

RIVERS OF CHANGE

The revolution of the public space around the Sinú river

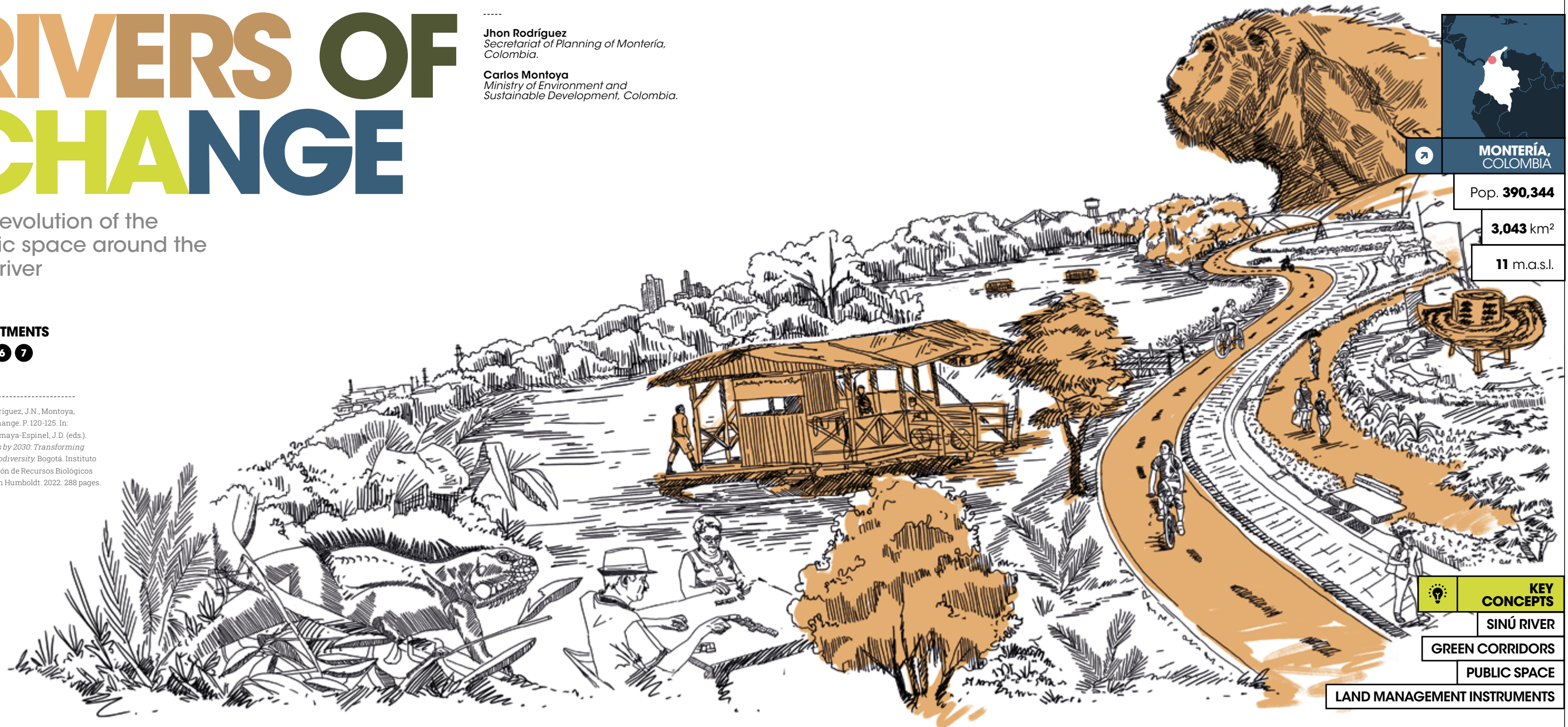
COMMITMENTS

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The city of Montería has reminded the world and its citizens of the importance and development possibilities that riverside cities offer, as they have direct access to 0.94% of the world's freshwater. The recovery of the Sinú river bank as a landscape attraction reflects a city vision that seeks to connect urban interventions with the riverbank, adapt urban design to biodiversity, and transform the inhabitants' relationship with the river.

The Sinú Riverbank, a linear park of approximately 2.8 kilometers, has its origins in Montería's ear-

ly development, when the entrance to the city was through the river and all of its buildings were located on the riverbank, making it a space for social, sports, and economic activities. At first, the riverbank was a meeting place, and the **Sinú River** was the center of the city's growth. However, through time and urbanization processes, the river lost its importance as a structuring axis and access point to Montería¹. This led to various social problems and the loss of **public space**, as the river became synonymous with degradation, danger, devaluation of private property and the city's red-light district.

