



The Ibagué, Colombia Studio: Fostering Resilient Peripheral Landscapes

**Department of Landscape Architecture
(Towards the Urban Design Certificate)**

**Instructor: David Gouverneur
Spring 2023**

In collaboration with:



**Professors,
Eduardo Peñaloza, Gloria Aponte**



The Municipality of Ibagué_ Arq. Daniel Caro,



Tejido Diagonal, Bogotá



Weitzman prepares students to address complex sociocultural and environmental issues through thoughtful inquiry, creative expression, and innovation. As a diverse community of scholars and practitioners, we are committed to advancing the public good – locally, nationally, and globally – through architecture, city and regional planning, the fine arts, historic preservation, landscape architecture, and urban spatial analytics.

Weitzman prepara a los estudiantes para abordar cuestiones socioculturales y ambientales complejas a través de la **investigación reflexiva, la expresión creativa y la innovación**. Como una comunidad diversa de académicos y profesionales, estamos comprometidos con la promoción del bien público - a nivel local, nacional y mundial - a través de la arquitectura, la ciudad y la planificación regional, las bellas artes, la conservación histórica, la arquitectura del paisaje, y el análisis espacial urbano.



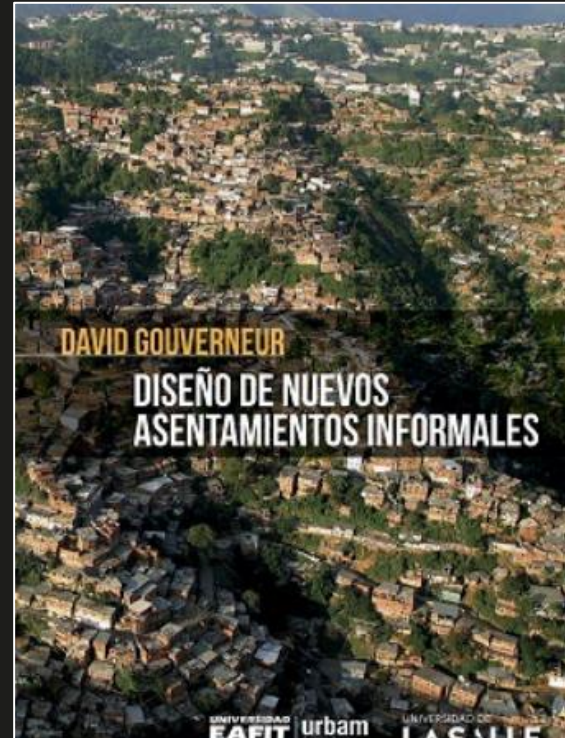
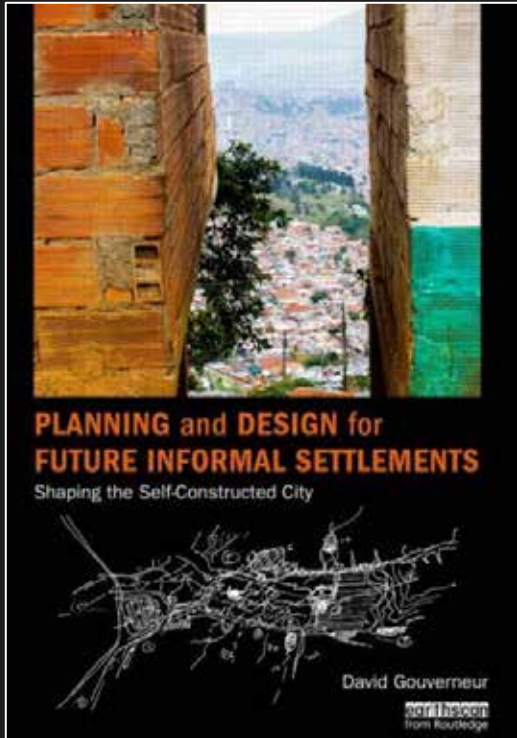
M.Arch. in Urban Design, Harvard University
B.Arch., Universidad Simón Bolívar

- Professor in Practice at the Department of Landscape Architecture of the University of Pennsylvania.
- Honorary Professor of the Universidad Rafael Urdaneta, Maracaibo, Venezuela (2014)
- G. Holmes Perkins Award for Distinguished Teaching at Penn Design in 2008 and in 2013

Courses at the Weitzman School

Elective Design Studios in Landscape Architecture and Urban Design (700 level)

Advisor of Independent Studies and Studios
Contemporary Urbanism



...Gouverneur se ha preocupado por el futuro de asentamientos informales que hoy enfrentan ciudades como, Caracas (Venezuela), Bogotá y Medellín (Colombia) incluyendo problemáticas que se han generado en países latinoamericanos donde se presenta una **desatención por parte de las entes gubernamentales en los diferentes modos de vida que comparten características y necesidades similares.**

Las estrategias urbanísticas que ha planteado junto con sus estudiantes en las clases de taller se **basan en diseños conceptuales, para resolver y dar vía libre a los asentamientos informales de forma ordenada, que hoy son vistos como dificultad, pero que se podrían aprovechar de manera eficiente**

La **ciudad híbrida**, formal-informal, como la llama Gouverneur, tendrá también que tomar en cuenta aspectos de orden global que incluyen el cambio climático, y sus implicaciones aplicadas a las diferentes armaduras informales, únicas en este tipo de asentamientos.

STUDIO DRIVERS:

- ✓ Equilibrar la protección de la biodiversidad, los paisajes productivos y las demandas urbanas.
- ✓ Reducir la brecha social (formal-informal).
- ✓ Explorar desde las visiones territoriales hasta la creación de lugares específicos.
- ✓ Aprender de enfoques interdisciplinarios y culturales.

Preliminary Research/Site Analysis









UPenn Studio Trip/Lectures and Site Visits ***The Dominican Republic***

October 6th - 17th 2022





THE LATIN AMERICAN STUDIOS



Stuart Weitzman School of Design at the University of Pennsylvania.
(Departments of Landscape Architecture/Regional Planning and
Department of City Planning.)

