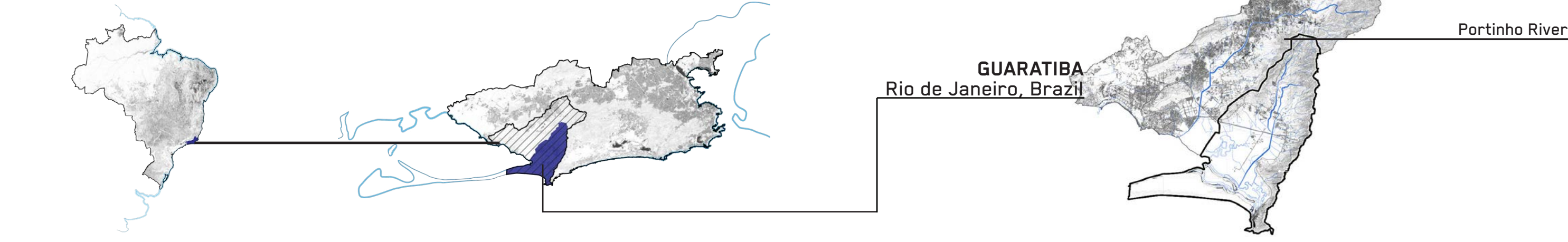


# BURLE MARX NATURAL PARK

A MULTIPLE-USE BUFFER ZONE BETWEEN THE EXISTING RESERVE AND THE RAPIDLY URBAN



## A FLOOD PRONE AREA AND IRREGULAR OCCUPATIONS

The idea behind The Roberto Burle Marx Buffer Park came thanks to a conjunction of issues observed both through academic research and during a four day immersion period during which the team rented a small guest house and studied the patterns and dynamics that dictate everyday life in Guaratiba and in Rio's West Zone. A series of important, isolated and undervalued social actors were contemplated in a thorough diagnostic exercise that resulted in a park-shaped response to the area's urban challenges. Local institutions such as the aforementioned fishing community from which the neighborhood

### ENVIRONMENTAL DISASTERS

Rio de Janeiro west zone: A swampy area, susceptible to flooding and urban growth to environmental fragile areas



Borders of the Piraque River, the largest river in the Guaratiba Region. To the left favella's Pedra de Guaratiba, at the right a Military Reserve. Photo: Google Earth Pro.



A local resident toward his home. Irregular housings on swampy areas routinely use the abundance of creeks to sewage drain. Photo by: Augusto Santos, PROURB/UFRJ.



Rio de Janeiro, Brazil, 1998. Stormwaters floods the streets of Jacarepaguá Neighborhood, closer of the studied Area. Jornal O Globo (Local newspaper) Photo by: Domício Paixoto.

## A RAPIDLY GROWING NEIGHBORHOOD WITH A LACK OF FACILITIES

developed, as well as the former home of landscape architect Roberto Burle Marx, now a museum in his honour, and the various traditional seafood restaurants that line the road leading into the neighborhood, were included as independent but complementary programs, a strategy we believe to muster a mutually beneficial exchange by creating conditions for spontaneous interaction between activities that are currently perceived as unrelated.

Occupying a continuous 1.100 hectares of untouched natural landscape along the Portinho river, the Roberto Burle Marx Buffer Park is our proposal

for an environmental buffer between the Guaratiba Biological Reserve and the rapidly expanding region of Barra de Guaratiba. We envisioned an intrinsic relationship between the new park and the existing Sítio Burle Marx, a publicly funded and operated cultural center established on the property where Brazil's most prominent landscape architect lived and worked for the better part of his celebrated career. With direct access to and from the proposed park, we invite the museum's participation and curatorship in organizing cultural and educational calendars directed towards - but not exclusive to - guided field trips for students from Rio's public school system, seeing that this practice is customary between public institutions in Brazil.

The prospect of creating a new, large scale public space for Rio's most disenfranchised citizens, all the while allowing for the transposition of pedestrian and bicycle traffic into and through the park

- as opposed to alongside heavy car and bus traffic greatly informed the conception and design of a park that could and would function on the level of mobility infrastructure as well as educational space and leisure destination.

A second and equally important premise was the lack of recreational and leisure spaces throughout Rio's periphery, with Guaratiba's small beachfront forced to absorb a disproportionate influx of beachgoers from other West Zone.

