

FROM FOSSIL TO FOREST

*Recasting Post-Industrial Landscapes
Through Wooded Commons*



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P5 Presentation | 26.06.2025
Urban Forestry lab

Introduction

Guggenheim Museum
Bilbao.

*Source: Courtesy of
FMGB, Guggenheim
Bilbao Museum, 2015.*

Landschaftspark
Duisburg Nord

*Source: Photoed by
author*

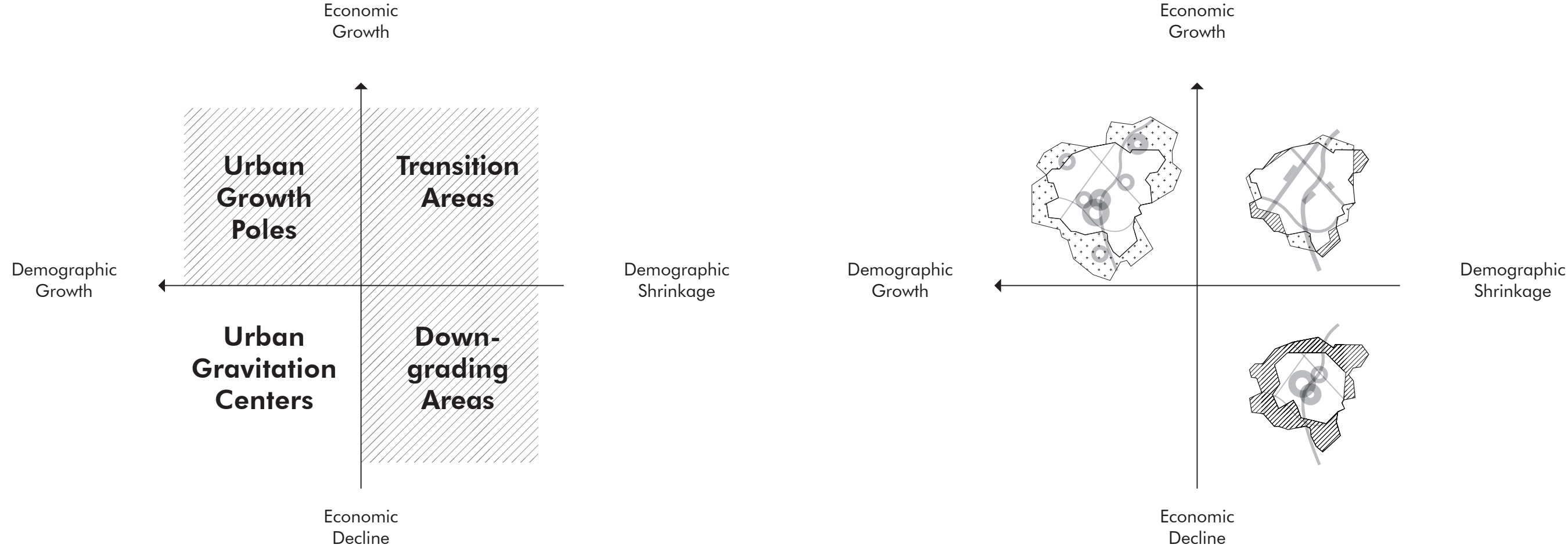
High Line park

*Source: Photoed by Iwan
Baan, [https://www.
thehighline.org/](https://www.thehighline.org/)*



Introduction

Shrinking Cities Classifications
Adapted by author based on
Wiechmann & Pallagst, 2012

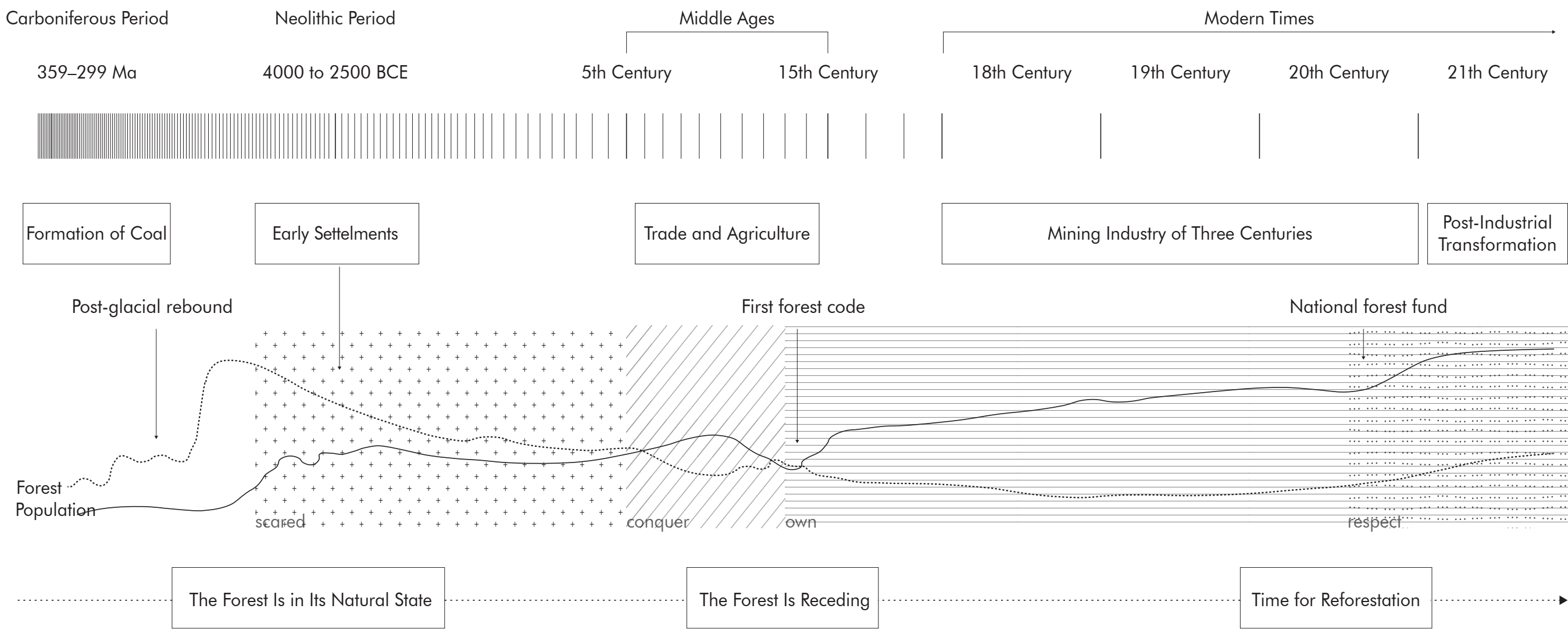


Introduction



Nord-Pas-de-Calais mining basin

Introduction



Introduction

Nord-Pas-de-Calais Mining Basin:

Remarkable as a landscape shaped over three centuries of coal extraction from the 1700s to the 1900s, the site consists of 109 separate components over 120,000 ha. It features mining pits (the oldest of which dates from 1850) and lift infrastructure, slag heaps (some of which cover 90 ha and exceed 140 m in height), coal transport infrastructure, railway stations, workers' estates and mining villages including social habitat, schools, religious buildings, health and community facilities, company premises, owners and managers' houses, town halls and more. The site bears testimony to the quest to create model workers' cities from the mid 19th century to the 1960s and further illustrates a significant period in the history of industrial Europe. It documents the living conditions of workers and the solidarity to which it gave rise.