Over 30 studios in Latin American cities



ECOLOGICAL VULNERABILITY

Seagrass and coral reef
degraded by toxic water

80% coral mortality

Affected ecosystems by wastewater runoff



short edge pollution by ships



Affected mangroves due to water pollution



Manatee



Water temperature
warming will
negatively affect
Manatee's route

Degradation of one of the
main routes of the blue crab
due to deforestation in the
energy plant area

55 ha / 135 ac of
deforestation

Cangrejo azul - Blue crab



300 linear meters of mangroves destroyed



ECONOMY DRIVERS

Artisanal eel fishing



PRESENT

Port with import and export



PAST - PRESENT - FUTURE

Eco-tourism in the Mangroves



PRESENT

Old banana company

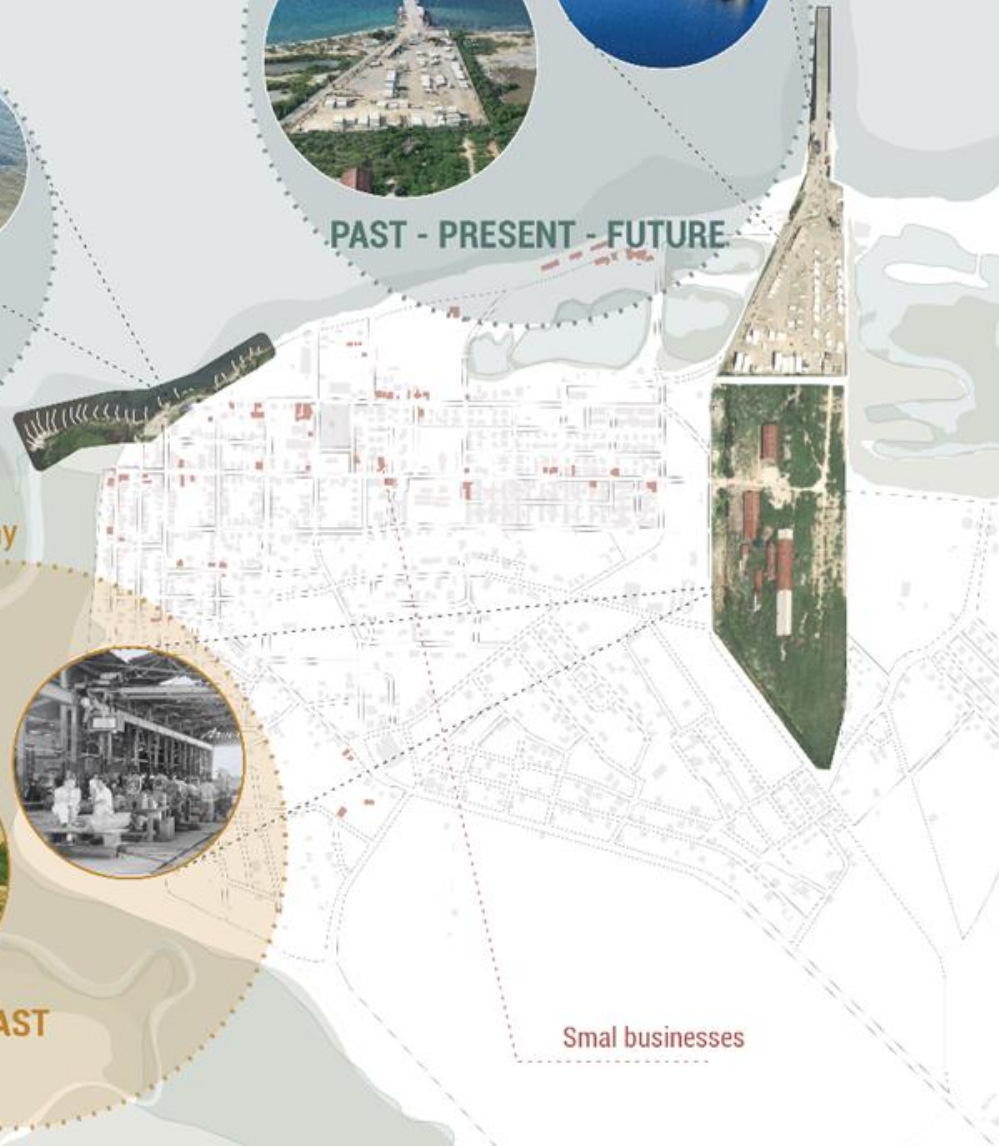


PAST

Energy plant



FUTURE?