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### HEALTHY LIVES



- A natural park infrastructure that contribute to the practice of sports and healthy lifestyle, also contribute to reduction of diseases caused by water and soil pollution through effective natural resource management and environmental protection.

### ECONOMIC GROWTH DECENT WORK



- Trough the consolidation of land uses and reinforcement of local commercial activities provide decent working environments, and impulse equal pay for equal work.
- Work with the communities to assess the benefits and costs of sport and eco tourism promoting in a sustainable way respecting the cultural and local customs.

### REDUCE INEQUALITY



- The initiative empower and promote the social, economic and political inclusion of all, promoting appropriate legislation, policies and actions.

### COMBAT CLIMATE CHANGE



- Our project improve education and raising awareness about the biodiversity, fauna and flora local.
- Improve the human and institutional capacity on climate change mitigation, adaptation, impact reduction through promoting mechanisms for raising capacities for effective climate change related planning management.

### PROTECT ECOSYSTEMS



- The project promote the implementation of sustainable management of the mangrove, halt deforestation.
- Restore degraded forest, ensure conservation, restoration and sustainable use of terrestrial water ecosystems
- Reduce degradation of natural habitat, halt the loss of biodiversity.

### WATER AND SANITATION



- Improving water quality through environmental protection measures and sustainable solid waste management.
- Protect and restore the water related ecosystems, specifically the mangrove and the Portinho's river slope.
- Our project support and strengthen the participation of local communities like restaurants or fishermen for improving water and sanitation management.

### RESILIENT INFRASTRUCTURE



- The proposal develop quality, reliable, sustainable and resilient infrastructure, including regional and neighborhood infrastructure, to support the tourist economic development and human wellbeing, with a focus on affordable and equitable access for all.

### SUSTAINABLY USE THE OCEANS



- By the consolidation of uses and improve of infrastructure of the fisher economic activitie, provide access of smallscale artisanal fishers to marine resources and markets sustainably manage and protect marine and coastal ecosystems.

### CITIES INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE



- Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety thinking of the to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- Sustainable human settlement planning and management respecting the ecosystems and existing landscapes.
- strengthen efforts to protect and safeguard the world's cultural and natural heritage.
- Education and politics that waste management.
- Access to safe, inclusive and accessible, green and public spaces.



**Cláudia Storino** Director of Sítio Roberto Burle Marx

*"The West Zone is the largest region of Rio de Janeiro but its very lacking of cultural and leisure facilities, which is important for the carioca inhabitants. Currently, Sítio Roberto Burle Marx fulfills this function in Guaratiba and nearby neighborhoods."*



**Ademir Silva** Local resident and fisherman

*"Down by the beach it's always crowded and there's always traffic, I can't remember the last time I was there by choice. On weekends my wife and I take our little boat upstream and find someplace quiet to enjoy the sunshine and take a swim. This is all a military training area, but it's so big we hardly ever see anyone or anything of that kind, it's mostly other fishermen and their families enjoying the weekend. If we're in the mood, we'll catch some crabs on the way back for lunch."*



**Paula Freire** Local resident.

*"We added a second story so that our daughters could visit us anytime, but they rarely do, they're young and don't really understand why we would leave the city and build a house in the forest. Still, we're only about an hour and a half away from the city center without traffic and we have a car, so it's still pretty easy. We rent out the extra space to travelers, we love the company."*



**Gabriel Freire** Local resident and retiree

*"We used to live in an apartment in Copacabana, but it's always been a dream of mine to be closer to nature. So, when I retired, we started building our house in the mountains. We have the best view of anyone in Guaratiba. The plumbing comes from a local stream - technically we wouldn't be allowed to build here, so we try to be extra respectful of the environment around us."*