--UNESCO World Heritage List

Introduction



Terril



Cité minier

Introduction

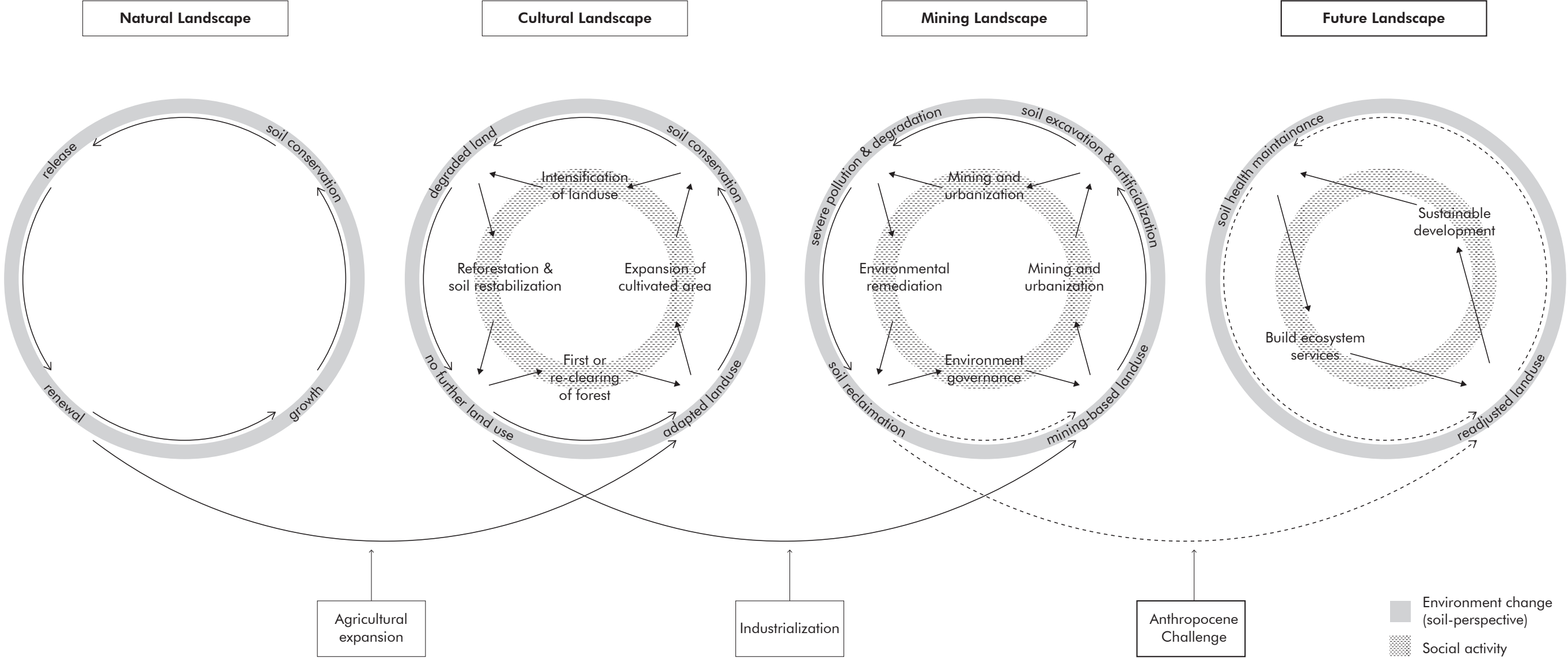


Introduction

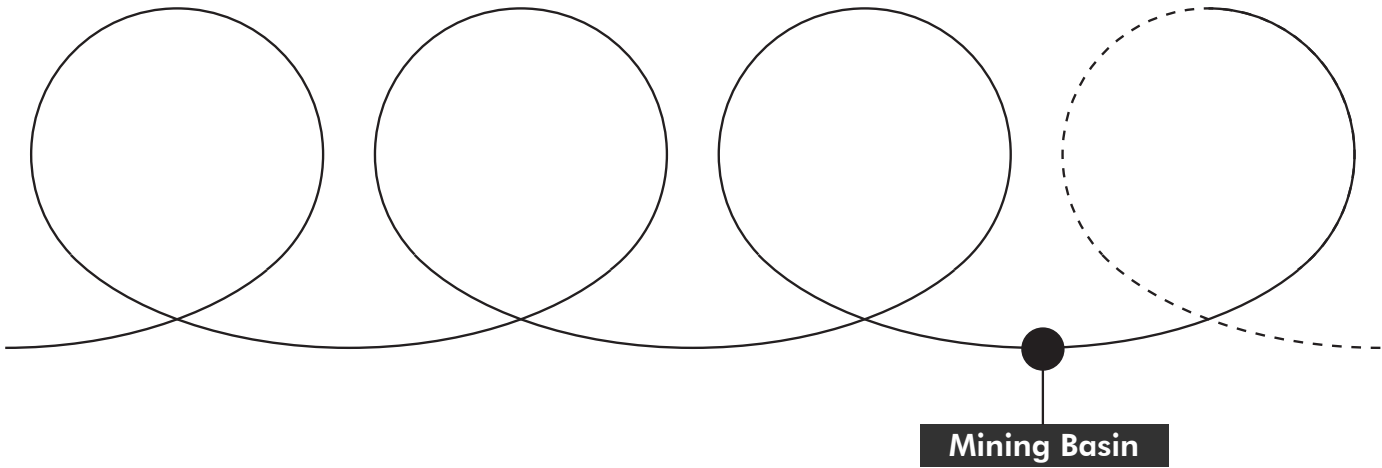


Inevitable Shrinkage

Introduction



Introduction



Call for Adaptation

Introduction

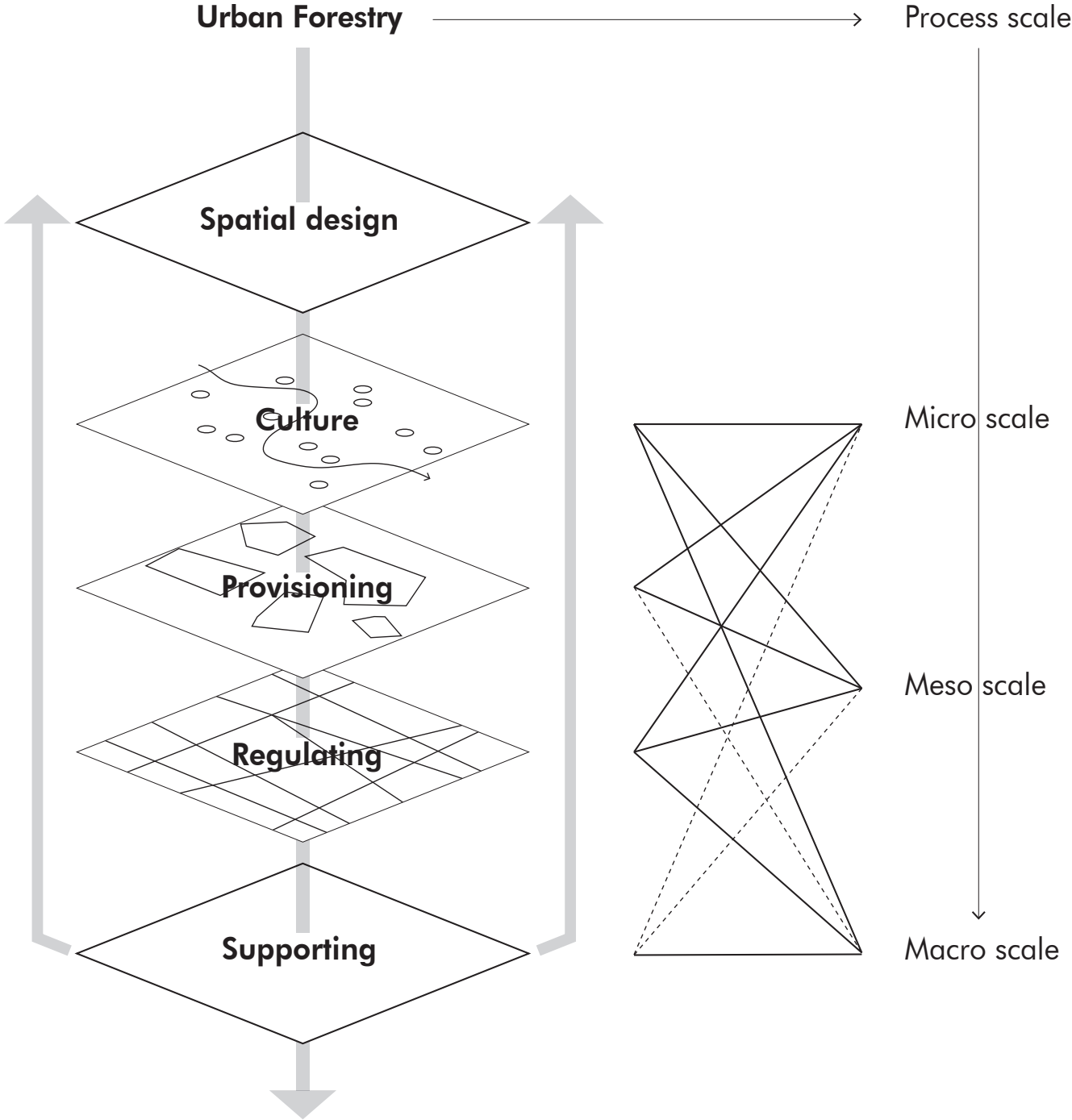
		Scale of the Urban Forest				
		Element	Configuration	Area		
Dimension of the Urban Forest	Spatial	Experience, sequence, green structure, tree architecture				
	Social-cultural	Identity, recreation, education, mental health, aesthetics			Cultural	Groups of Ecosystem Services
	Economy	Food, wood production, employment, leisure			Provisioning	
	Environmental	Microclimate regulation, water filtration, air pollution reduction			Regulating	
	Ecology	Habitat for biodiversity, nutrient cycle, soil health			Supporting	
		Design				

Method

How can *urban forestry* serve as an **ecosystem services** tool to reshape the **post-industrial territory** and foster **social-environmental adaptation**?

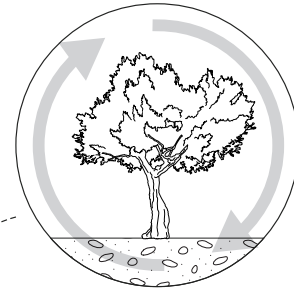
*How does forestry contribute to **ecological regeneration** in the Anthropocene? | How does forestry facilitate **socio-economic transformation** in post-industrial landscape?*
*How does forestry improve the **socio-cultural resilience** in the context of urban shrinkage? | How does forestry **balance** between different roles in the new paradigm of adaptation?*