Environmental Impact

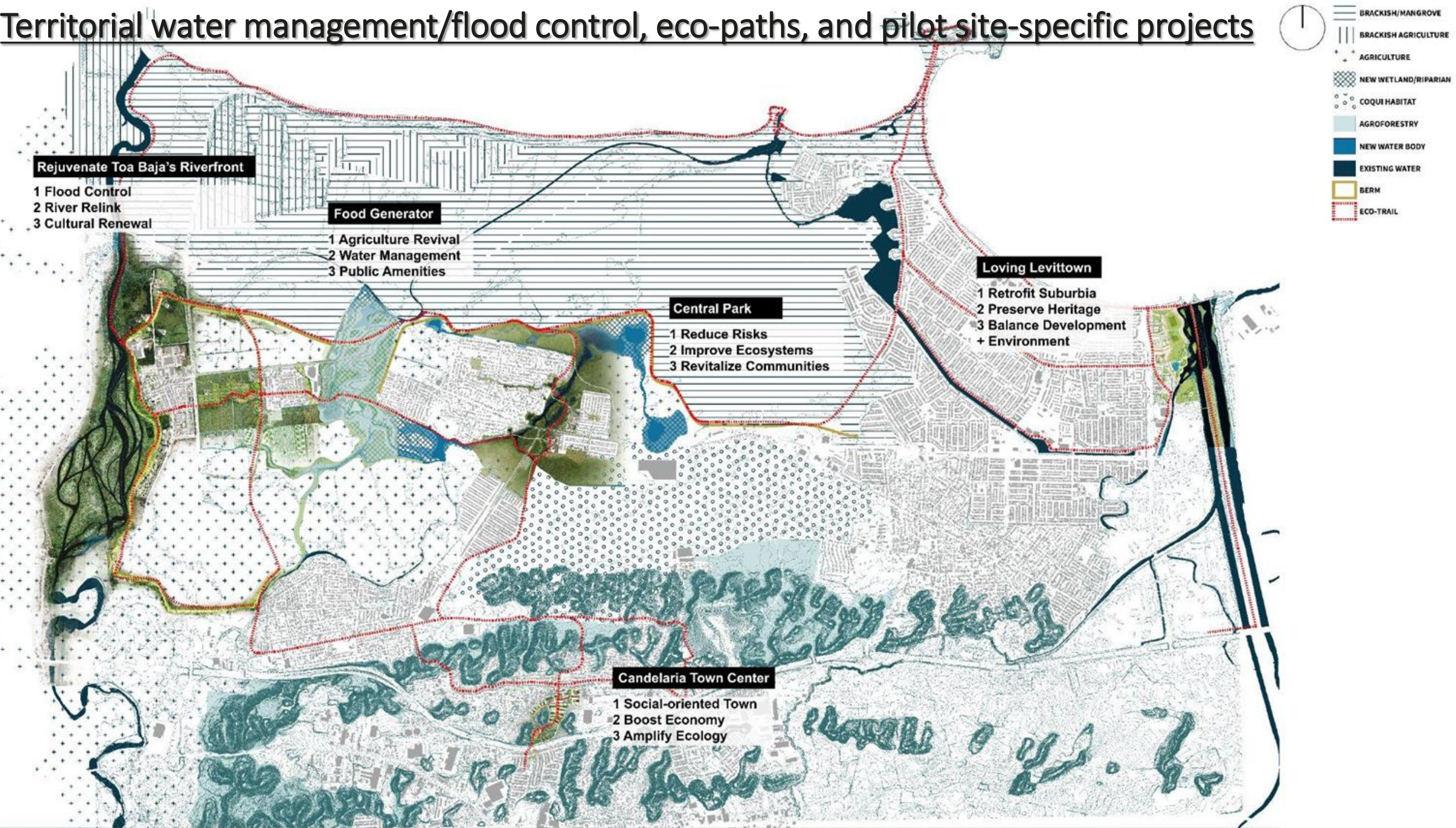
130 Acres of Site Cleared

Photo taken October 2022



SHIFT
The Border Wall

Territorial water management/flood control, eco-paths, and pilot site-specific projects



Linking two communities/reducing floods/boosting tourism and the economy/providing food

WATER MANAGEMET

Water Management Logic

1. Berm System

Part of the existing abandoned historical railway is transformed to build a berm, which is extended along the river to block both river floods and sea water from the north.

2. Modified Flooding Plain & Productive Wetland

We reshape the flooding plain with new branches by increasing volumes for better stormwater and flooding management, tracing the historical flooding plain topography records. A constructed wetland extended to north and east is inserted as a huge sponge to purify and absorb water from communities and farmlands.

3. Large-scale Water Network

We modify and connect existing water channels together with new flows to collect water for agricultural needs and guide water flowing to the sea, including bioswales along main mobility corridors. Then we try to reimagine the community roads as water flow path, mostly rely on the swale on one sides of the road, and connected to the nearby water body or retention ponds.

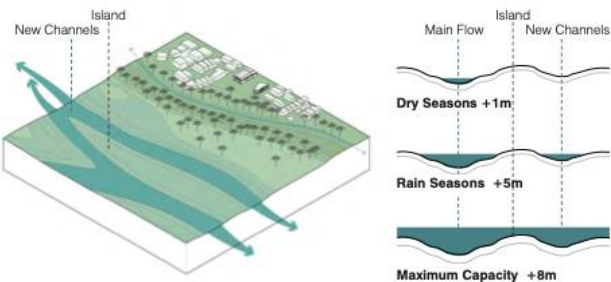
4. Irrigation System

And then the irrigation system in the nursery to large scale river system; trying to build up a more natural and sustainable irrigation method.

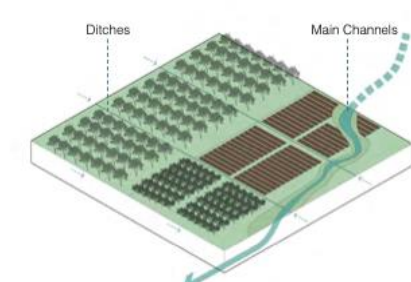
5. Buffer Areas

Adjacent to the Water flow, areas of different depths and different landcovers are designed as buffer areas as well as detention and retention pond. This areas can also work as waterscape and wetland farming.

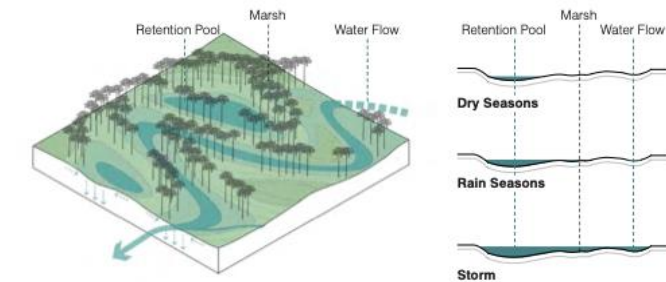
River Flooding Plain



Nursery Irrigation



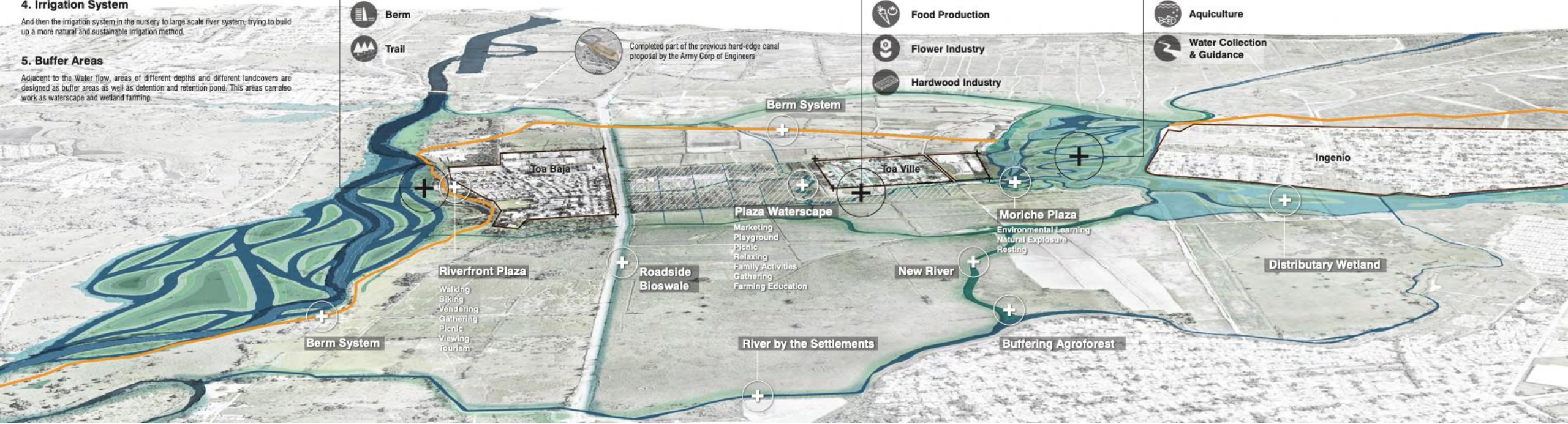
Productive Wetland



- Wetland
- Church
- Berm
- Trail

- Filtration Wetland
- Irrigation Ditches
- Food Production
- Flower Industry
- Hardwood Industry

- Habitats
- Productive Moriche
- Aquiculture
- Water Collection & Guidance



Reconnecting the Old town to the River



Candelaria: A Balanced District (Relocating Inhabitant from High-Risk Areas)

A fish-like pedestrian spine links currently disjointed areas creating a vibrant neighborhood, while transversal spatial relations take advantage of the views, environmental quality, and planting palette of the adjacent hills. A pedestrian spine organizes the scheme bridges over the interstate, traverses a recreational zone with the main communal facilities, links to the re-location housing area, and connects to a main plaza as the heart of a new denser, residential, commercial, and manufacturing district closer to public transit. Vehicular access is provided laterally.