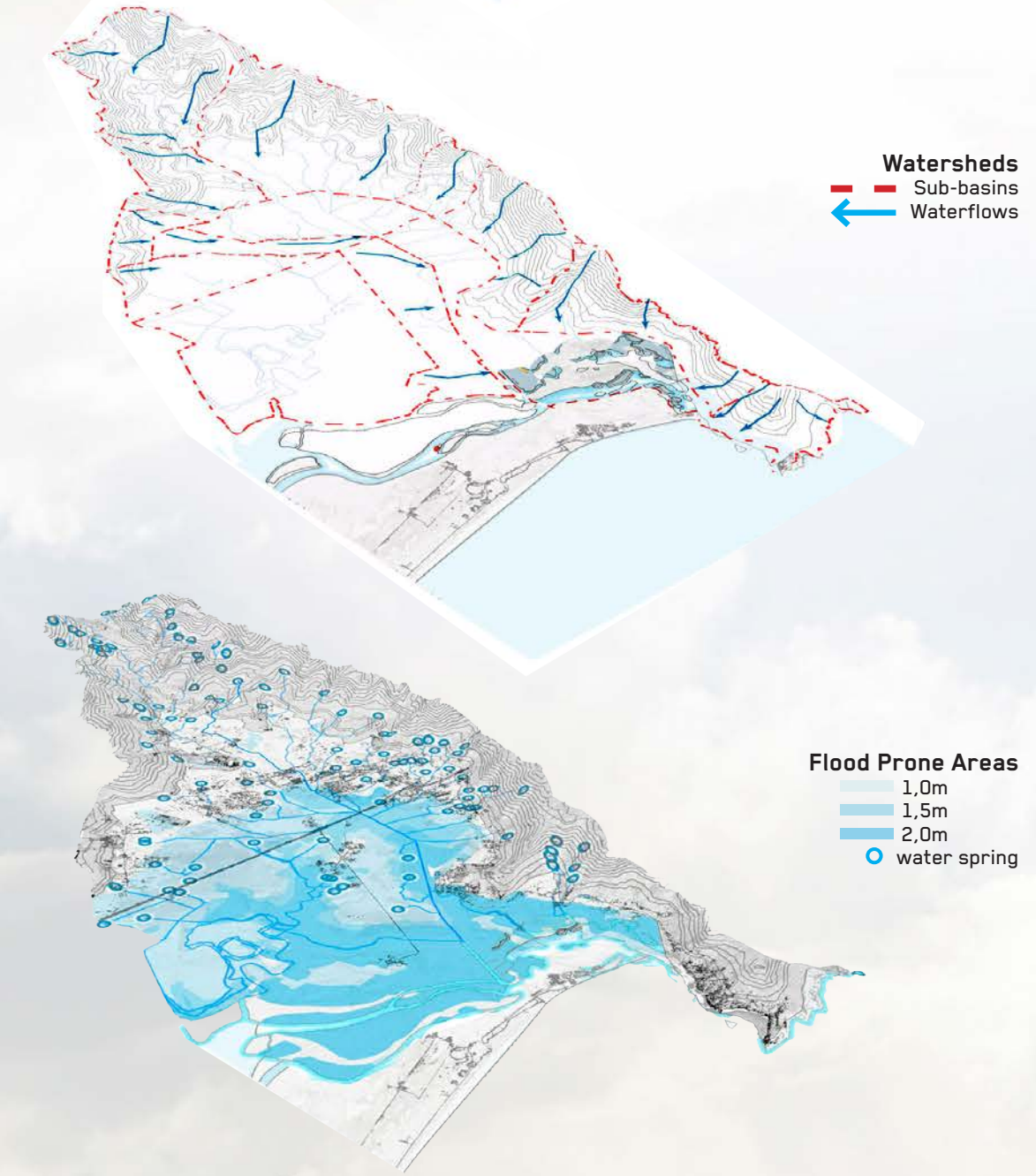
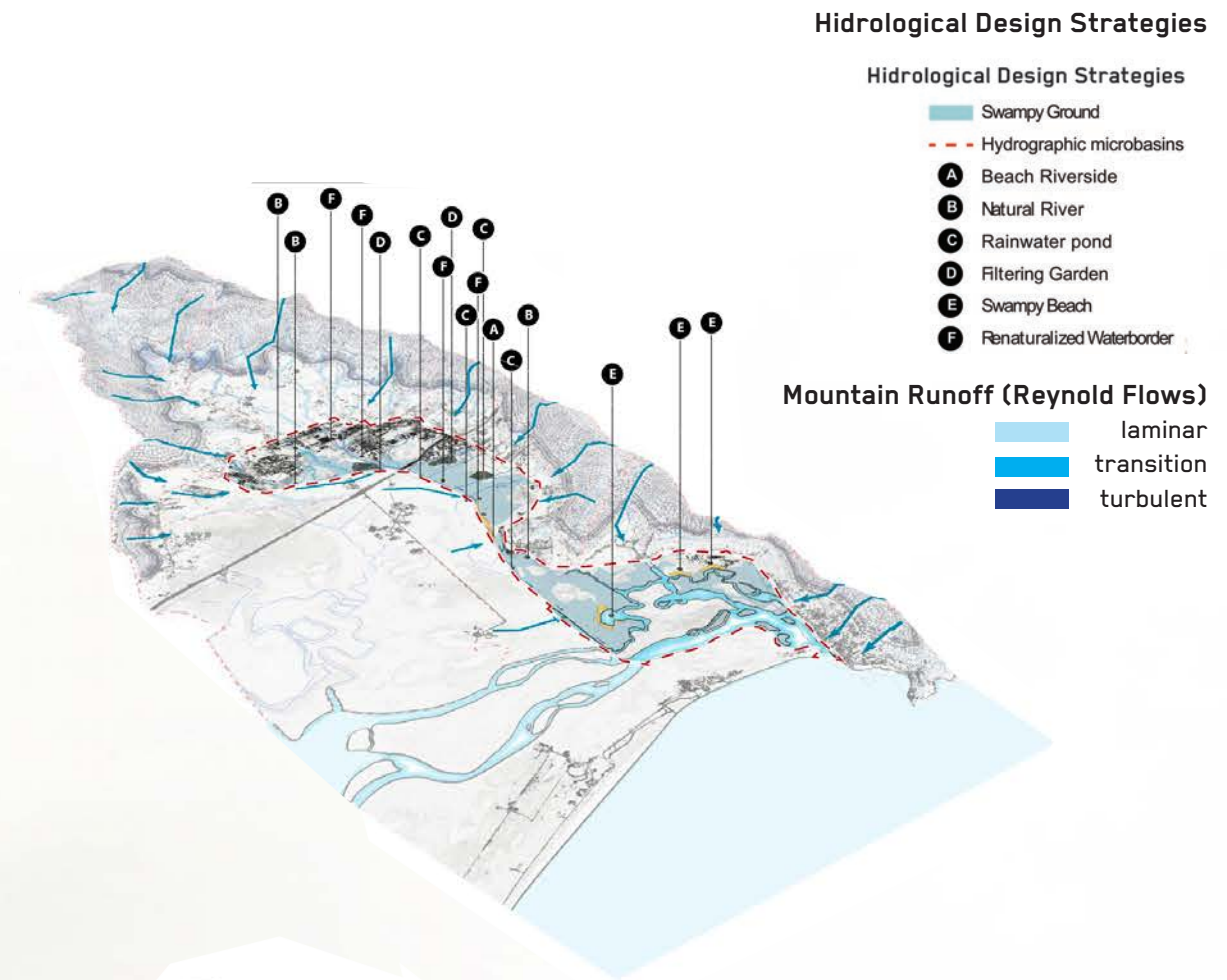