Method

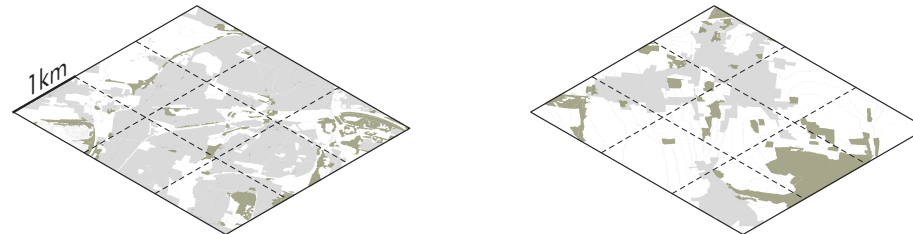


Method

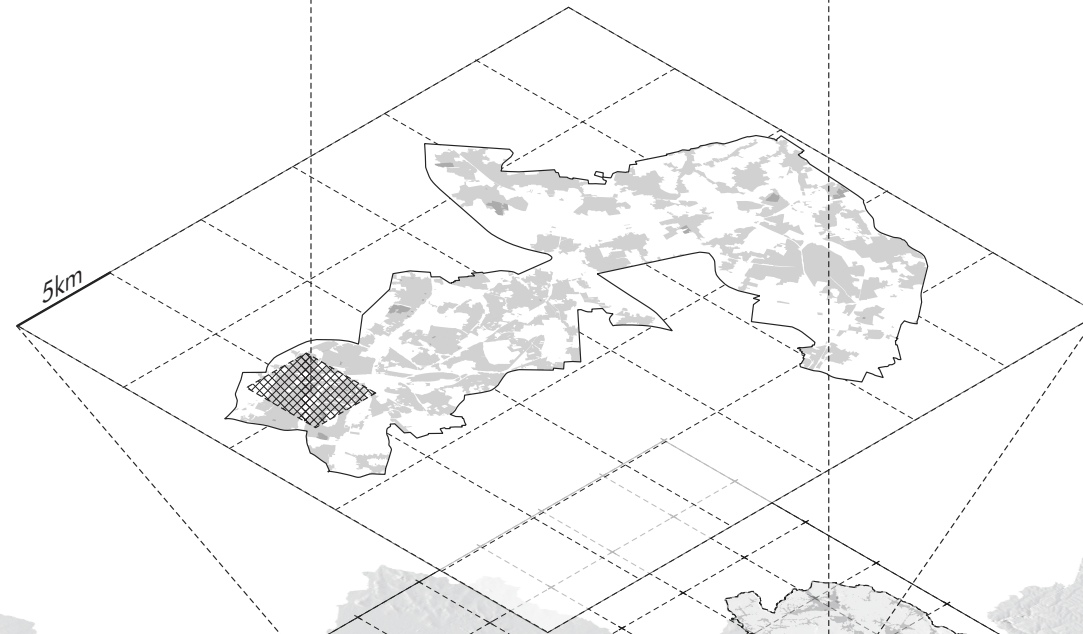
Tree - Process Scale



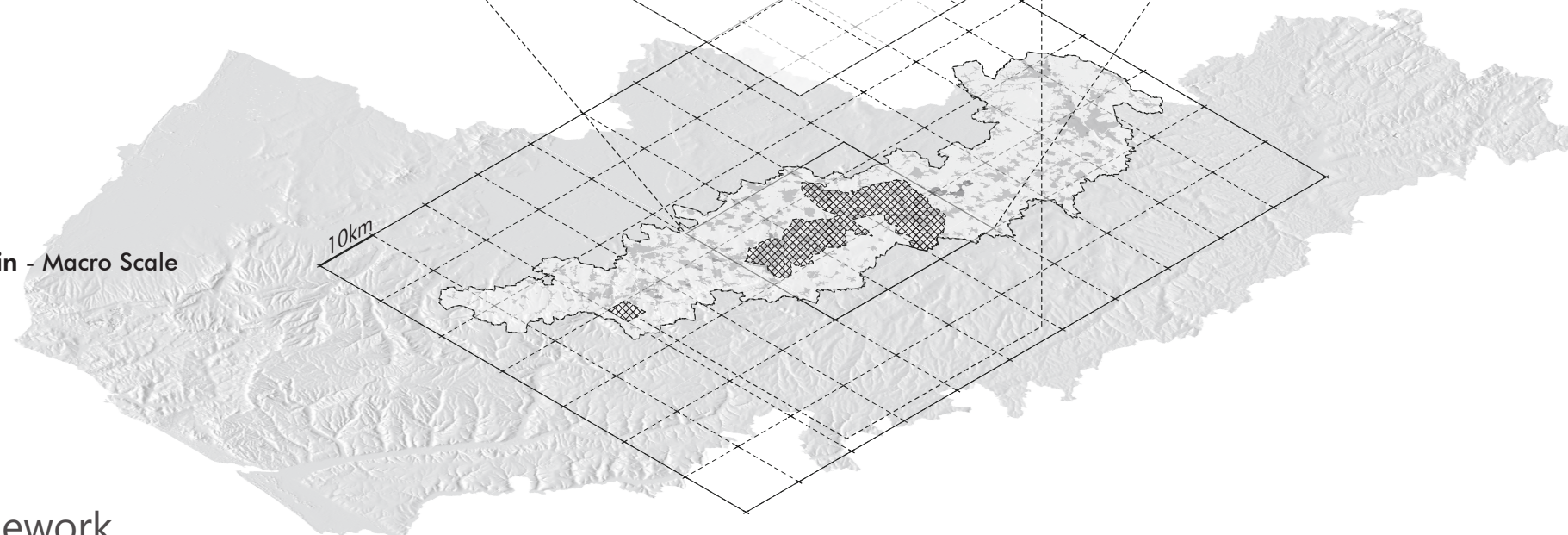
Local Projection - Micro Scale

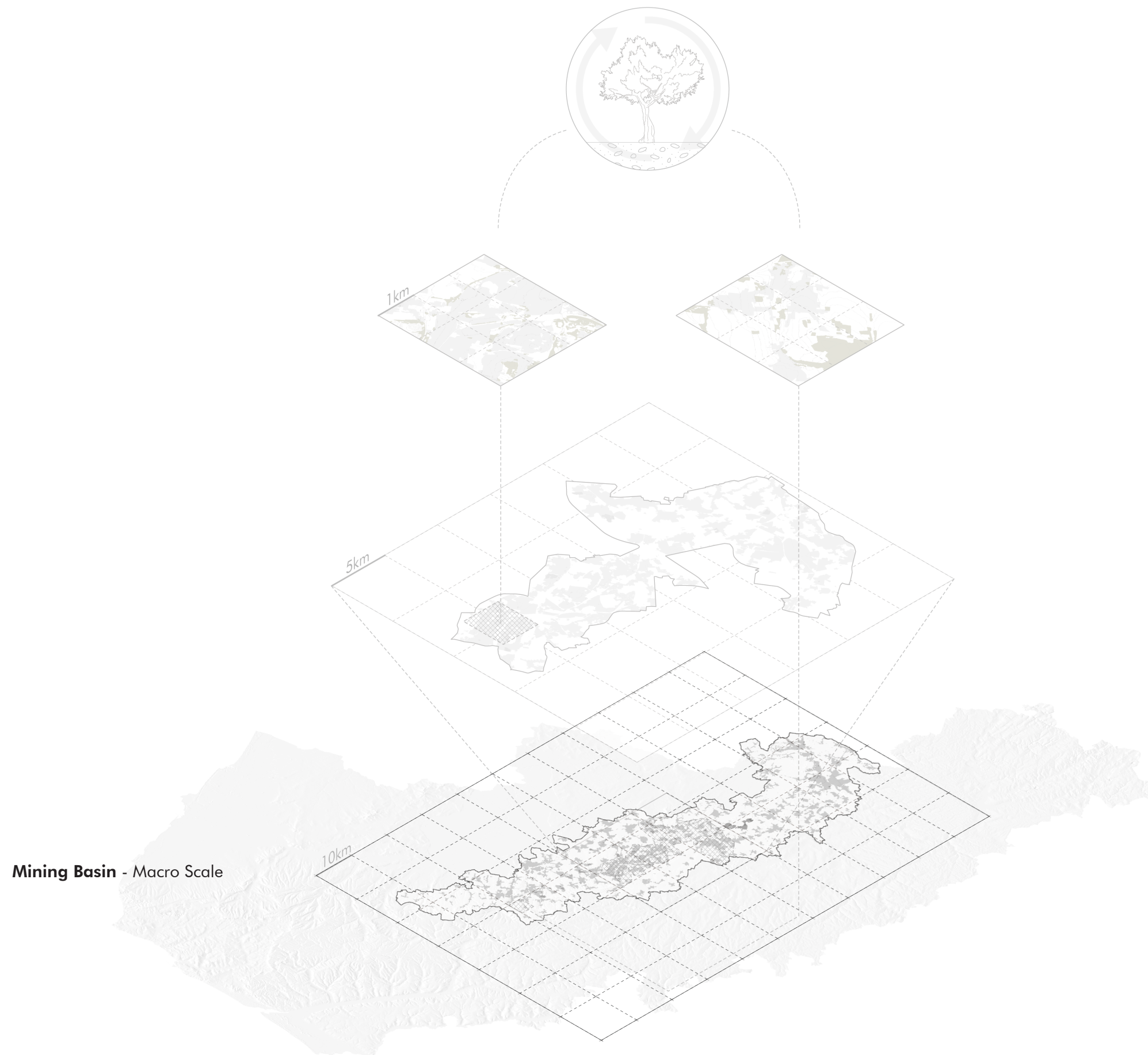


Urban Agglomeration - Meso Scale



Mining Basin - Macro Scale



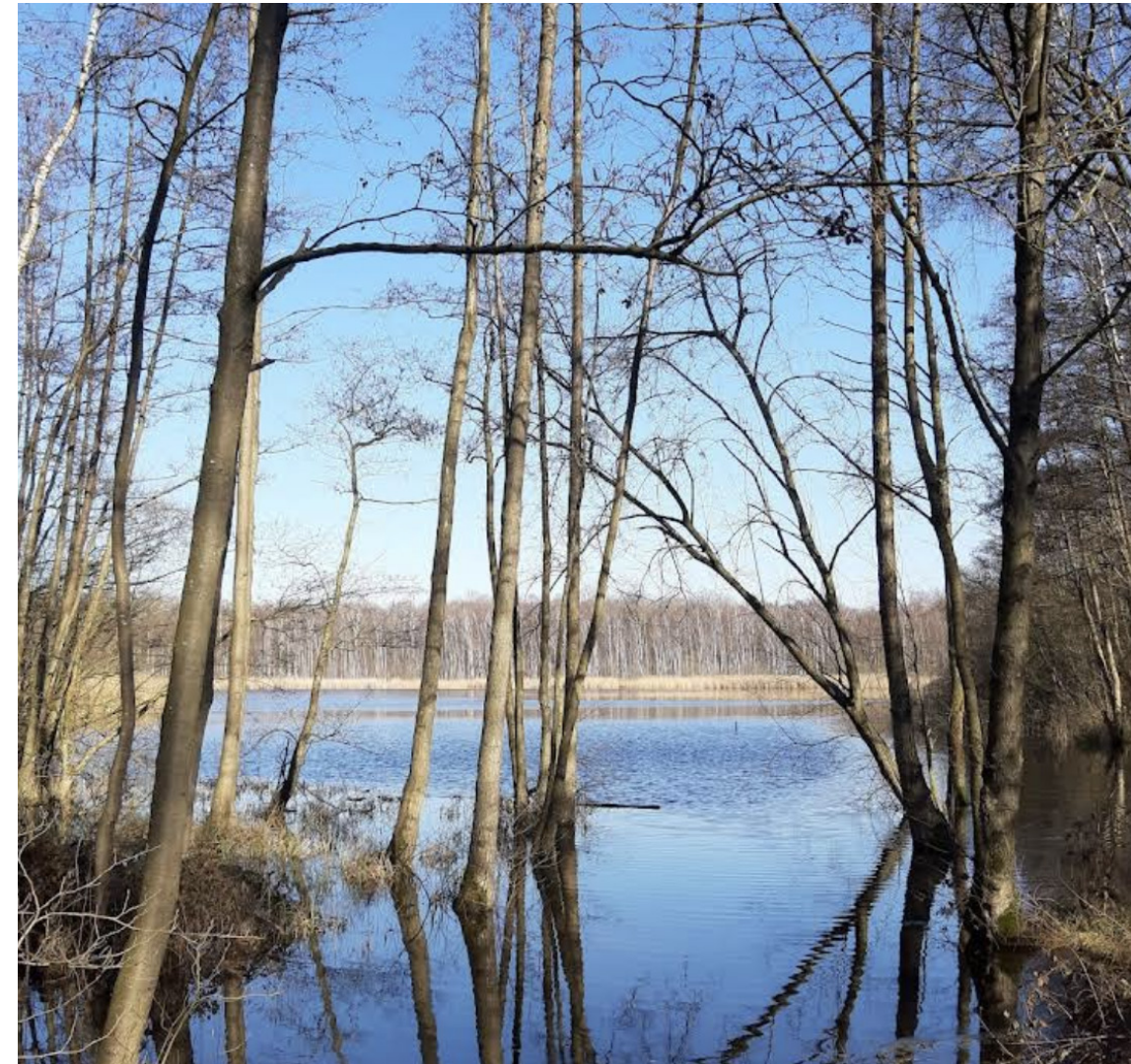


Research for Design

Mining Basin - Macro Scale



Landscape Typology





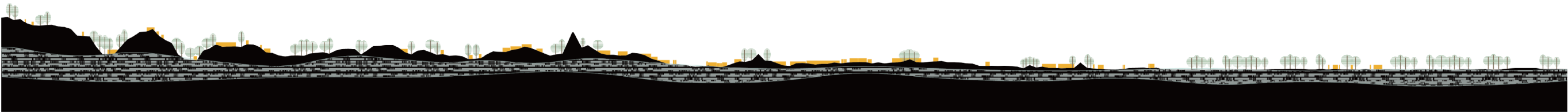
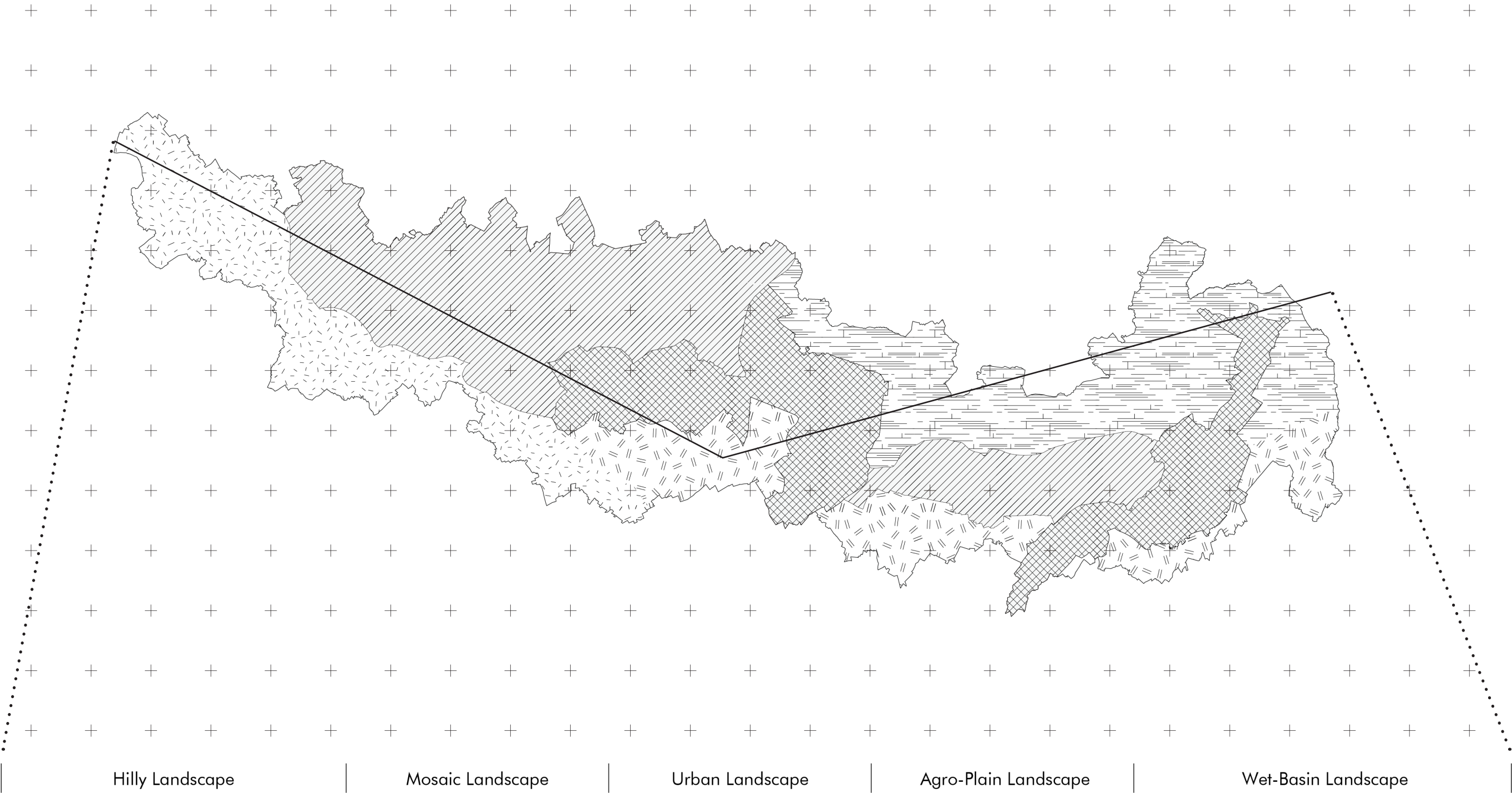
Research for Design



Urbanized Area

Mining Basin - Macro Scale

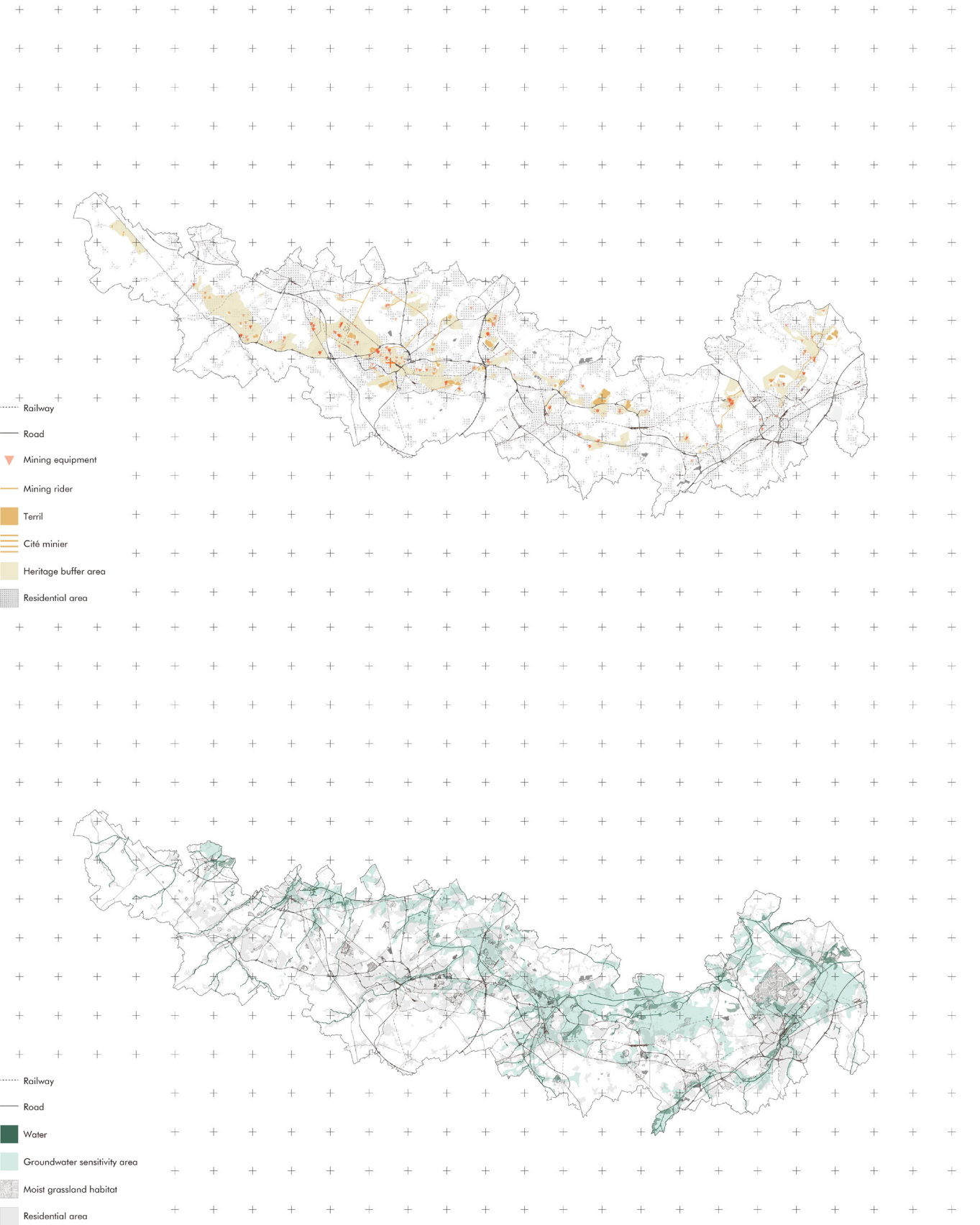
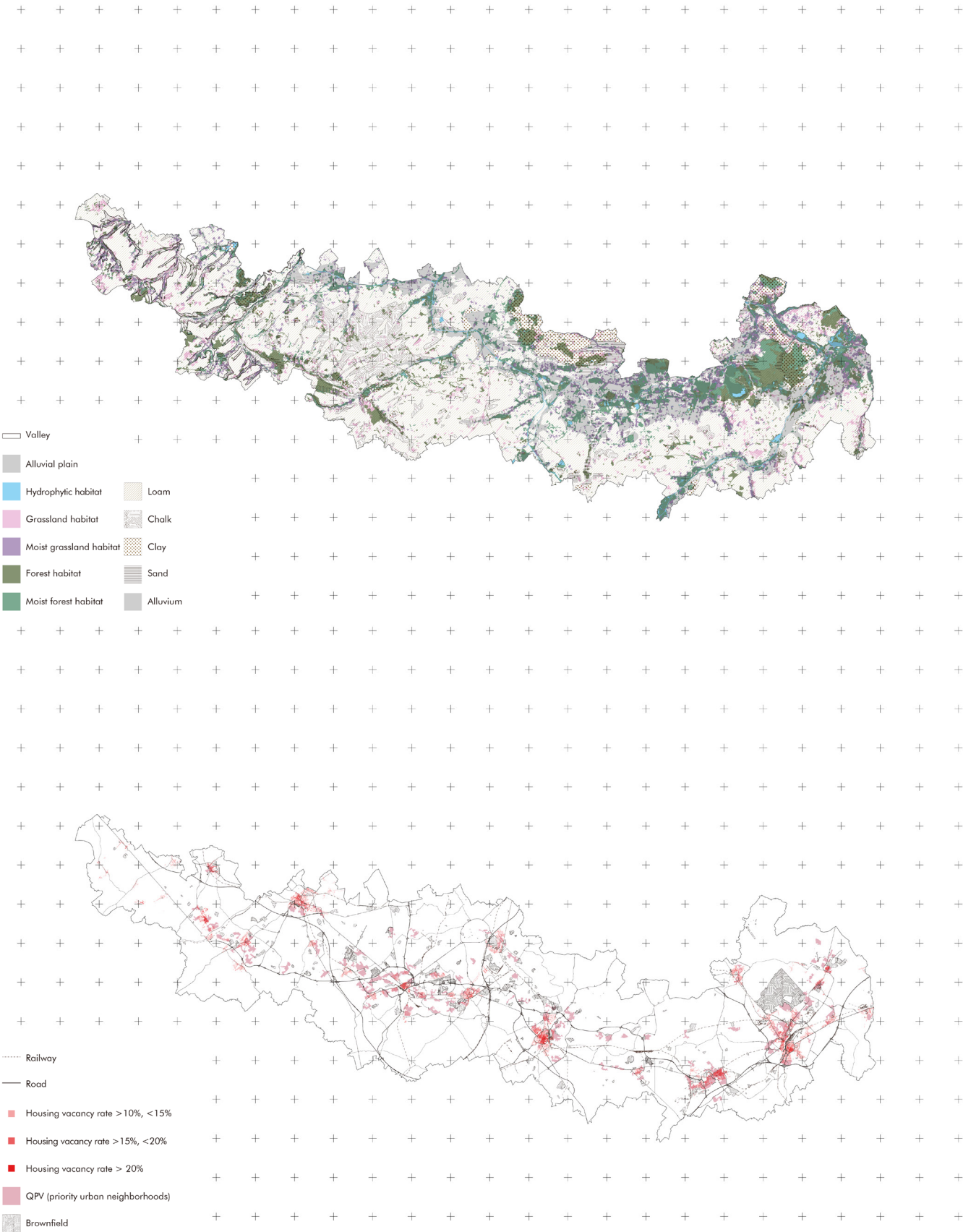