In response to this context, in 2002, Montería proposed a novel public license model² for one hundred parks, including a section of the Sinú riverbank. This model required licensees to design, build and maintain the delimited public spaces for twenty years and would initiate a major transformation for Montería. Since then, the recovery of the Sinú riverbank has been guided by a structuring vision of the city, as it not only seeks to intervene in the riverbank but also to connect the urban fabric with the river, establish design under the principles of respect and enhancement of its biodiversity, and pro-

mote new scenarios for the growth and well-being of the city's citizens.

According to data from 2018, the Sinú riverbank is home to 7,942 plant species and 22 fauna species, and the river is considered a key nature reserve for biodiversity conservation, as well as a fundamental ecological asset for generating a refreshing microclimate within the city (IDB et al., 2014). To date, there are 3,400 kilometers of built riverbank and 200 meters in the nearby western zone, which are segmented due to the complexity of recovering the area, relocating the settlers in the area, and intervening the necessary spaces.

MONTERÍA,
COLOMBIA

Pop. **390,344**

3,043 km²

11 m.a.s.l.

KEY
CONCEPTS

SINÚ RIVER

GREEN CORRIDORS

PUBLIC SPACE

LAND MANAGEMENT INSTRUMENTS



CENTRAL RIVERBANK

Ecological zone: characterized by dense forests and high presence of fauna. In this zone, priority was given to greater permeability, low lighting, and reduced commercial presence to protect the animals.

Active recreation zone: close to the financial area and the city's largest shopping mall. Children's playgrounds and restaurants were built here.

Artisan and renovation zone: located on the city's old pier. Here a small square was created for artisans and open-air exhibitions.

Cultural zone: it is integrated into the city's foundational square. In this case, the project proposed a museum for itinerant shows, a meeting and event room, and an open-air puppet theater.

A Before **B** After



Photos: Carlos Montoya



Photos: Iván Potes

BIODIVERSITY AS A GUIDE FOR URBAN DESIGN

Some of the main criteria used for the intervention of the Sinú Riverbank were: (i) adapt design to the existing biodiversity, as well as to the river's dynamics; (ii) identify ecological criteria to intervene the space in all its phases and not cut down any trees except when they presented phytosanitary problems; (iii) adapt the spaces and paths marked by daily citizen movements; (iv) choose the construction methodology and materials giving priority to the permeability of the spaces, taking into account the maintenance commitment acquired by the license, and (v) promote the social component by carrying out consultation and dialogue activities with the community.³

ECOSYSTEM SERVICES WITHIN THE CITY

As the community's relationship with the Sinú Riverbank improves, the challenges and projects related to it change. One of the new challenges is how to connect the riverbank with the rest of Montería. A new city project has emerged in response to this, complemented by urban development processes: the **green corridors**. These perpendicular corridors give access to the riverbank and are designed under the same logic of adapting to the existing vegetation. In this way, ecosystem services generated by the river bank not only remain there but also penetrate the city, improving Montería's ecological connectivity.

Green corridors have already begun to be created in potential locations in the city by taking advantage of rainwater channels and using **Nature-based Solutions** and biodiversity monitoring. Previous demonstration projects have been so effective that all residents want to have green corridor-like areas within their city spaces.

For this reason, today, these channels are considered in the city's land management plan as part of the mitigation and adaptation strategies. They are buffer areas between the buildings and the edge of the wooded channels and are associated with the network of bicycle paths and the public bicycle system. In the future, it is expected that these spaces, together with the green corridors, will be small river corridors and public areas protected by their inhabitants. It is also expected that future public investment projects will maintain the connection with the bike paths so that the city's central projects can be traveled by bicycle.

PLANNING AND FINANCING

The beginning of the Sinú riverbank recovery was possible thanks to land management and financing instruments for infrastructure development, which created a



NORTHERN RIVERBANK

Located in a residential area whose construction began in 2008 and was put into operation in 2010. This area was reforested with trees, and the natural environment was re-qualified. The project also included the construction of a lookout point overlooking the Sinú River, a puppet theater, sales and restaurant modules, children's playgrounds, and street furniture.

Photos: Carlos Montoya



The riverbank is approximately 70% green area and 30% cobblestone (articulated pavement).

win-win situation for both public and private sectors. Although often overlooked, these instruments have great potential for the country's growth, as they enable the development of intermediate cities and improve both citizen satisfaction and political gain. In fact, Colombia stands out for its land management instruments, for example, the right of first refusal and priority development and financing instruments such as valuation and capi-



MONTERÍA CENTRAL MARKET

The intervention in this area began with police intelligence work in 2013 that dismantled the micro-trafficking gangs that dominated the sector. A social mapping exercise was also carried out, making it possible to relocate the 1,500 informal vendors established there and connect them to formal trade in a market adapted to their needs. Thanks to this joint effort, 20,000 m² of degraded public space have been recovered.