Concept



Early Iterations



**RELOCATION NEIGHBORHOOD
GREEN BAND**

A middle entirely pedestrian green band connects with the nearby hills and offers recreational space for the neighborhood.

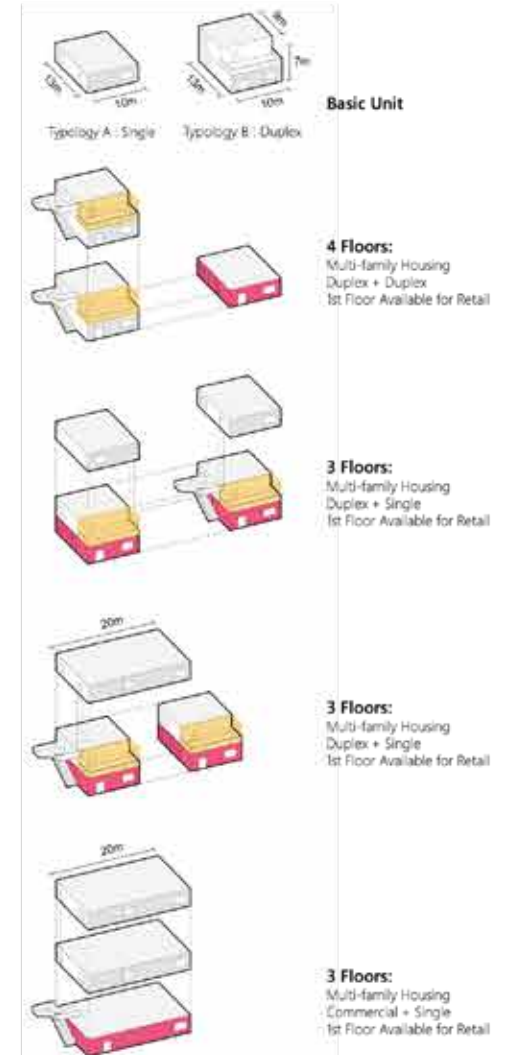


COMMERCIAL FACILITIES



MIXED-USE HOUSING TYPOLOGY

The mixed-use housing typology offers maximized flexibility to convert the lower two floors into ground floor commercial space, with another duplex or single unit stacking on top.



**The Dominican Republic/ Healing Borders Studio
In Collaboration with the Ministry of Economy, Planning, and Development of the DR
Charrettes with Communities
(Empowering the Communities/Learning from Them)
3 towns at the border with Haiti**



Pepillo Salcedo: Former Company Town + Protected Ecologies + New Port/Industries + Community