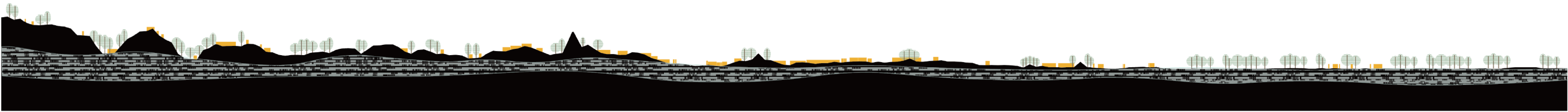
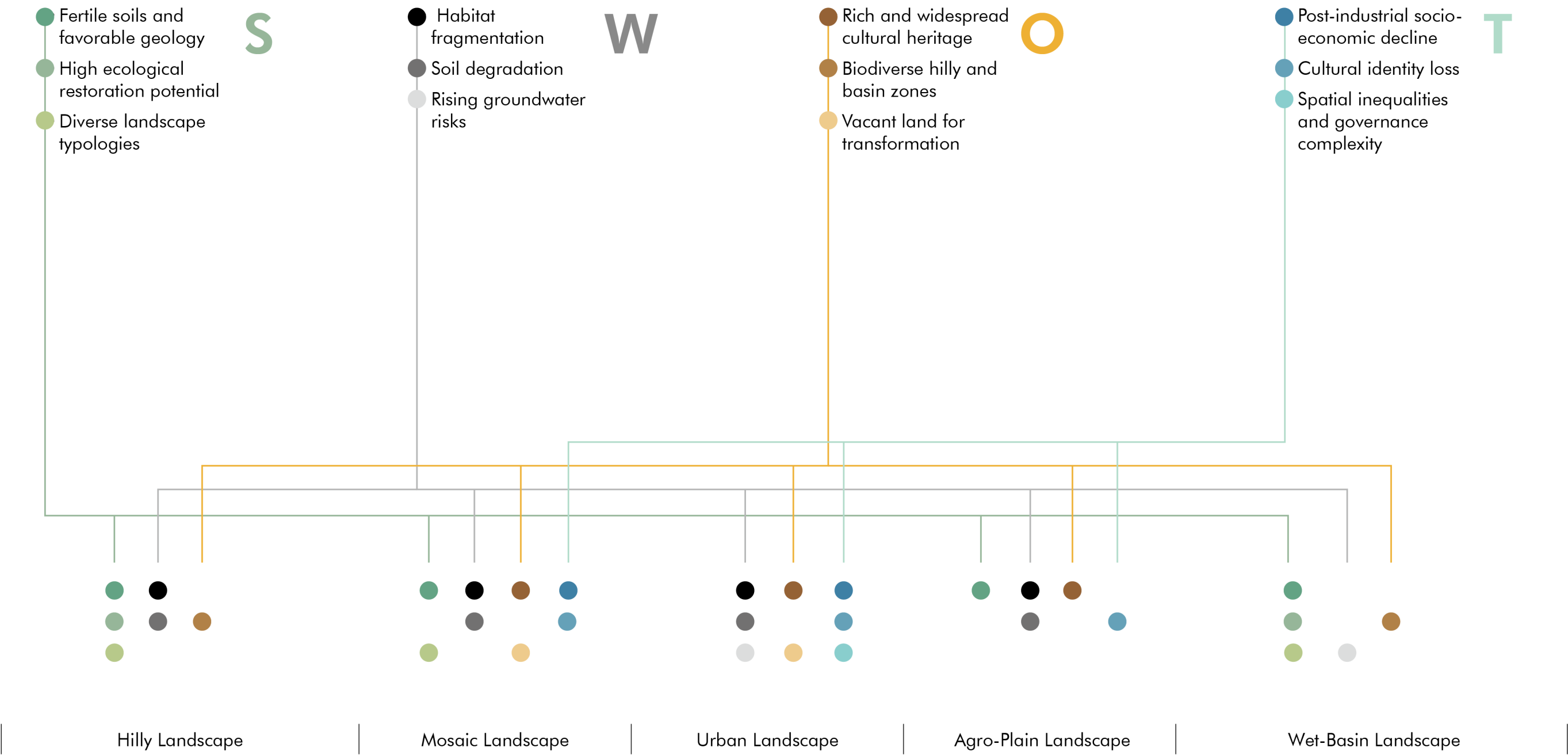
Conceptual Section