A Before **B** After



Photos: Municipality of Montería and Jhon Rodríguez

tal gains. However, few cities use these mechanisms, so it is essential to promote their implementation.

One of the consequences of the restoration of the Sinú riverbank has been the **capital gains** of nearby land. It has thus been proposed that the land that has benefited from the valuation should contribute to continuing the river bank.

In intermediate cities, the needs of the city and its inhabitants will always exceed financial and administrative capacities. Due to these limitations, it is recommended that cities rely on **land management and financing instruments** to carry out this type of renovation and construction, which are costly.

A NEW GENERATION IN CONNECTION WITH THE RIVER

The works for the recovery of the Sinú riverbank involved, in turn, a transformation of the citizens' relationship with nature and with the works carried out in public areas. On one hand, the project was committed in using a horizontal language to promote an understanding among citizens of the importance of riverside cities in the world. It also reconnected citizens with nature by preserving the fauna and flora in these spaces (red howler monkeys, sloths, squirrels, and iguanas, among others), signage for

each species, and education on the importance of nature-based solutions. Thus, as a result of the restoration, a new generation emerged in contact and coexistence with the fauna and flora of their city. On the other hand, there was public distrust of the licensed works and the fulfillment of what was promised. In this case, the discovery of the riverbank's first zone was a turning point, since the quality of the work changed the citizens' relationship with the project. From this point on, the work progressed smoothly and with the support of the inhabitants, as well as with a high sense of responsibility and expectations for the project's continuity. For this same reason, various efforts and activities were carried out to keep the new scenarios active, strengthening citizens' sense of belonging to the riverbank, and increasing tourism in the city, including management of the puppet theater, invitations to school trips, the Summer Festival, the Montería Jazz Festival, and other day and nighttime activities.

The recovery of the Sinú riverbank began as a project of the mayor's office to recover an initial stretch of the riverbank. However, it is now a city project that the community itself demands of the mayor's office every four years. Many of the benefits that the Sinú riverbank now provides to its inhabitants were not considered initially. However, as the project has evolved, new aspects to be considered have been included. Thus, for example,



Tom Park Concert, 2013.



Parade of floats in the Fiestas del Río, 2013.

Photos: Olger Guzmán

it has been understood that: i) the more continuous the riverbank is, together with the green corridors, the better the city's ecological connectivity will be; ii) the project has generated economic development and greater use of public space; and iii) thermal regulation is maintained and improved each time more sections are joined, so the Sinú riverbank functions as a buffer area and adaptation to climate change.

ONE CITY, ONE RIVER

Prior to the recovery of the Sinú river, its left bank was lagging, with high levels of inequality and no presence from the State. Using the vision, the city proposed for

the project - the river as a unifying element - it was decided to build the new town hall on the left side of the city. This symbol of State presence in a sustainable building was the catalyst for the development of the area. With the new town hall came new urban parks, shopping malls, ATMs, housing projects, and jobs. In addition, a social project was carried out that provided 5,340 housing solutions for people living on the riverbank, accompanied by didactic activities to adapt to change; for example, educational talks in simple language on the functions and correct use of the systems and services offered by these homes.

KEY LESSONS

→ Before learning about the concept, Montería was already applying nature-based solutions, as the riverbank recovers and improves the conditions of the public space using the ecological benefits already existing in the area.

→ The Sinú riverbank recovery project and its administration have demonstrated that there can be human uses that are respectful and compatible with nature. If, on the contrary, these spaces are not occupied with certain citizen and urban uses, they run the risk of being invaded, degraded, and can no longer provide ecosystem services to humans and other species.

→ It is necessary to use existing land management and financing instruments for infrastructure development, especially in intermediate cities. Likewise, it is essential to use these instruments to construct the next sections of the Sinú riverbank in areas that are not urbanized, so that the continuation of the riverbank be considered an urban development burden.

→ Investing in public space is very important, as people with fewer resources depend on public space to use their free time.

→ The more continuous the riverbank is, along with the green corridors, the better the ecological connectivity of the city. The Sinú river corridor is a buffer and adaptation area for climate change. Thus, for example, thermal regulation is maintained and improved each time more stretches are added to the corridor.

→ Citizen participation in the design process is vital. Without participation, there is no appropriation, but this should be done in a horizontal language between the different actors (government, technicians, unions, and citizens).

→ Public space projects, especially green infrastructure, should be designed based on the ecosystem services they can provide to all forms of life that inhabit the city (humans, plants, and animals).