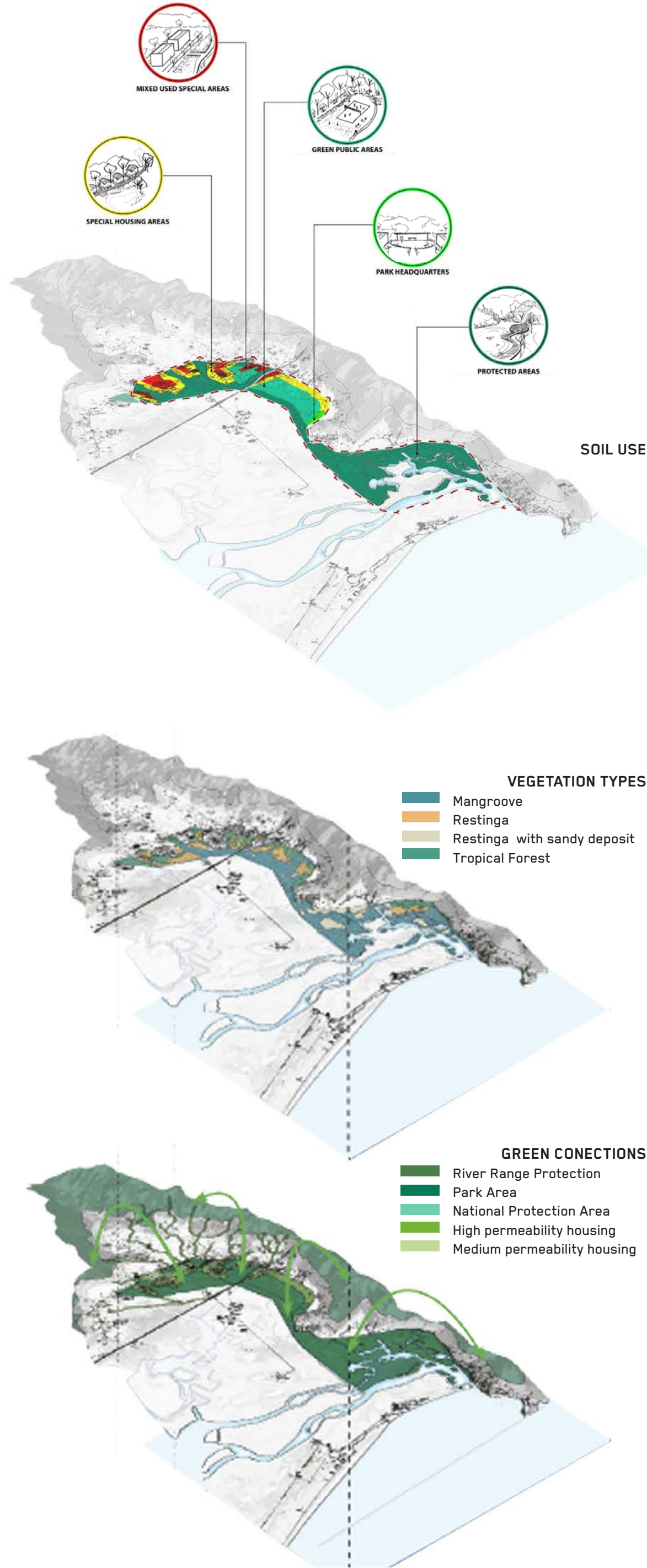
