



Analysis of the Parques del Río Norte project as a Nature-based Solution for climate resilience

Context

The Parques del Río Norte project in Medellín aims to increase the amount of public space per inhabitant by improving urban conditions in areas with unplanned and underserved urban development.

In this context, the objective of the consultancy, carried out together with Universidad de Antioquia, was to analyze and assess the climate risks of Medellín's Parques del Río Norte project and recommend Nature-based Solutions (NbS) to strengthen climate change adaptation, biodiversity, and water management in this infrastructure project.

Project Description

In carrying out this consultancy, SELVAR led the NbS component, through the **proposal of NbS**, maintenance and monitoring recommendations, and a **cost-benefit analysis** of the proposed typologies, which was carried out as follows:

1. **Review of the existing architectural design** and improvement proposal.
2. Proposal of **NbS typology**.
3. **Monitoring and maintenance** plan.
4. Workshop on **methodologies for evaluating, selecting, and designing NbS**.
5. Workshop on **NbS maintenance**.
6. Workshop on **water management measures** such as Sustainable Urban Drainage Systems (SUDS).
7. **Cost-benefit analysis** for each solution.
8. **Multi-criteria matrix for decision-making** on NbS.

Duration

9 months, October 2023 - August 2024

Results

- Climatic, meteorological, and hydraulic analysis in the Parques del Río Norte project area.
- Analysis of the architectural designs from an NbS perspective.
- Selection of NbS typologies to address the climate challenges in the Parques del Río Norte project area.
- Maintenance and monitoring plan for the NbS prioritized for the park.
- Cost-benefit analysis of the prioritized NbS.
- A multi-criteria matrix for integrating NbS into infrastructure project designs such as Parques del Río Norte.



Partners



Clients