Final Results of the One-Day Charrette

Pepillo Salcedo

October 6th - 17th 2022



Identify Positives, Negatives, & Possibilities ***Pepillo Salcedo***

October 6th - 9th 2022



Development of the Proposal

Strategies

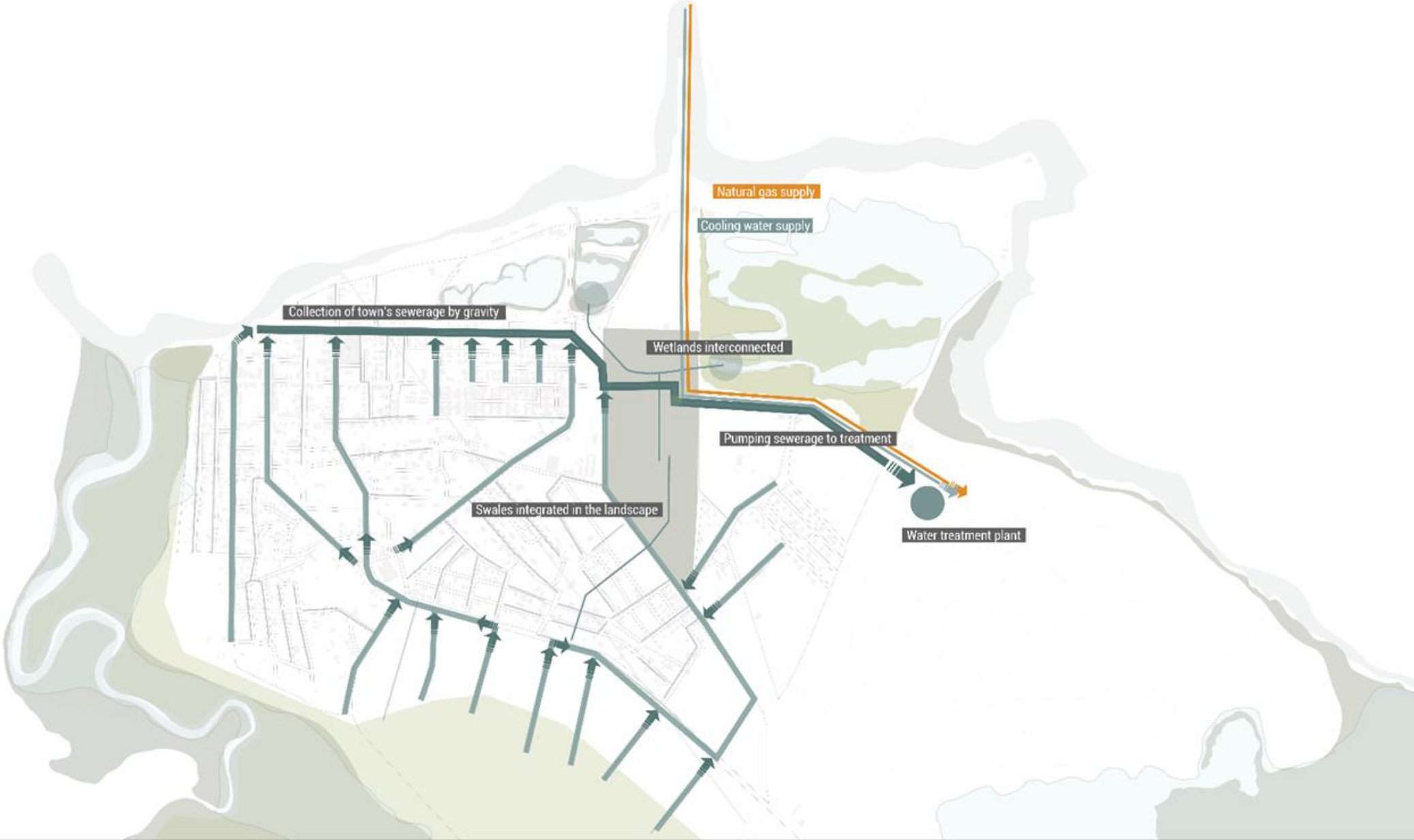
GREEN ARMATURE



MOBILITY NETWORK



WATER MANAGEMENT





The Big Picture

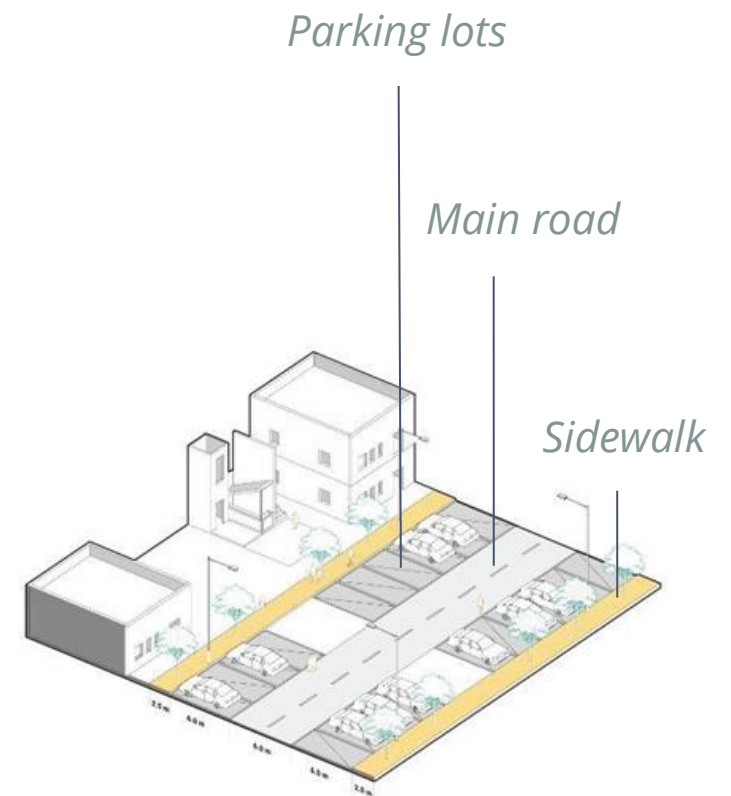
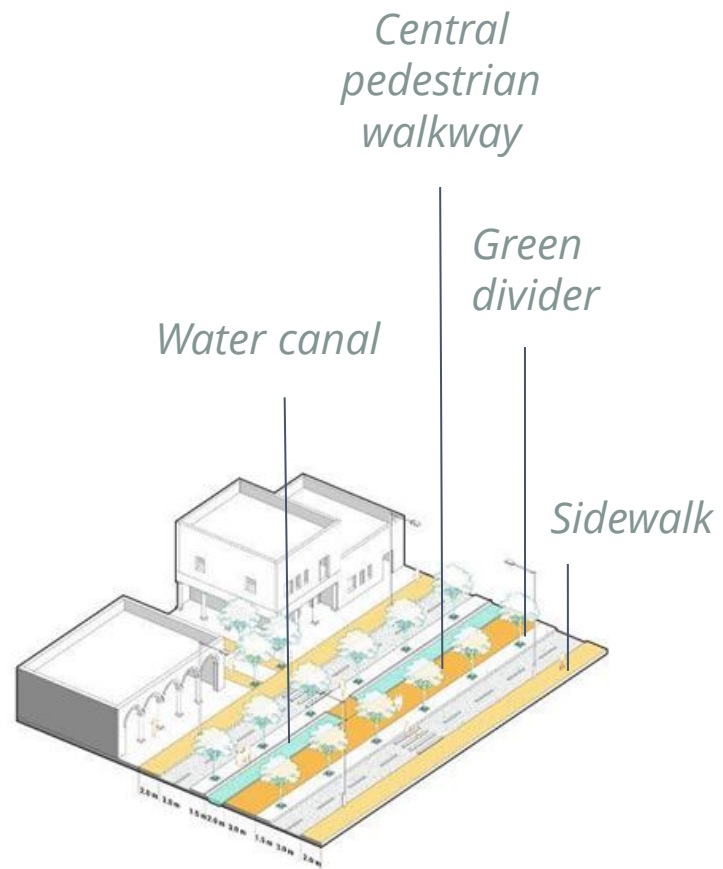
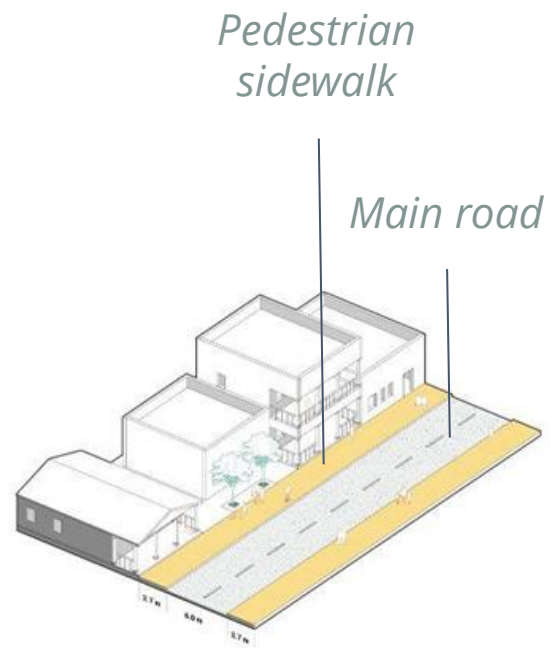