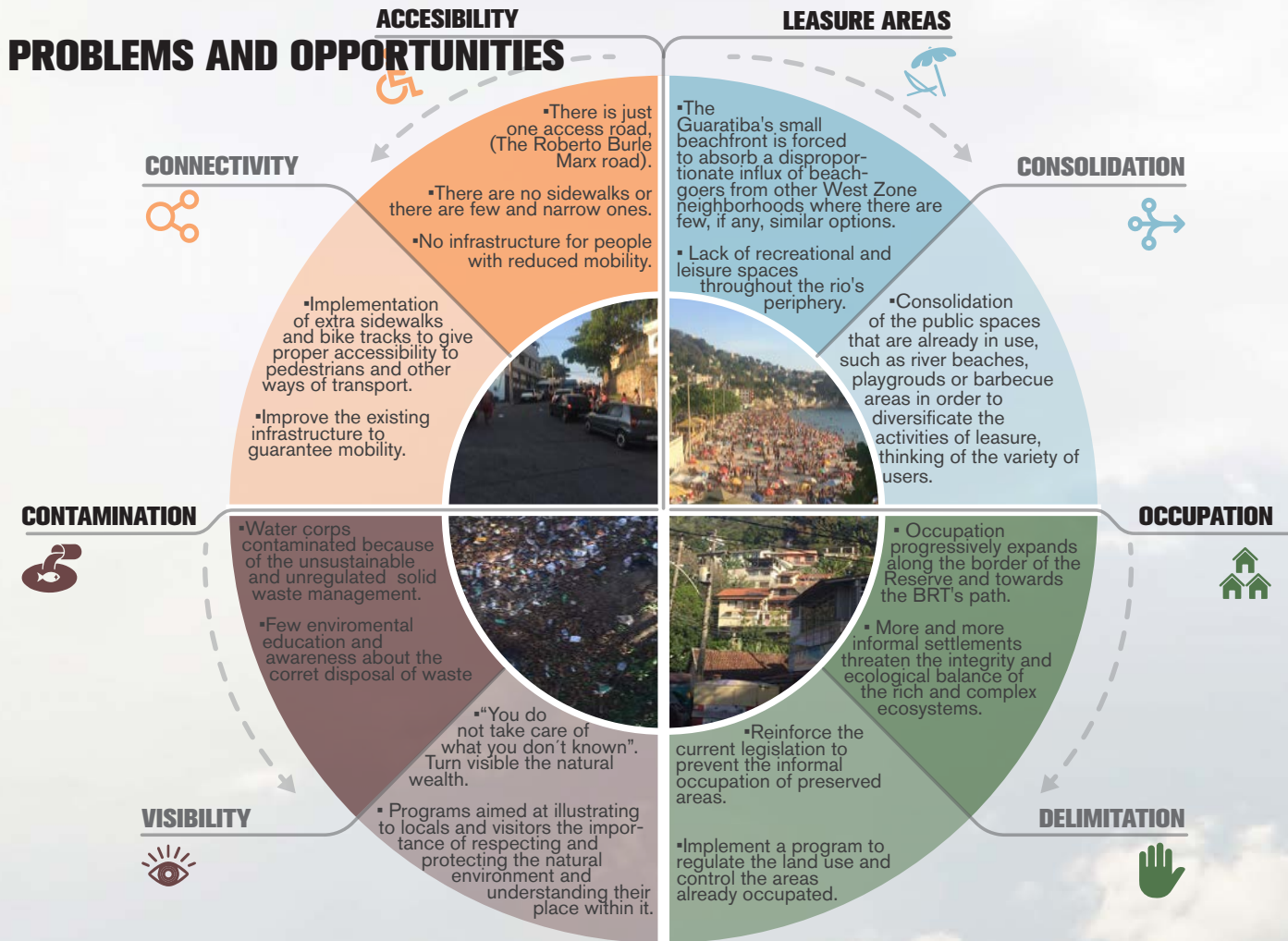
**Douglas Bigode** Local resident and tour guide.