Research for Design

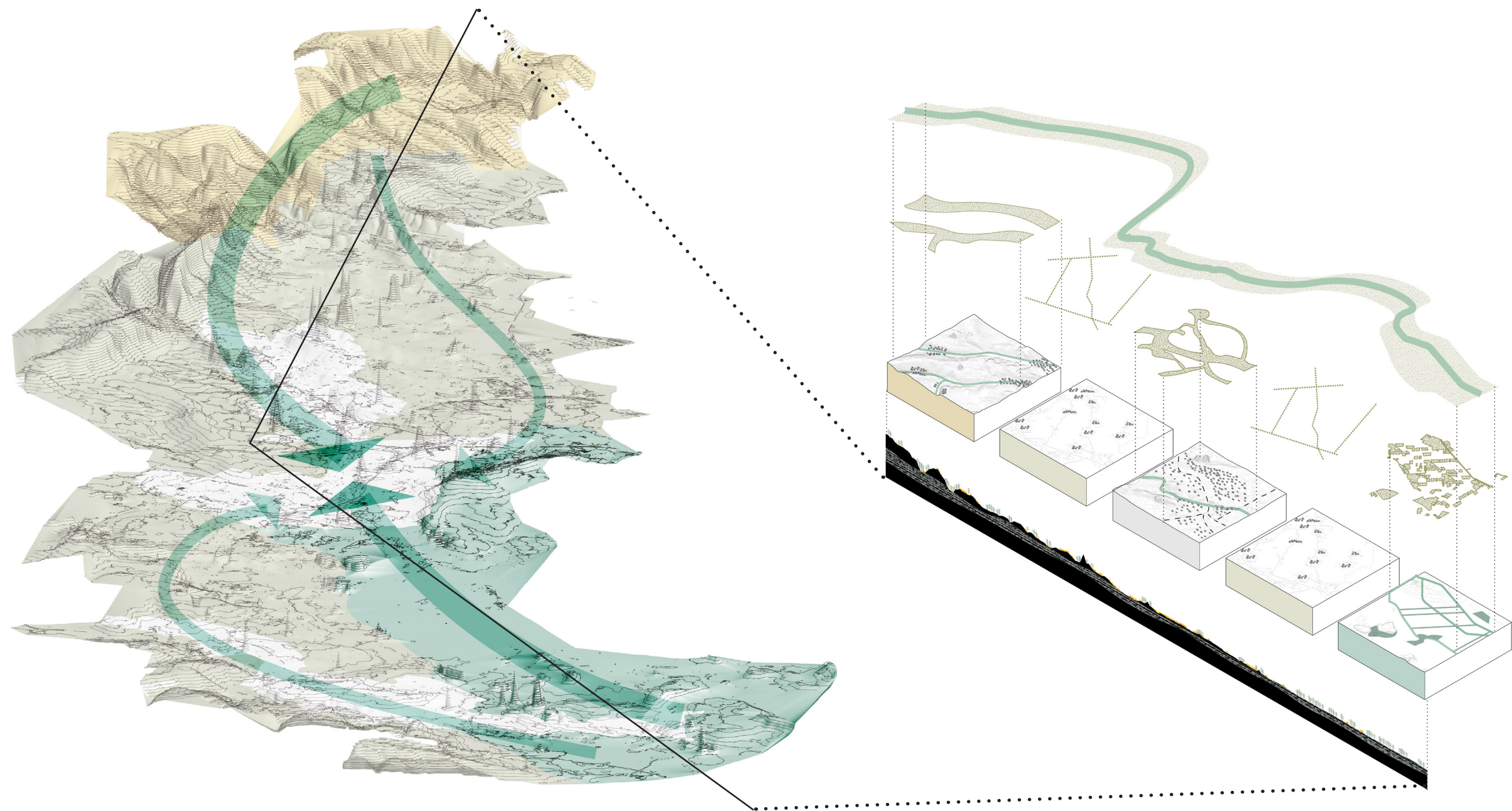
Mining Basin - Macro Scale



Analysis

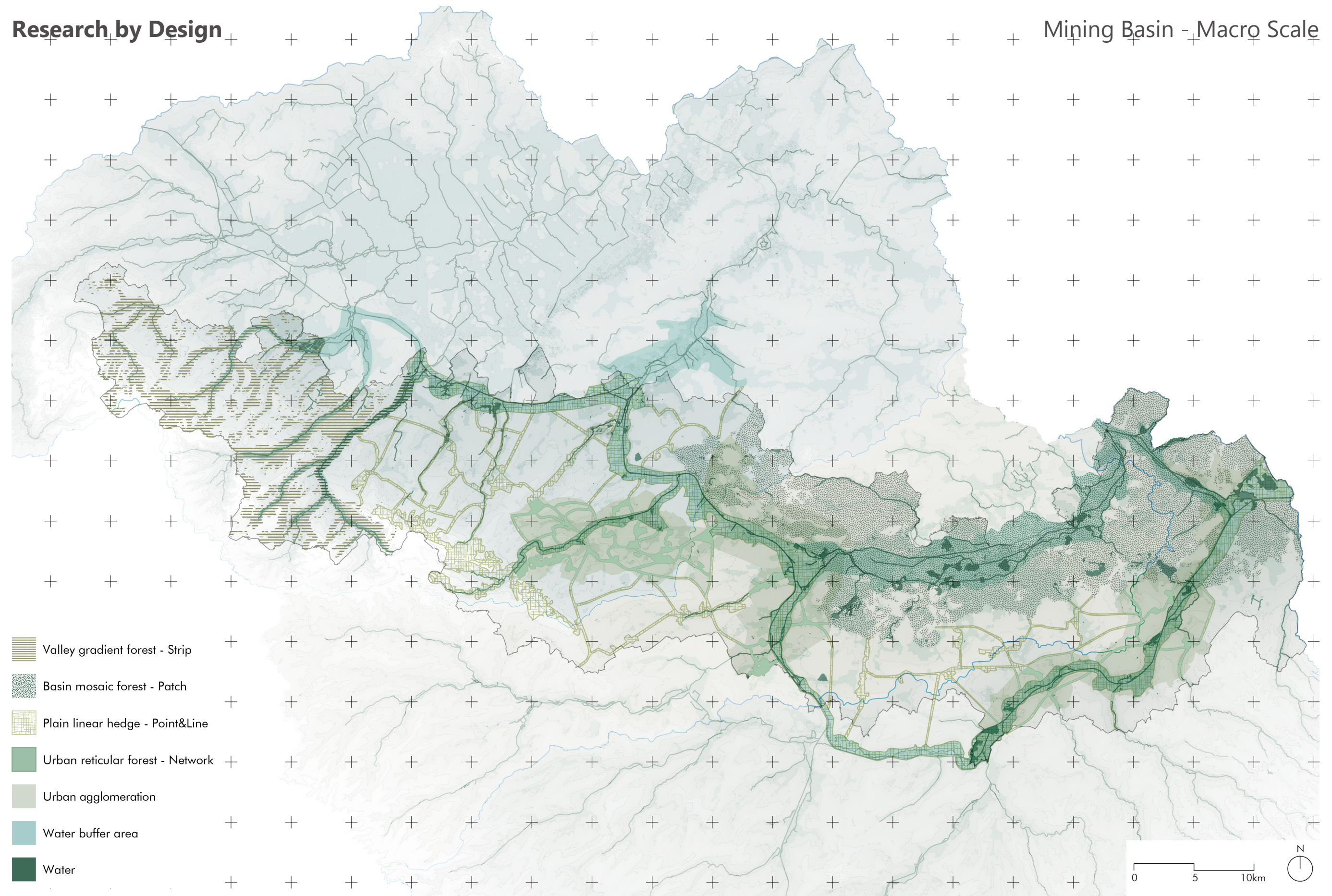


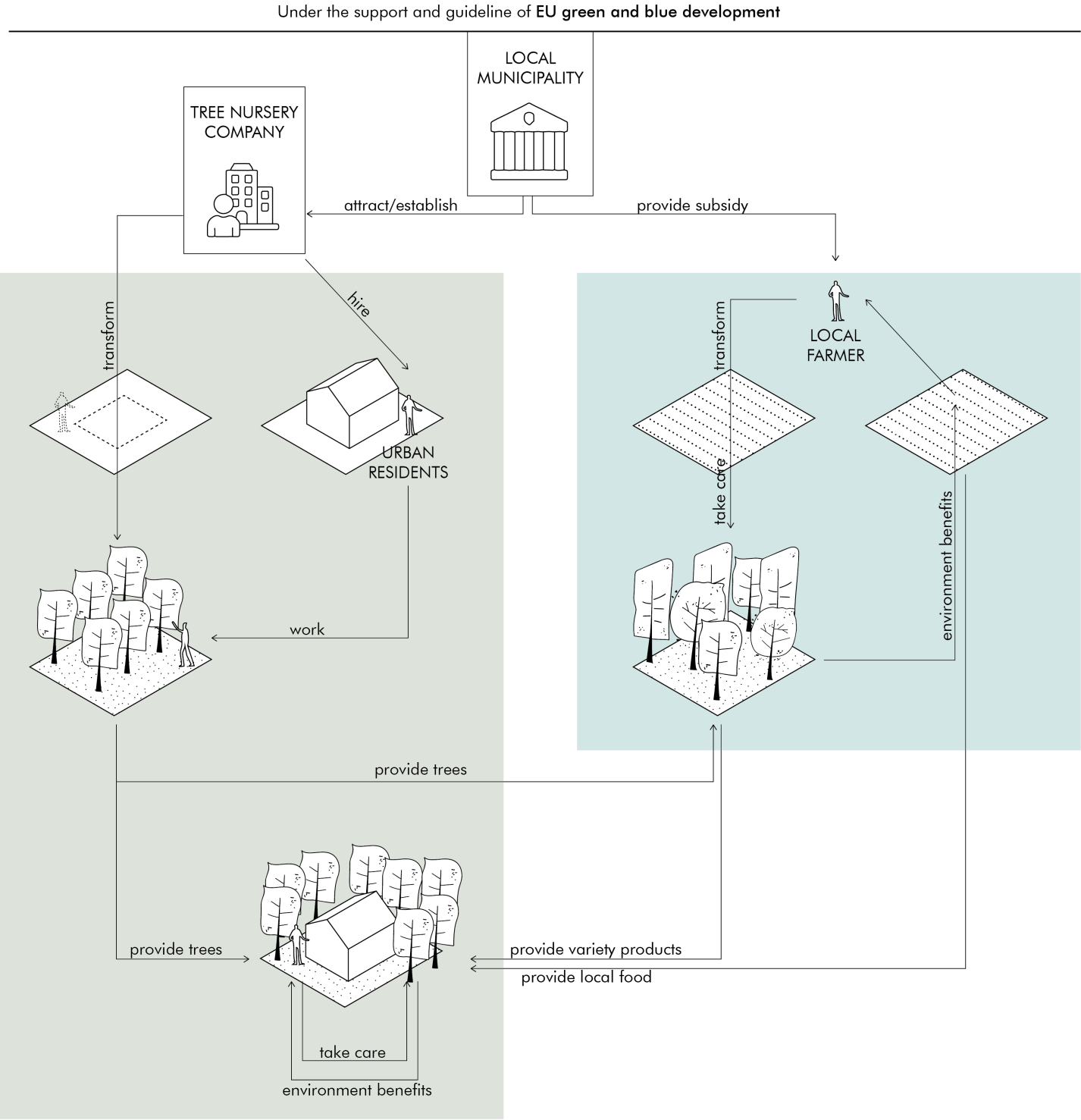
SWOT analysis



Research by Design

Mining Basin - Macro Scale





Research by Design



Strategic Succession

Mining Basin - Macro Scale

Phrase 1-Activate



Phrase 2-Connect

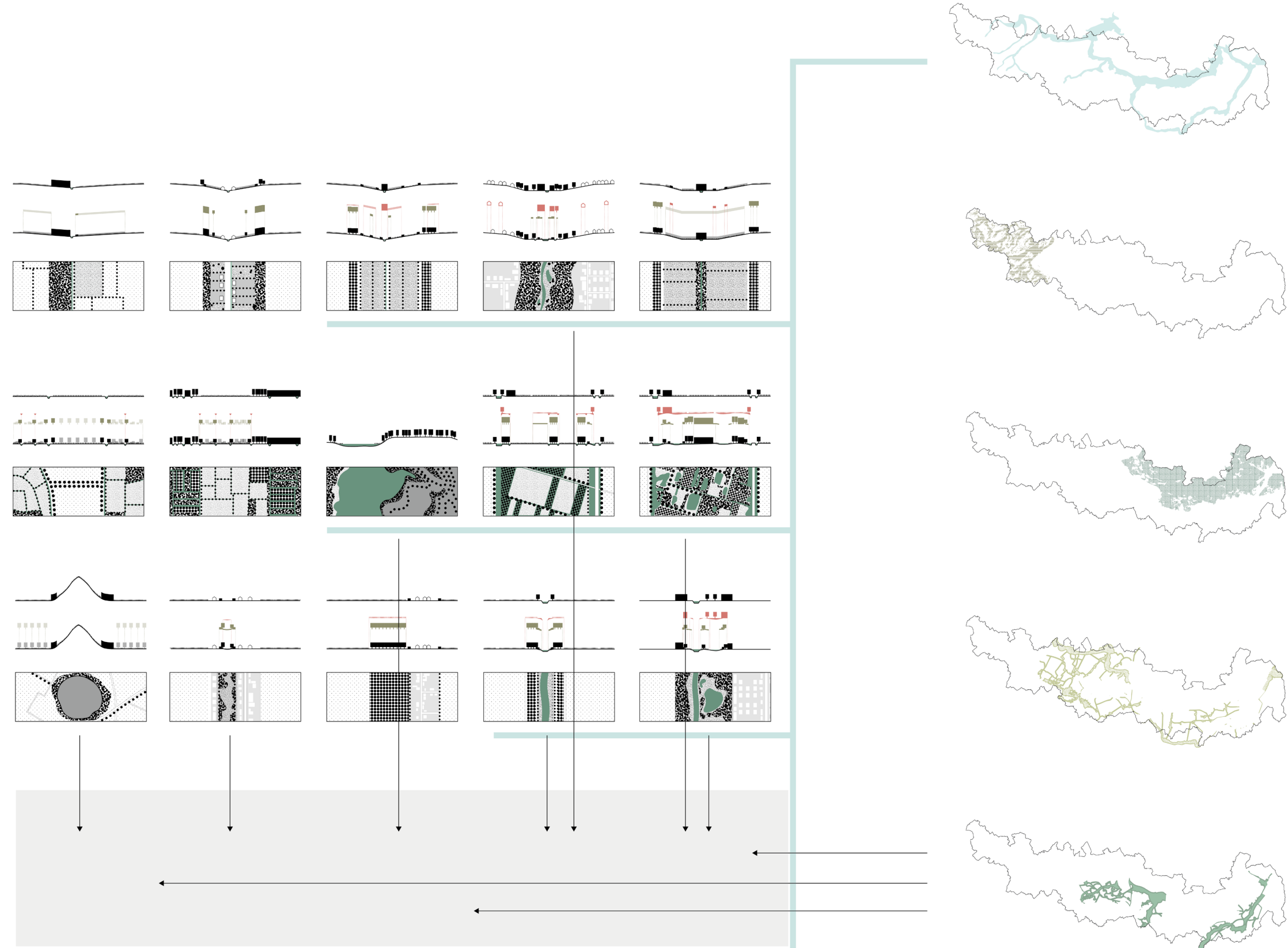


Phrase 3-Diffuse

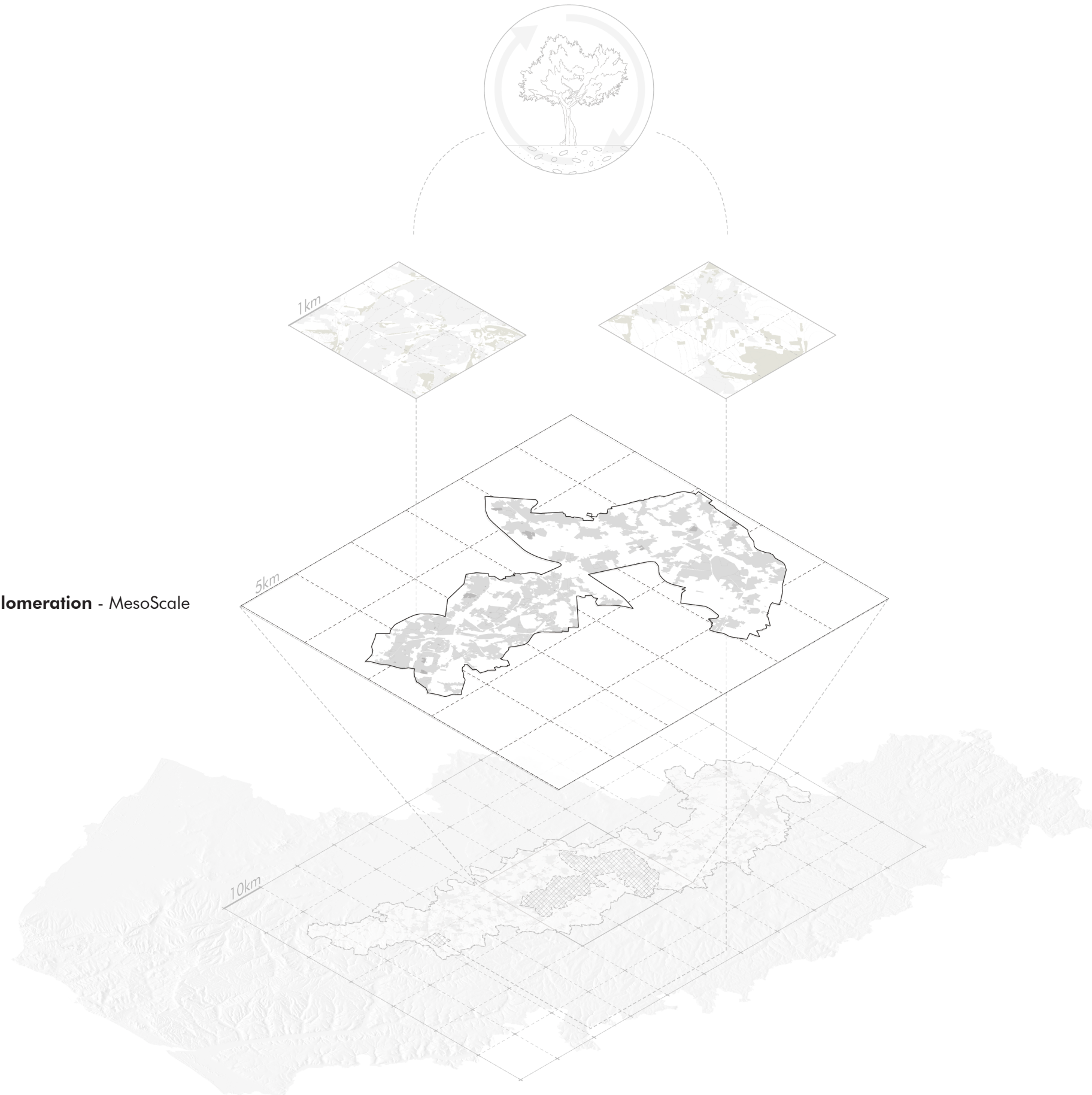


Phrase 4-Strengthen





Urban Agglomeration - MesoScale



Research for Design



Urban Agglomeration - Meso Scale



'Broken' Land

Research for Design

Urban Agglomeration - Meso Scale



'Uncommon' Woods

Research for Design

Urban Agglomeration - Meso Scale



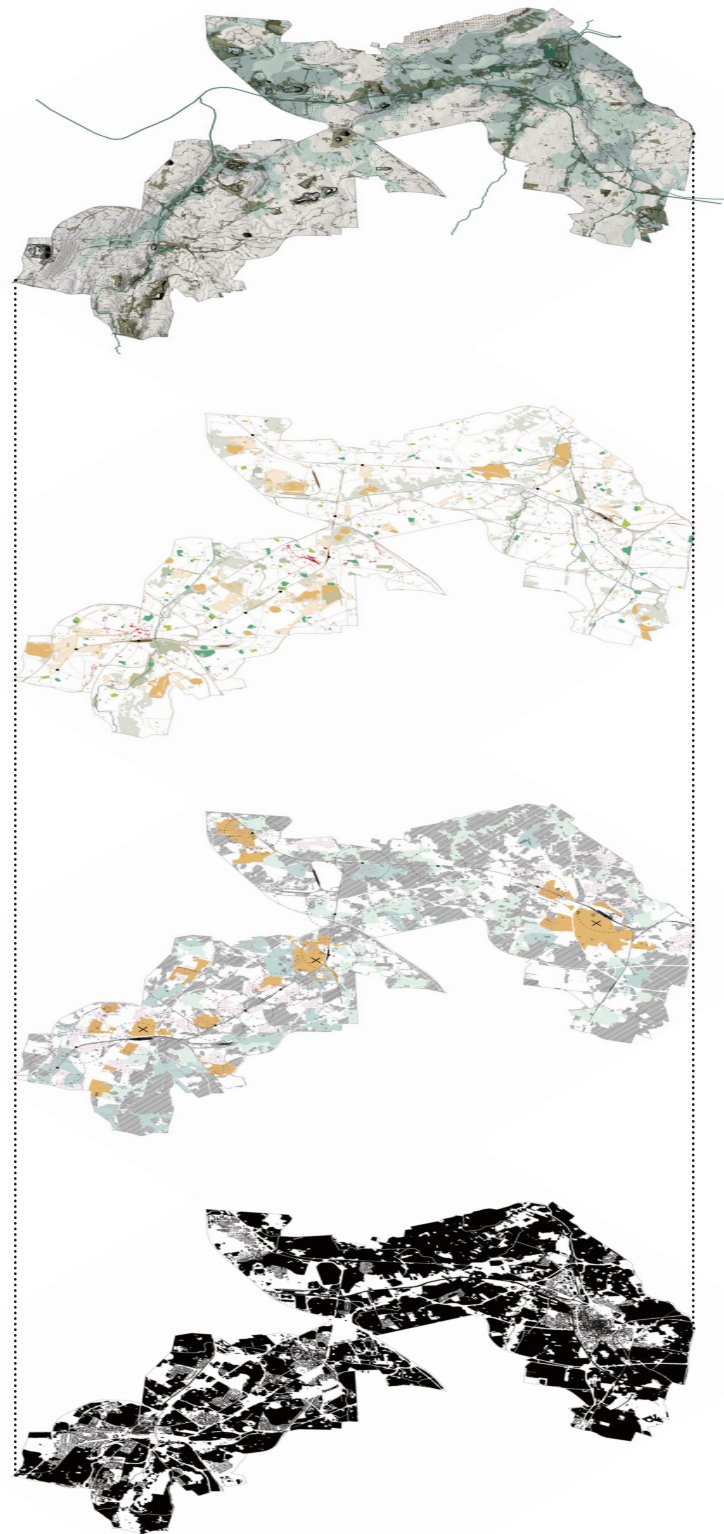
'Up and Down'

Research for Design

Urban Agglomeration - Meso Scale



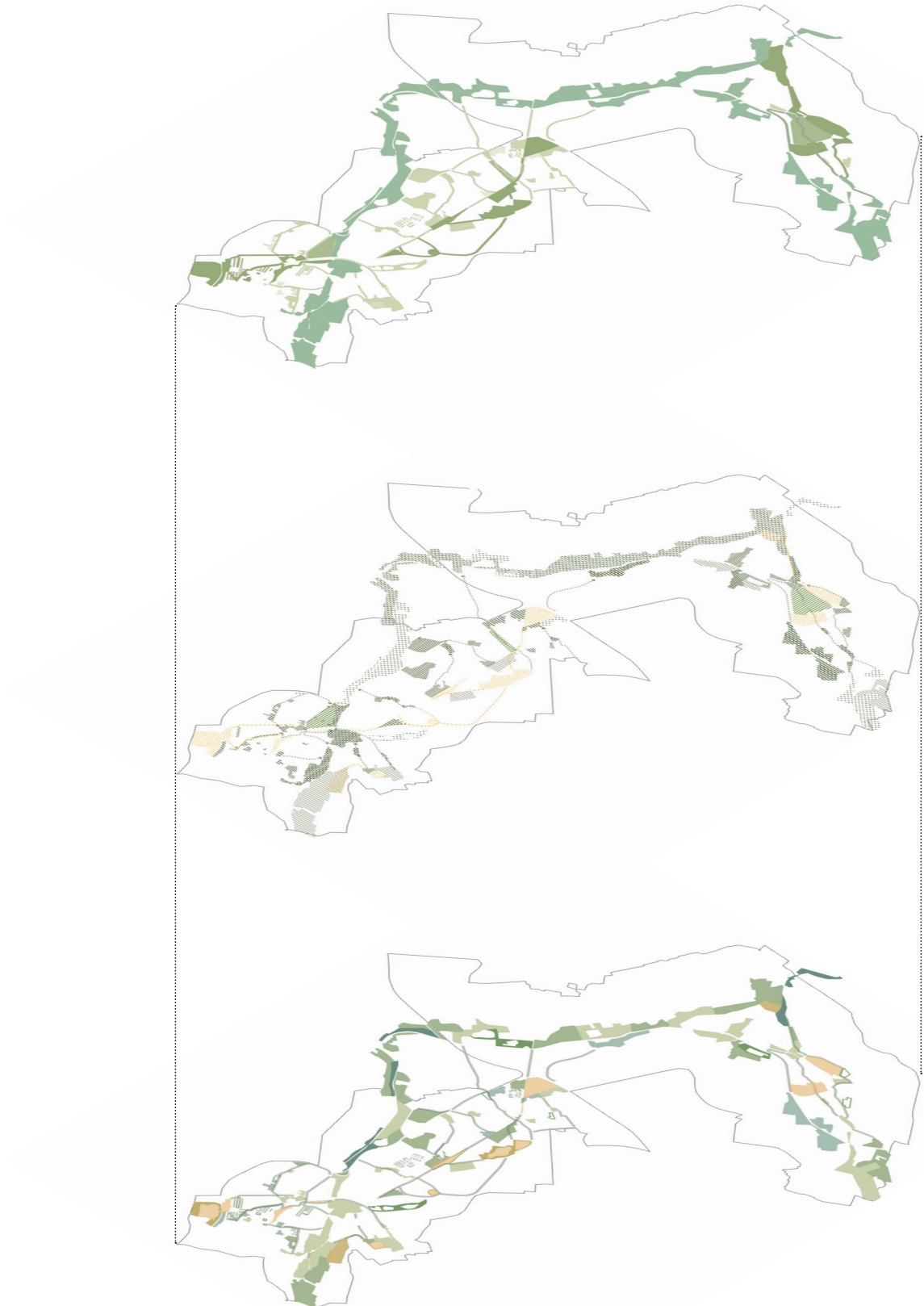
'2.5th Place'