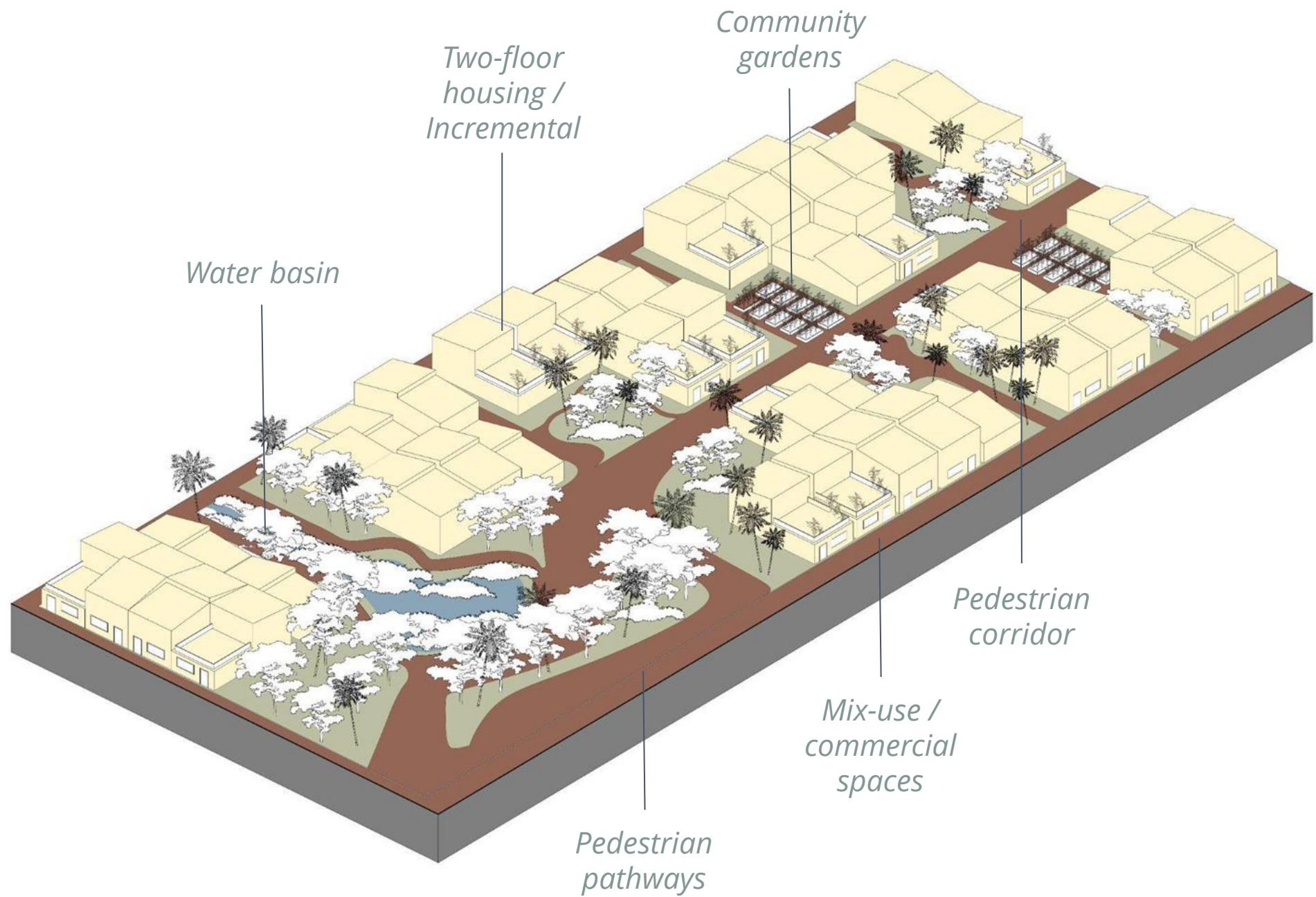




PROJECT
The Green Heart

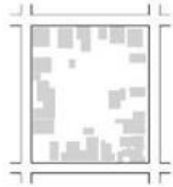








A center open space surrounded by houses



Spatial pattern I
90m×105m



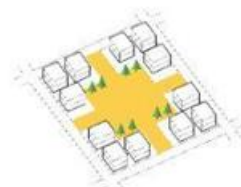
Interior central open space



Interior central open space



Interior central open space



Interior central open space



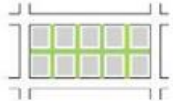
American suburban housing style



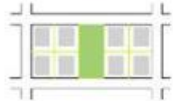
Spatial pattern II
90m×40m



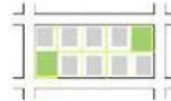
Courtyard regeneration



"Fishbone"



Corridor connectivity



Corner park



"Fishbone"



Corridor connectivity



Corner park



Overcrowded barrack housing



Spatial pattern III
300m×90m



Central pedestrian street with fishbone structure



Central pedestrian street with porous interface



Central pedestrian street with porous interface



Randomly distributed housing



Spatial pattern IV
100m×45m



An interior park with a public square



Enclosed group layout with interior open space



Layout as shape of "S"



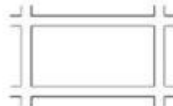
Enclosed group layout with interior open space



Layout as shape of "S"



