperation. 149.

CEC. 2014a. Conservation Assessment for the Big Bend-Río Bravo Region: A Binational Collaborative Approach to Conservation. Montreal, QC: Commission for Environmental Cooperation. 106.

CEC. 2014b. A Proposal for Developing Desired Future Conditions for the Big Bend Reach of the Rio Grande. Montreal, QC: Commission for Environmental Cooperation. 50.

CEC. 2014c. Consultant Services Procurement Manual. Montreal, QC: Commission for Environmental Cooperation. 36.

The White House. 2010. Joint Statement from President Barack Obama and President Felipe Calderón. Office of the Press Secretary. Retrieved Decmber 22, 2021, from Office of the Press Secretary.



COMMISSION FOR | COMISIÓN PARA ENVIRONMENTAL COOPERATION

LA COOPERACIÓN AMBIENTAL

COMMISSION **DE COOPÉRATION ENVIRONNEMENTALE**