*"My uncle and I own the best fishing boats in Guaratiba. We take large groups out on fishing trips all week long and once in a while we'll even get some tourists from the local hotels, we're well known in the area. We have the best boats. The reserve is supposed to be off limits for fishing, but no one seems to mind. It's a way to make a living."*



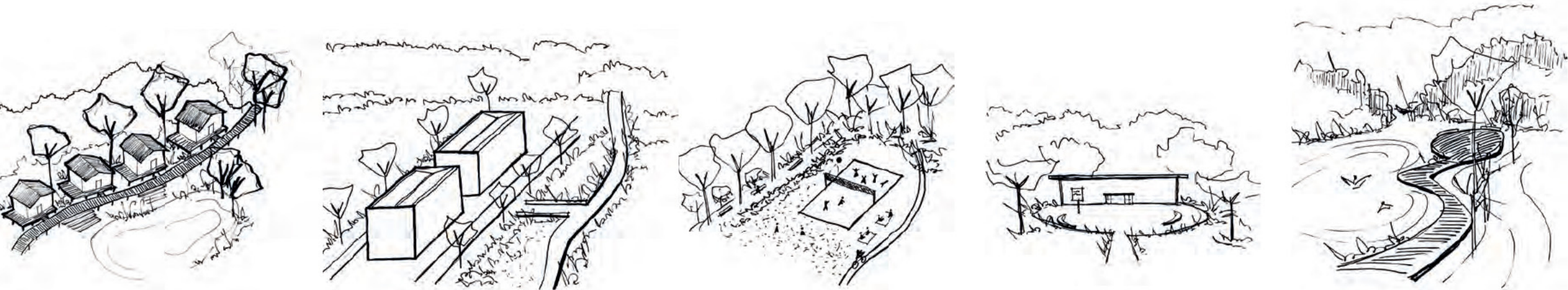
**Cristóvão Duarte** Architect and professor FAU UFRJ