Woodland structure







Structural layer

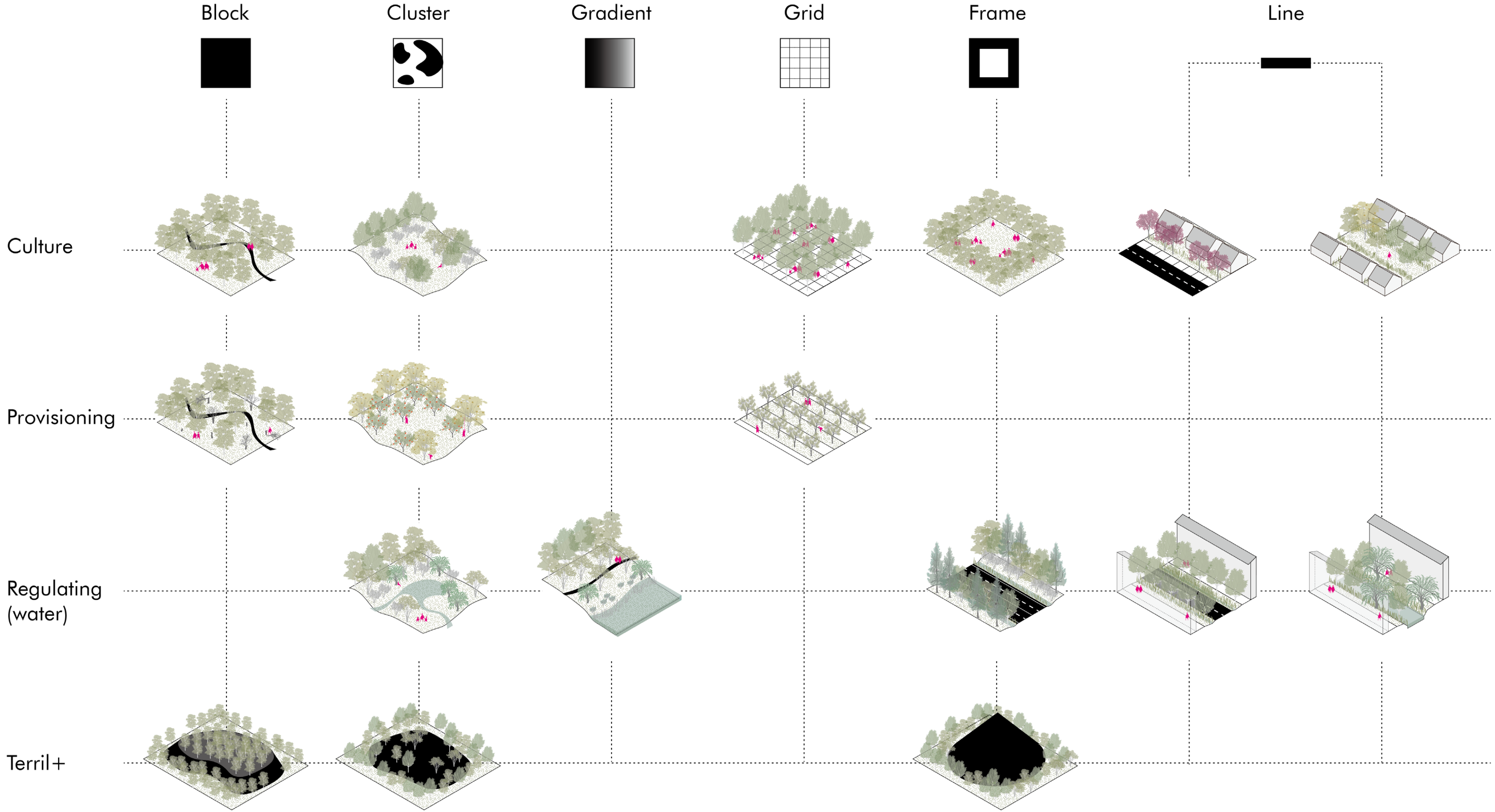
- Mega Blue-Green Corridor
- Memorial Forest Path
- Daily Woodland Commons

Functional layer

- Regulating
- Regulating
- Provisioning
- Culture
- Culture-heritage
- Culture-route

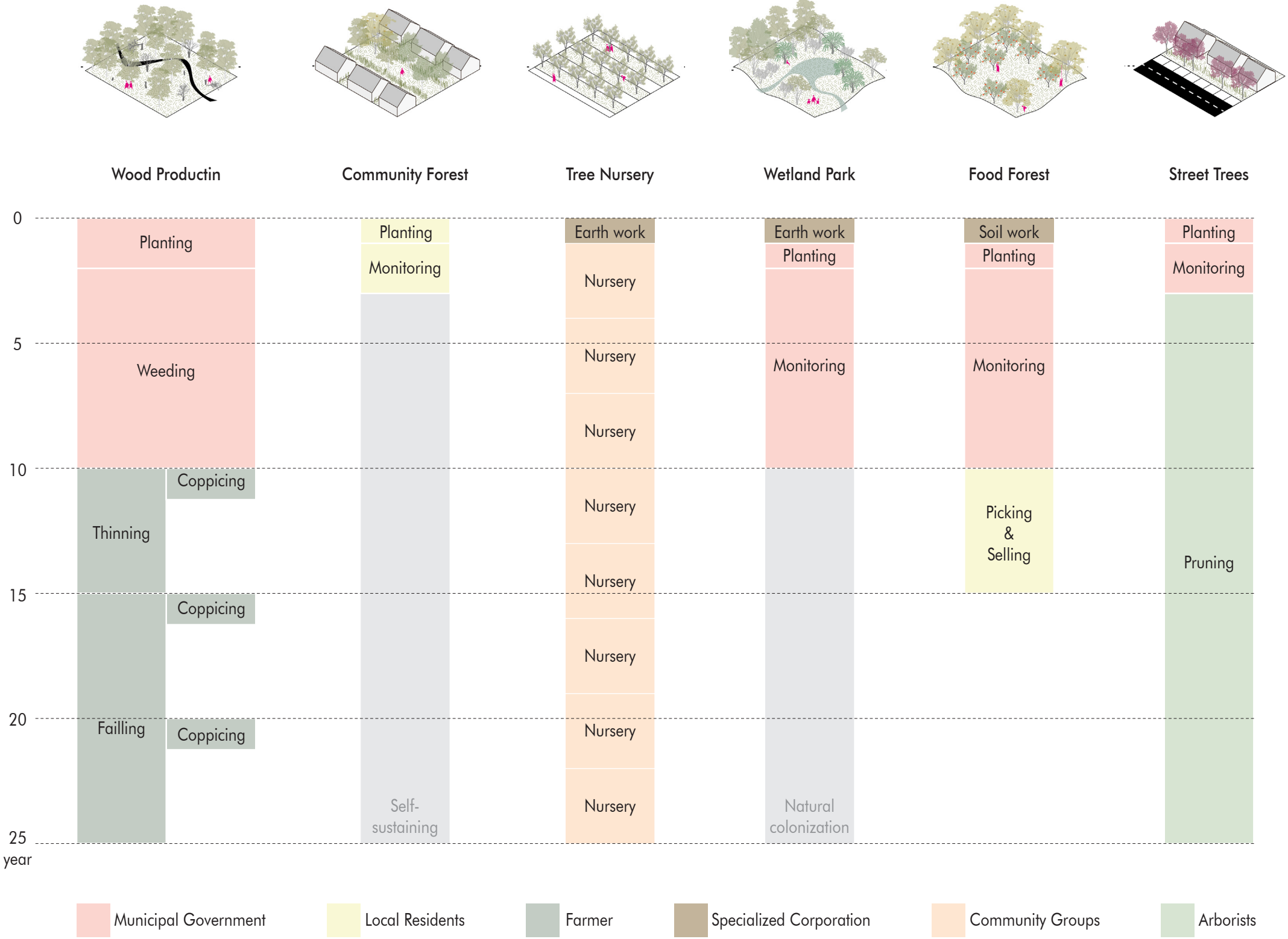
Morphological layer

- Block
- Cluster
- Gradient
- Grid
- Frame
- Line
- Other(Heritage)



Research by Design

Urban Agglomeration - Meso Scale

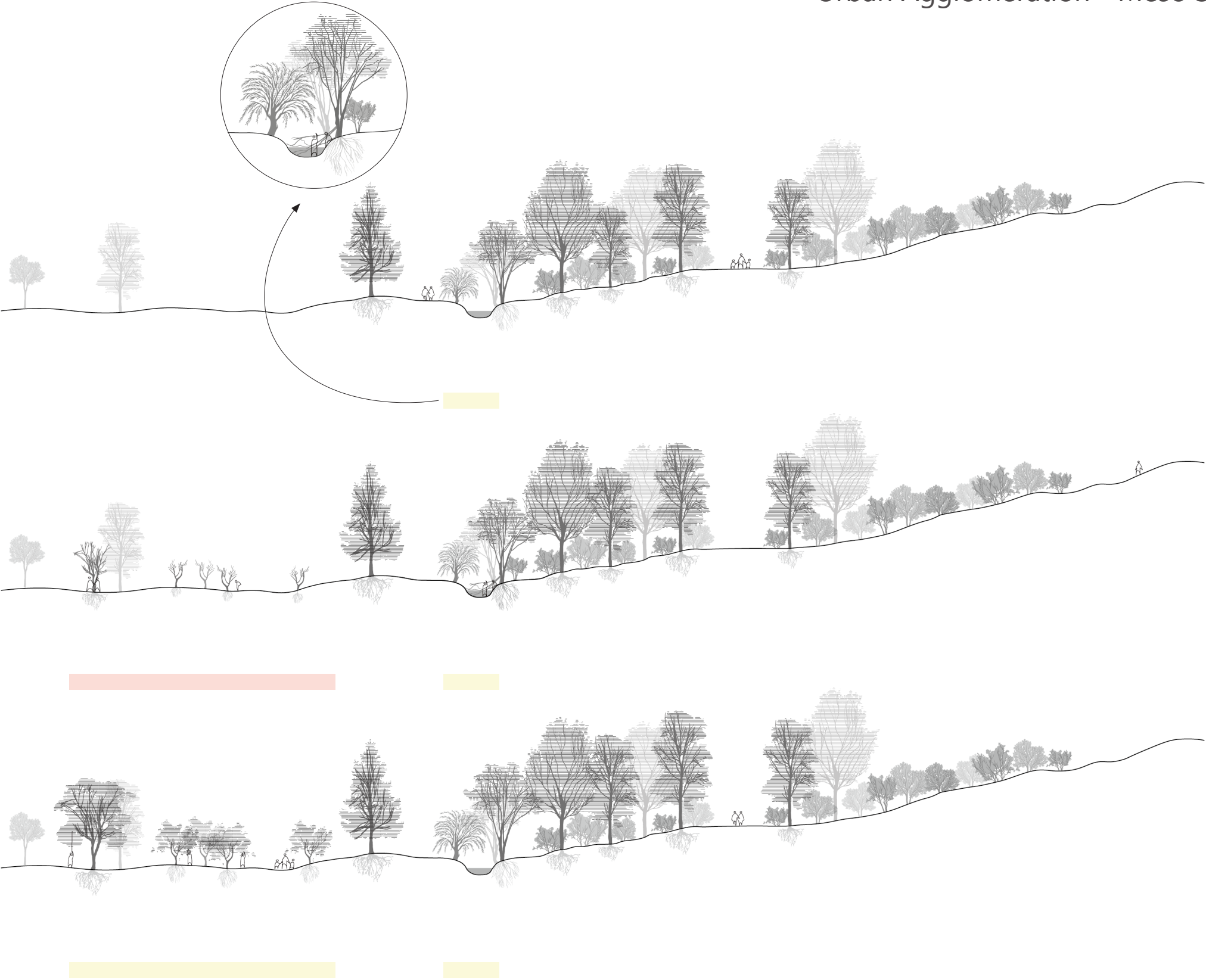
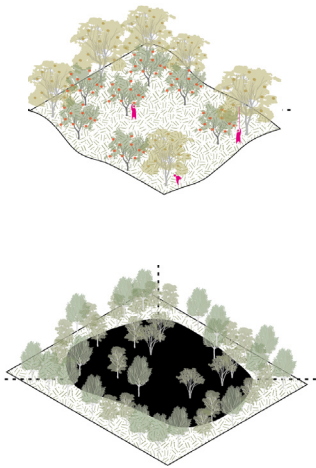


