Charting a Resilient Future for the Rio Grande

A river under threat

The Rio Grande, known in Mexico as the Rio Bravo, is the lifeblood of the water-scarce Chihuahuan Desert. The river and its tributaries serve as the primary source of water for some 13 million people and provide food and shelter to an abundance of plant and animal species. But, climate change, coupled with rising populations and diversifying demands, threaten the river's future and the future of those who rely on it.

To increase the resiliency of this river and all who depend on it, WWF with partners will be leading an innovative, climate-smart, multi-sector process to envision the future of the Upper Rio Grande sub-basin.

We invite you to be a part of this process.

The Resilient Rivers process

While it may be recognized that rivers and the life they support are at risk, combining existing research, monitoring, and data into actionable knowledge and recommendations that can support a more resilient future is something that doesn't often happen.. Frequently, there is a lack of information regarding the value of the ecosystem services that river basins provide, or the amount of water necessary for the entire river system to function. It is difficult for stakeholders to make informed decisions for better water management without these kinds of data or without clear recommendations on the actions that are needed.

WWF with partners in the region will be developing a 'Resilient Basin Report Card' to assesses the challenges in the Upper Rio Grande sub-basin and provide recommendations on climate-smart responses to address them.

This two-year effort will deliver the benefits of basin report cards while underscoring the imperative of a climate-changed future and providing guidance for the way forward, by combining the report card methodology with Freshwater Resilience by Design, an innovative freshwater scenario analysis approach.

The report card provides a picture of the river system's health using clear concepts and fact snapshots to inform communities, managers, companies, government officials, and decision makers. And under the Freshwater Resilience by Design approach modeling of hydro-economic-

Reaching Resilient Freshwater Systems

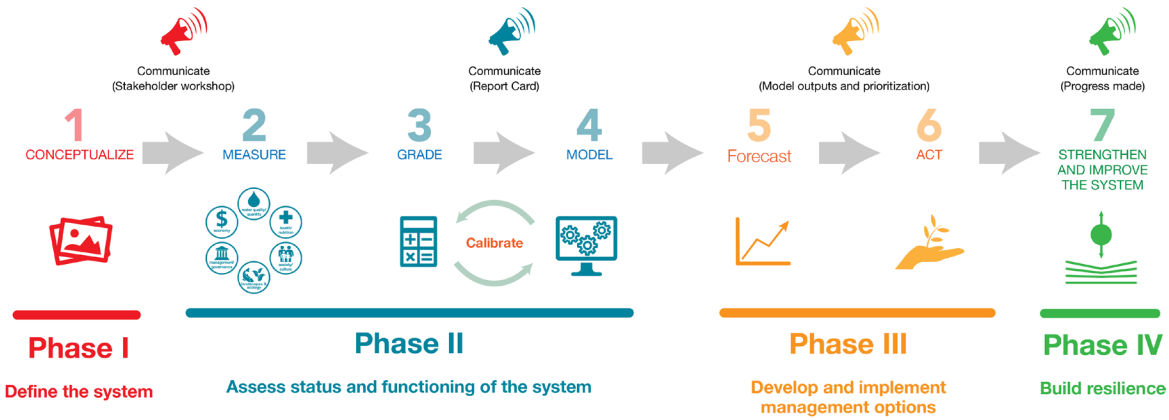

Figure 1: Resilient Basin Report Card Process

ecological variables under different scenarios will assess climate vulnerabilities and tests how different actions could impact the basin at large. These scenarios will provide a series of alternative paths for the future of the basin, as well as recommendations for which actions can best "raise the grade" and mitigate factors such as climate change and population growth.

To accomplish this, we will engage diverse stakeholders to establish a common understanding and sound baseline of the current health of the Upper Rio Grande Basin; model possible future scenarios; and, create a data-driven, transparent, and replicable report card. This process involves four phases: 1) defining the system; 2) assessing status and functioning of the system; 3) identifying management options for a better future, and 4) Building resilience (Figure 1).

The 'Resilient Basin Report Card' for the Upper Rio Grande, will be specifically designed to:

1. leverage broad stakeholder engagement, academic contributions, and communications with the public and decisionmakers;
2. clearly communicate the current state of a river system and potential future states; and
3. advocate for substantive policy changes or direct interventions to achieve the best future scenario

A more resilient future

The long-term vision for the Rio Grande Basin is to ensure sustainable water resource management that builds basin health and resilience against climate change while promoting livelihood opportunities for local people, economic growth for businesses, and environmental protection for all. Success hinges on collaboration with the people and communities in the basin and providing clear information to enable sustainable decisions about land and water management.

WWF and Audubon New Mexico will be leading this process with technical support from UMASS-Amherst and UMCES, and we are seeking the participation of other organizations and institutions. The engagement and participation of a set of broad and representative stakeholders is critical to the success of this project.

Together, we can better secure the region's unique biodiversity, the livelihoods and cultures of its people, and the future for all under a changing climate.

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