*"Guaratiba is a rural area that is being colonized by the city. We've been witnessing a process in which the country is taken by storm by the metropolis, subverting everyday customs, socioeconomic practices, traditions, even the landscape itself, which is subjected to many alterations and transformations. This is the great challenge that we are faced with."*





SUSTAINABLE SOIL USE AND RESILIENT HOUSING STRATEGY TOWARDS PROTECTION ON ENVIRONMENTAL AND SOCIAL VULNERABILITIES



Unifamiliar resilient housing tipology built 1.5 meters off the ground on wooden platforms, accessed through decks that connect to the open space park areas.

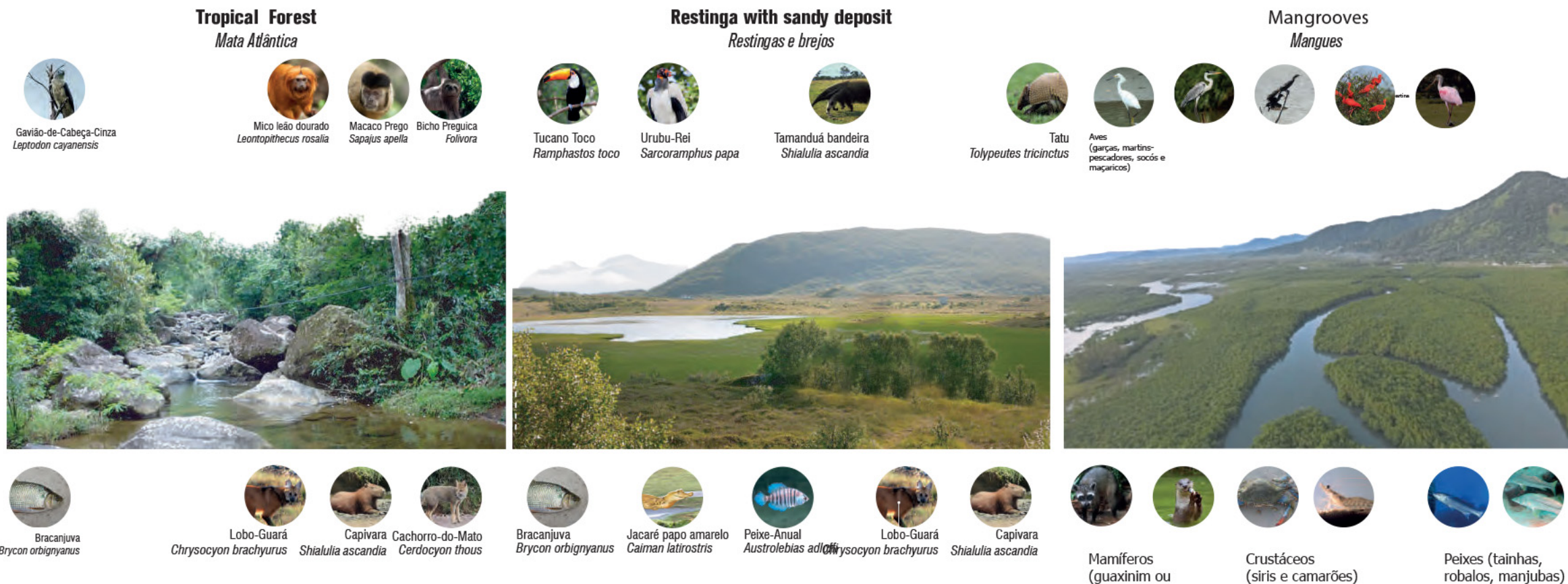
Mixed use areas with multifamiliar unities built on plateaus on higher levels. The slopes help to drain the water and retain it on lower levels.

Green public areas with sports equipments to attend populations' leisure activities and to offer environmental education.

Park headquarters providing information through public equipments, as well as making the park and the reserve visible for visitors and residents.

Protected areas of the park that allow specific activities that cannot affect the natural environment. Decks and contemplation spaces can be used to build this border.

TURNING THE FRAGILITY OF THE LAST HUMID ECOSYSTEMS INTO A POTENTIAL NARRATIVA FOR A UNIQUE PARK IN RIO



The last driving force behind the proposal was to create a piece of urban equipment capable of resonating on a city-wide scape, the project aims to assert peripheric neighborhoods such as Guaratiba as equally worthy - if not more - of the kind of public investment and attention rarely seen outside aristocratic areas such as Copacabana and Ipanema, beyond which there is little to no incentive for this type of initiative.

With the creation of the Roberto Burle Marx Ecological Park, Rio's periphery stands to gain a public space whose scale and nature - both literal and figurative - currently do not exist beyond the reach of the city's sharply concentrated touristic circuit. We firmly believe that this kind of intervention will shine a light on an extensive territory within the city that currently goes unnoticed and uncared for, unbeknownst even to most cariocas.



Conceptual Map



Master Plan