Actors & Actions



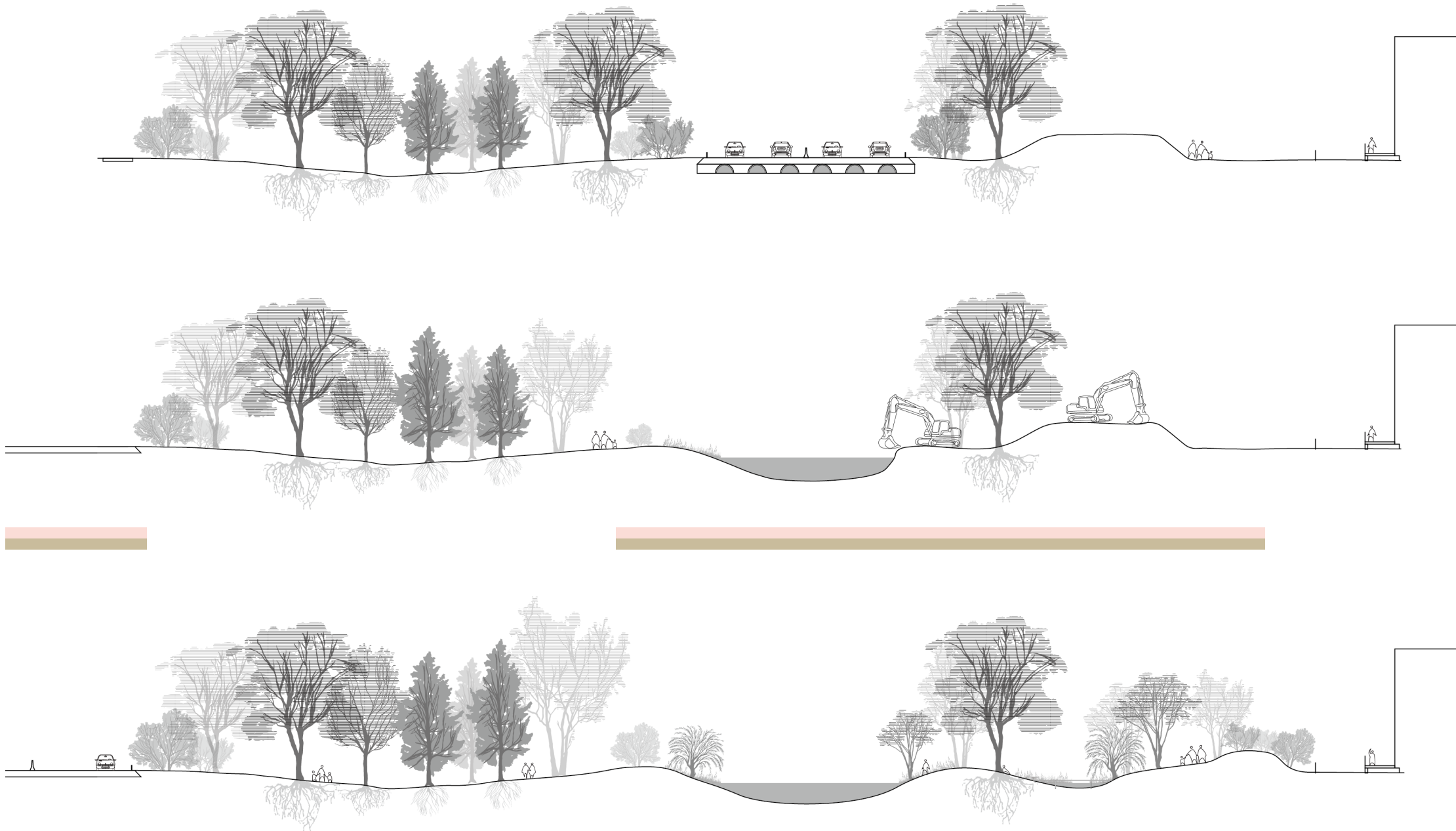
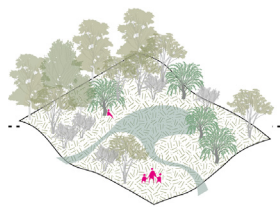
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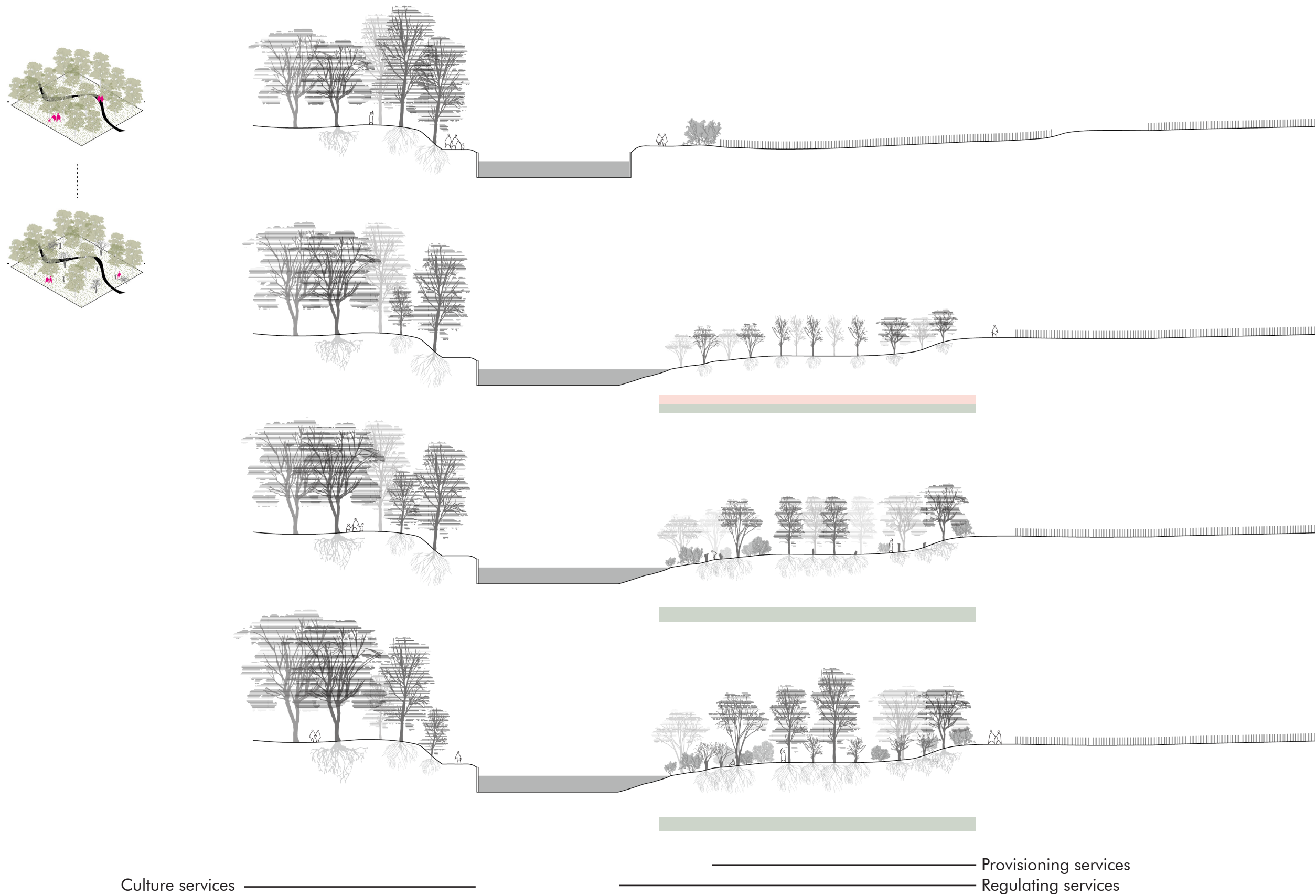
Urban Agglomeration - Meso Scale

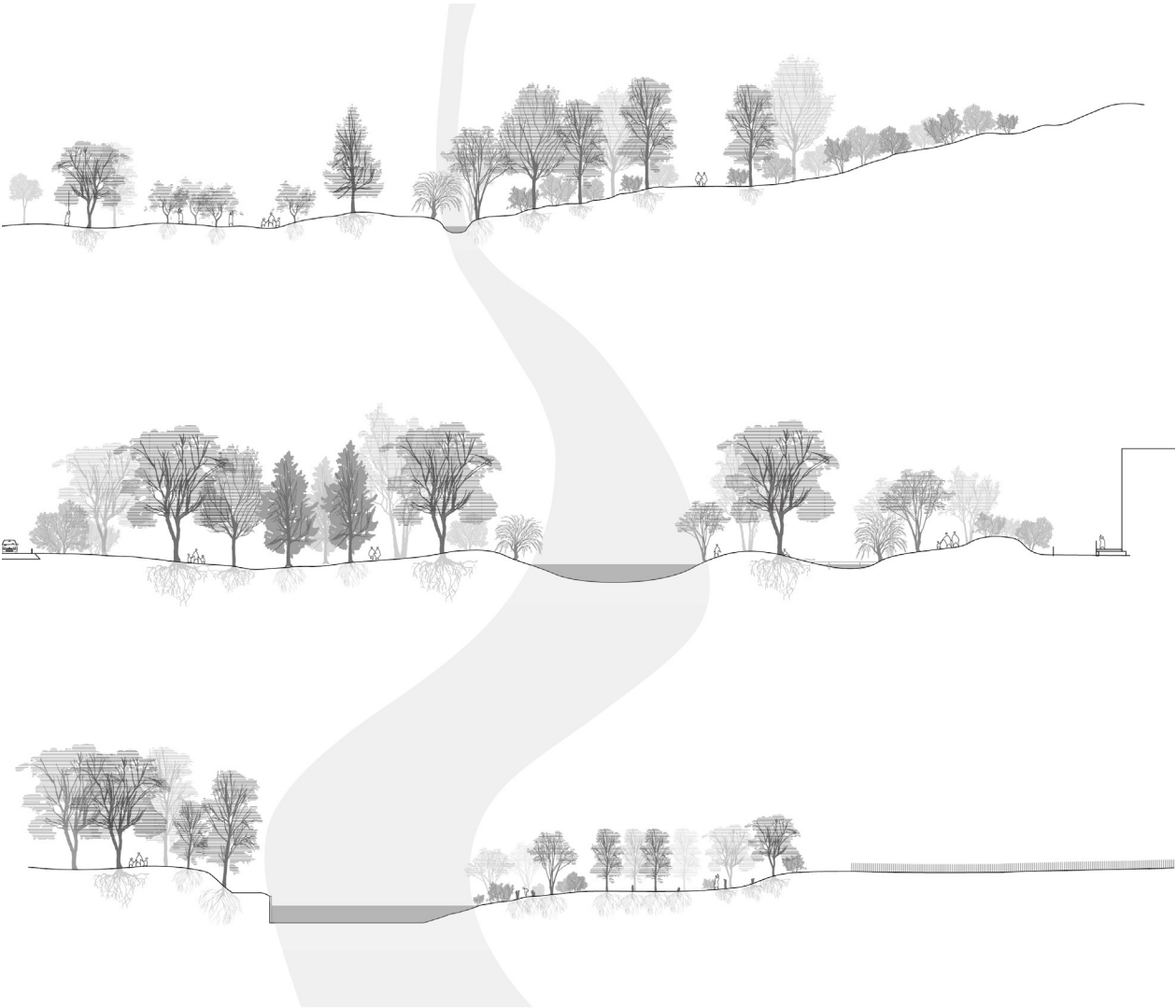
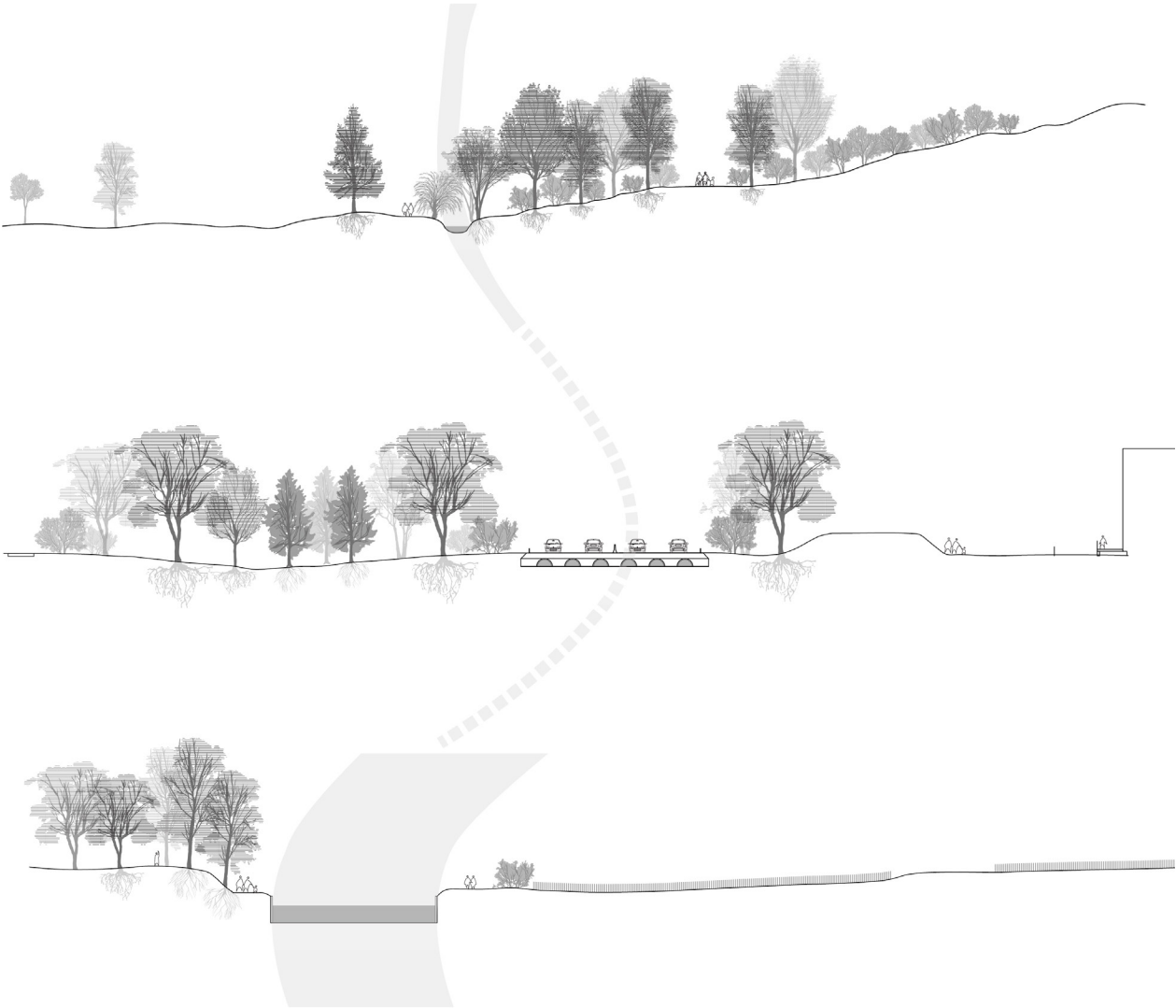