Vacant land for new development



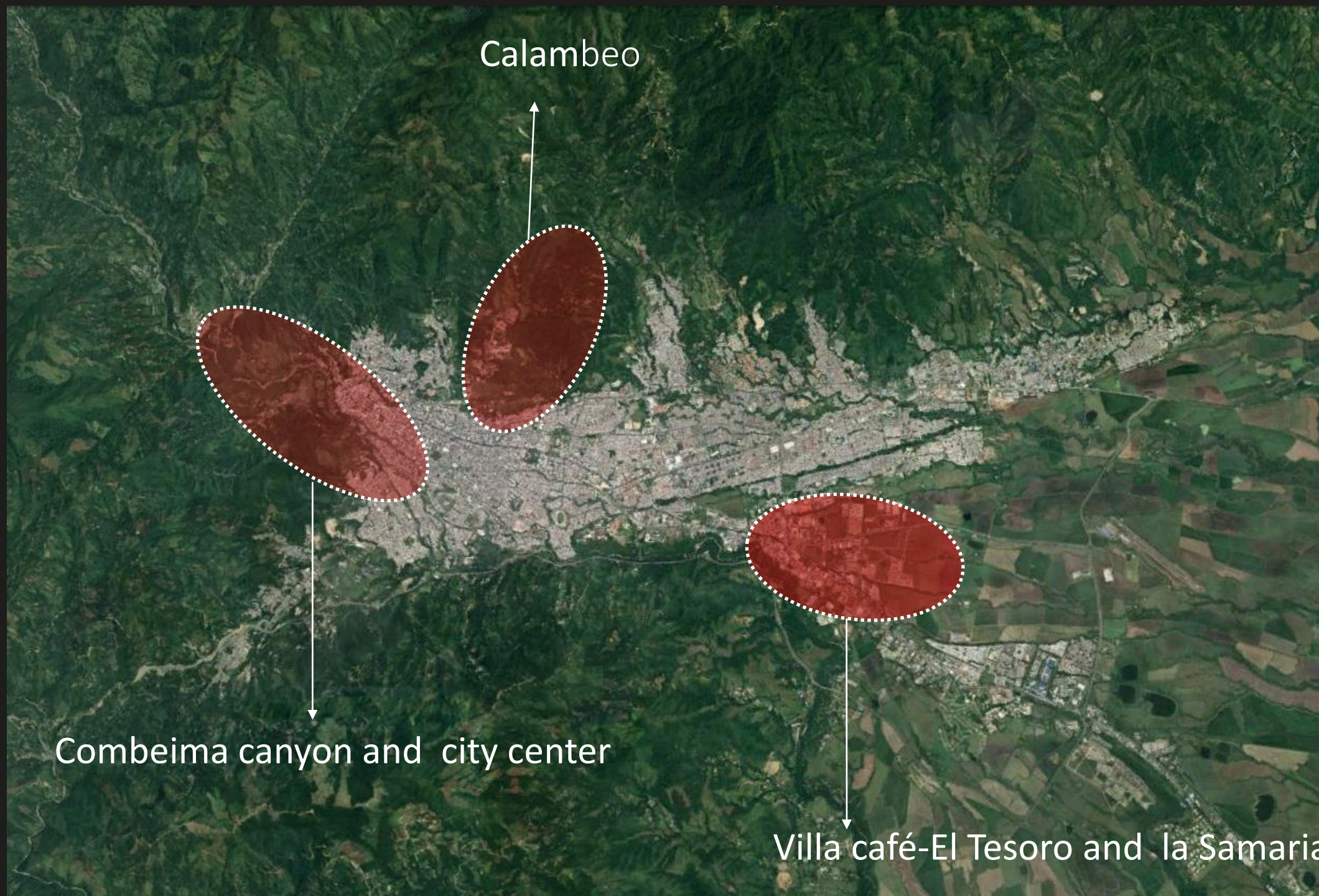
Spatial pattern V
xx×xx

Housing Typology Strategies



Ibagué

The 3 Sites:



Calambeo

Combeima canyon and city center

Villa café-El Tesoro and la Samaria

Combeima Canyon-City Center



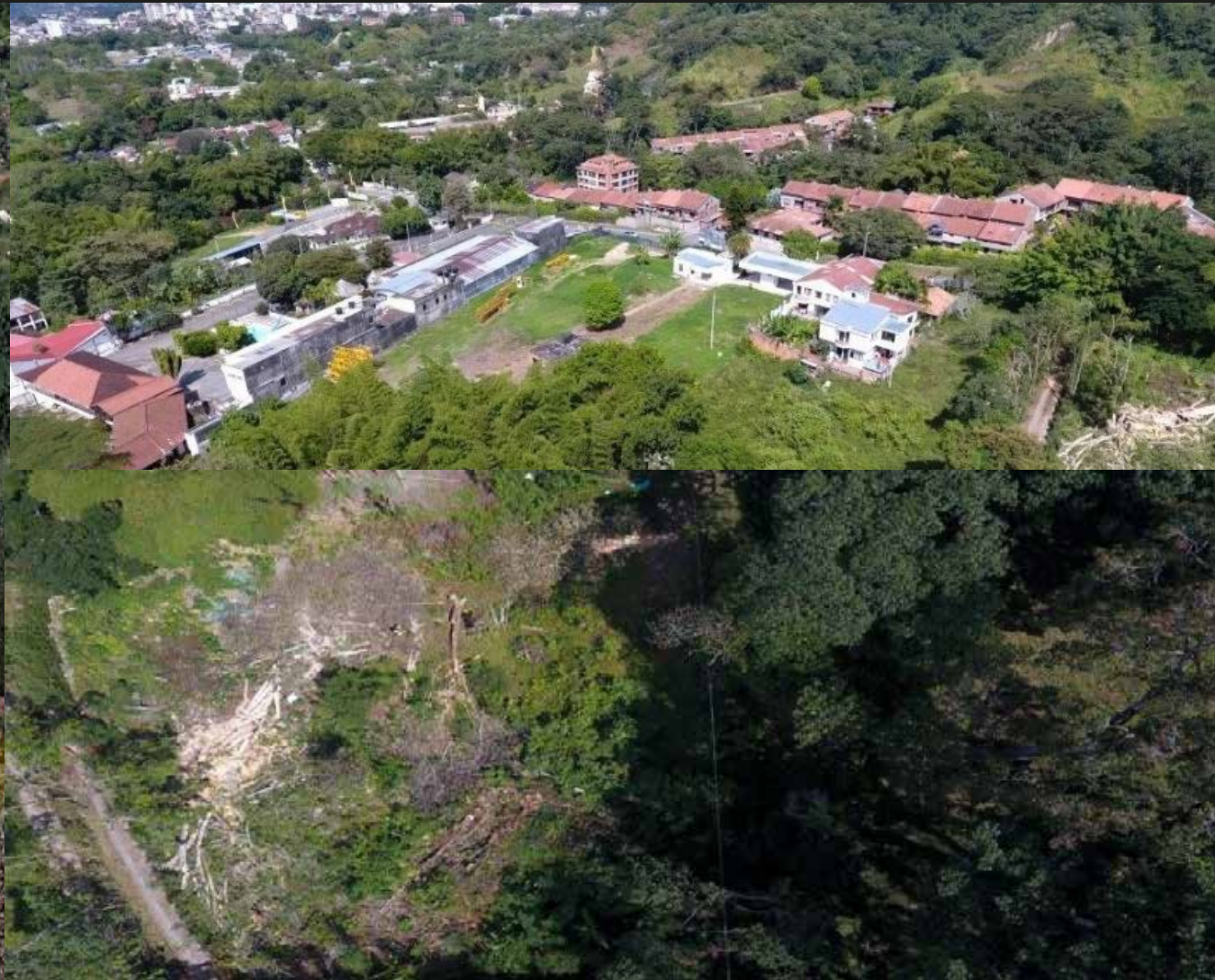
Informal growth onto agricultural land



Habitat corridor meets the historic center

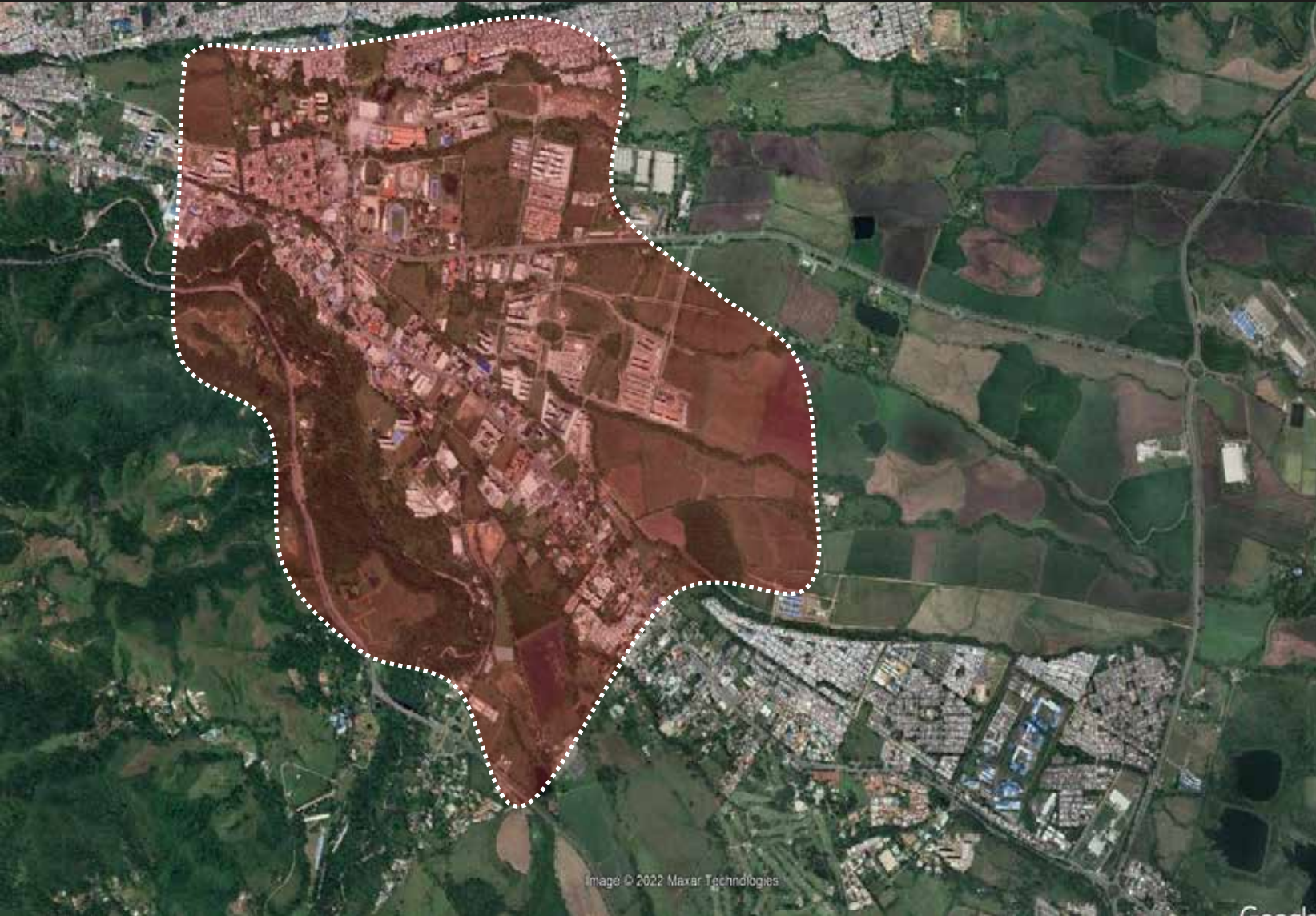
Calambeo

Fragmented formal urbanization



Deforestation, pollution of streams , and landslides

Villa Café El Tesoro and la Samaria



Middle income gated developments



Urban/industrial patchwork on agricultural, culverting and polluting streams

Recent informal settlements

Objetivo general

Proporcionar a los estudiantes y profesores de las Universidad una experiencia educativa intercultural, que aporte a los objetivos de la *Universidad Necesaria*, amplíen su perspectiva “glocal “sobre las problemáticas urbanas de Ibagué , y brinde la oportunidad de trabajar en una dinámica participativa.

Objetivos específicos

- Compartir e intercambiar conocimiento.
- Fomentar la colaboración internacional. (miradas glociales)
- Desarrollar habilidades técnicas: sesiones de diseño en planificación del territorio mediante el diseño participativo.
- Proporcionar un ambiente de aprendizaje práctico desde una lógica intercultural.
- Mejorar las habilidades de comunicación en otra lengua (inglés)
- Crear más redes académicas internacionales para la Universidad. Aporte para los cursos de verano.

ALGUNOS ALCANCES

- Validación de los criterios por parte de actores locales
- Punto de partida sólido para el desarrollo del Taller IX del programa de Arquitectura (unibagué). Se aprovecharan las experiencias realizadas por el taller VII y el grupo de investigación Rastro Urbano en los 3 sectores.
- Intercambio de ideas, información, y participación de docentes en jurados en la etapa intermedia y en la entrega final del Taller
- Aporte de ideas para la ciudad sobre los emplazamientos seleccionados, para el beneficio de las universidades, la Alcaldía y demás fuerzas vivas

CRONOGRAMA VISITA

Sunday 5th

A.M. Early departure from Bogotá to Ibagué by bus

P.M. Site visits old core of Ibagué

Monday 6th

A.M. Meetings and lectures at the Universidad de Ibagué

P.M. Studio sites visits

Tuesday 7th

A.M Studio sites visits

P.M. Studio sites visits

Wednesday 8th

Charrette with local students and stakeholders

Thursday 9th

Visit to regional habitats of El Tolima (Sleepover in Cañón del Combeima)



Philadelphia, 14 de enero de noviembre de 2023

Ing. Diego Fernando Herrán Triana

Director técnico de la Secretaría de Infraestructura

Alcaldía de Ibagué, Departamento del Tolima, Colombia

Estimado Ing. Herrán:

Sirva la presente para hacer de su conocimiento que el Departamento de Arquitectura del Paisaje de la Escuela de Diseño Stuart Weitzman de la Universidad de Pennsylvania, ubicada en Philadelphia, U.S.A, incluyó en la oferta de académica del semestre enero-mayo de 2023 el curso denominado: Procurando paisajes resilientes en la periferia urbana de Ibagué, Colombia.

Le informamos que en la selección de talleres electivos realizados el día 10 de lo corrientes, dicho curso fue elegido por 15 estudiantes de diferentes nacionalidades, resultando el de mayor número de inscritos debido a los objetivos académicos trazados, y gracias al apoyo recibido por usted, y los arquitectos Daniel Caro y Eduardo Peñaloza.



CENTRO COMUNITARIO VARÓN DEL SOL



FESTIVAL 27 DE AGOSTO
**RECORRIDO POR EL PATRIMONIO DE LA
COMUNIDAD CON ESTUDIANTES Y
PROFESIONALES**