Provisioning services ————— Regulating services
Culture services

The Key Action

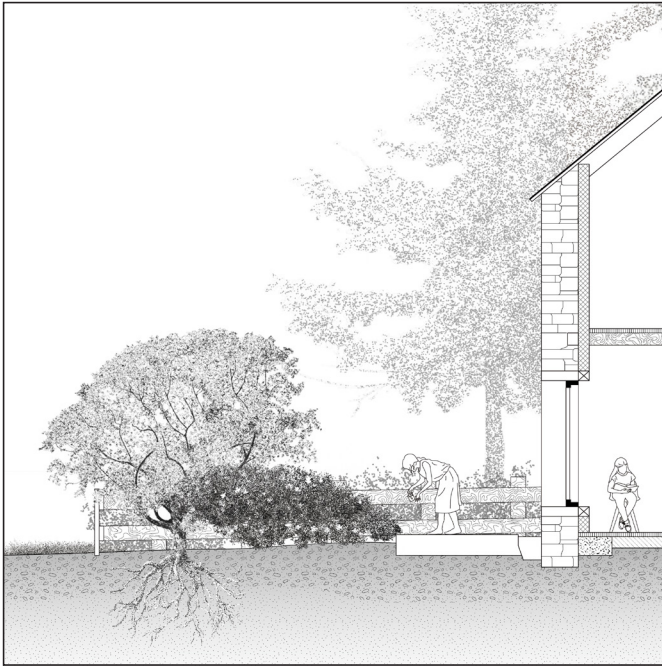




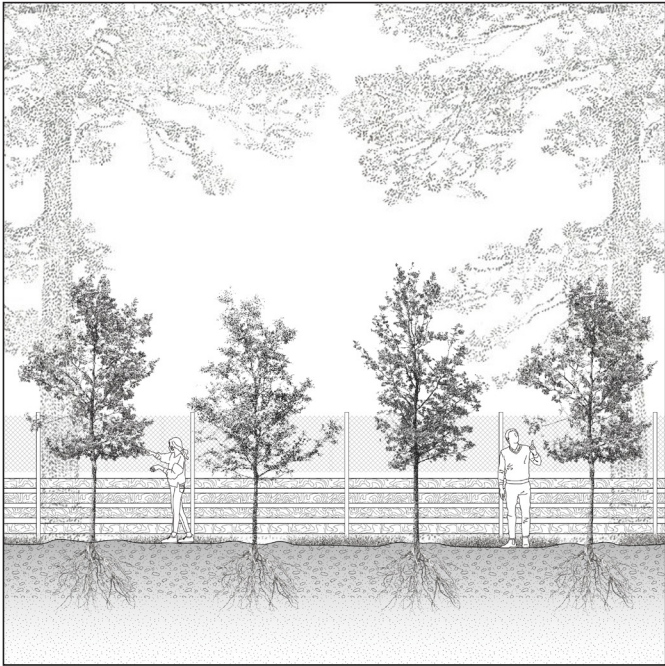




Wooded Common Network



First place - Personal backyard



Second place - Community tree nursery

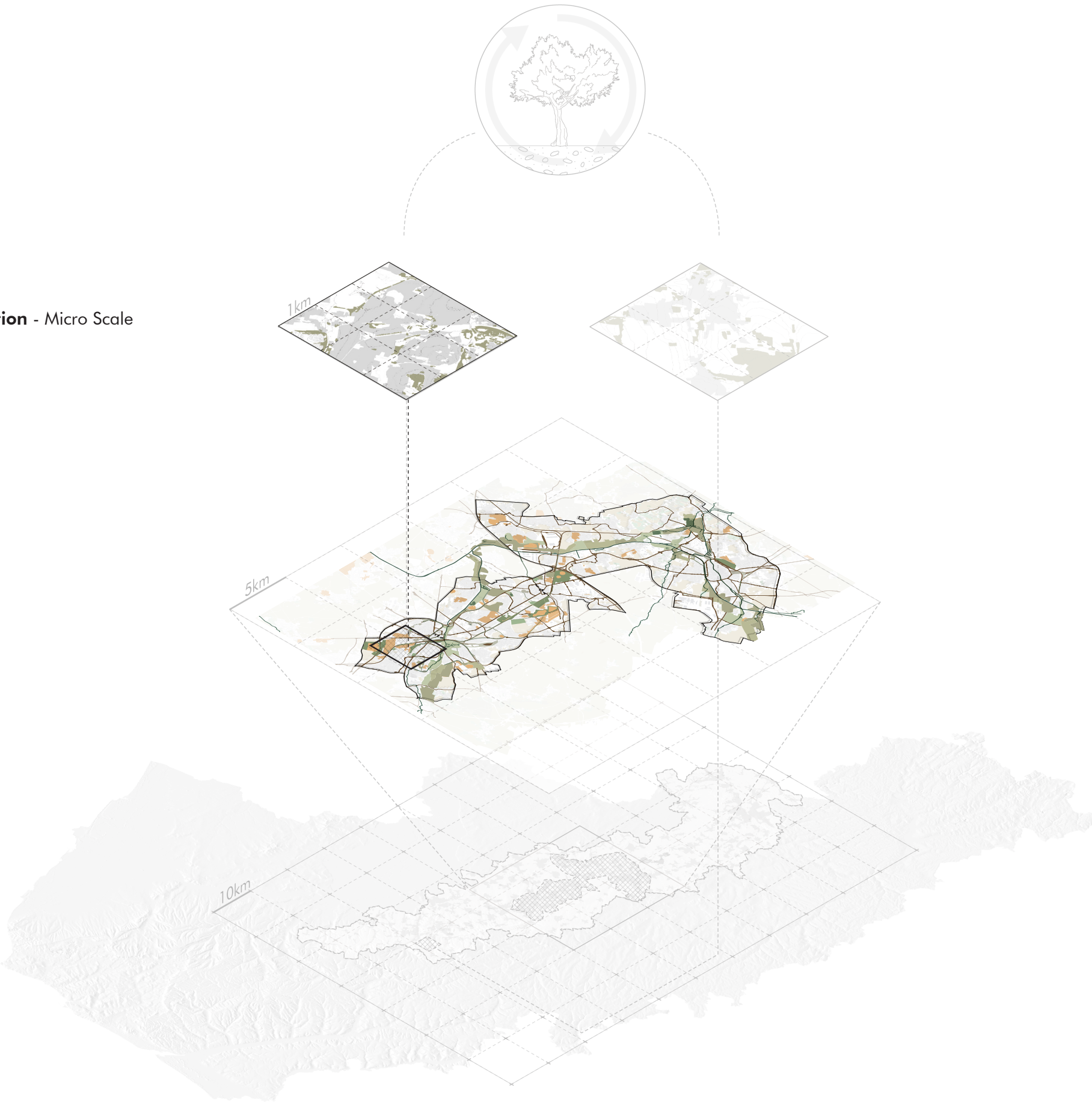


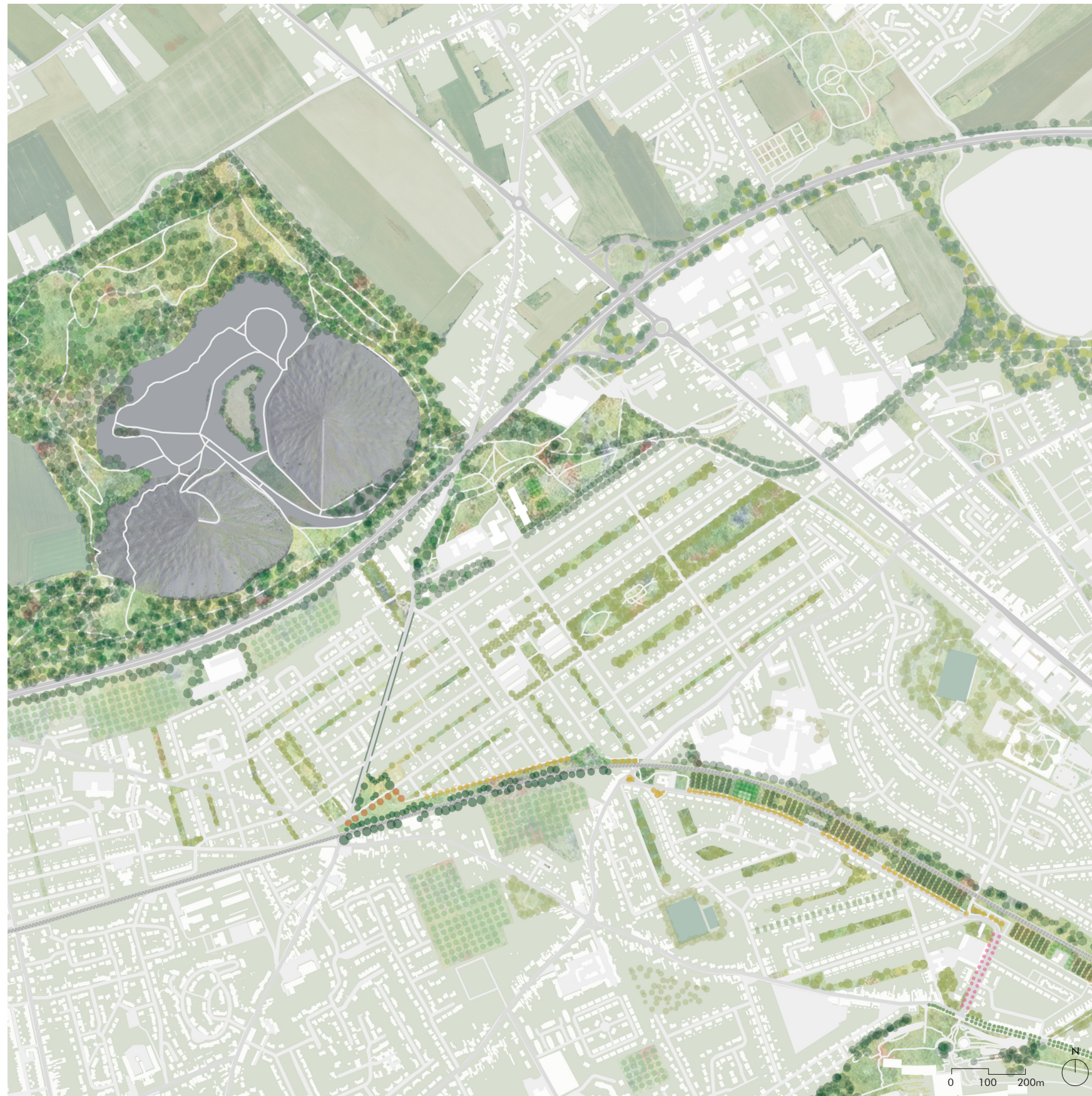
Third place - Public park

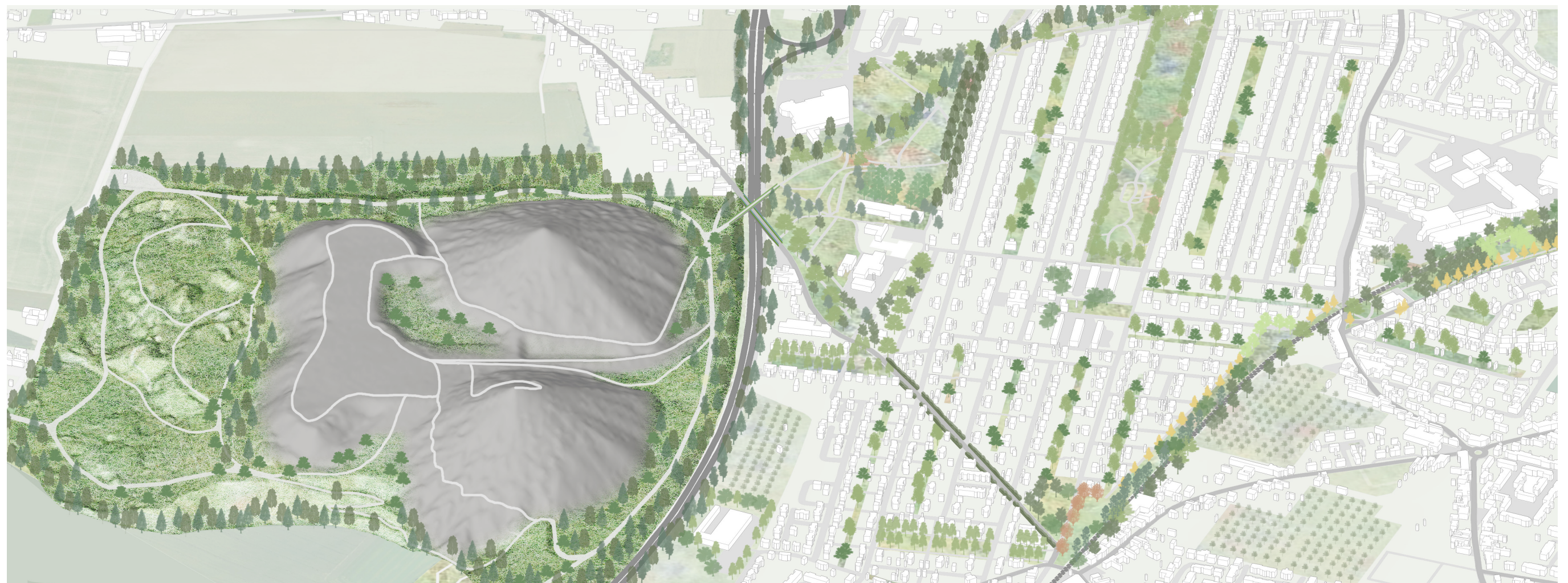
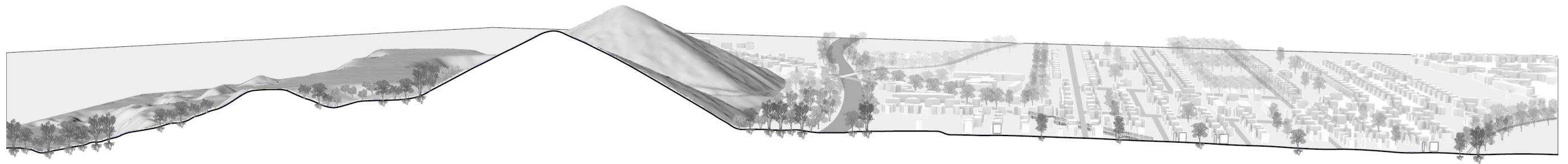


2.5 place - Backyard Woodland Garden

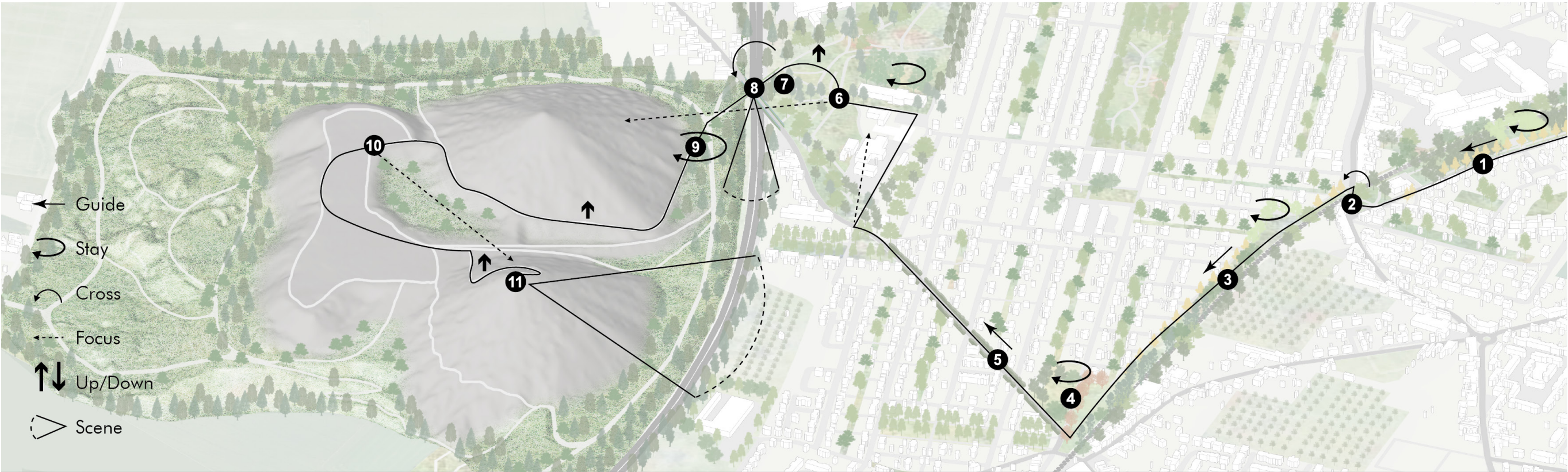
Local Projection - Micro Scale





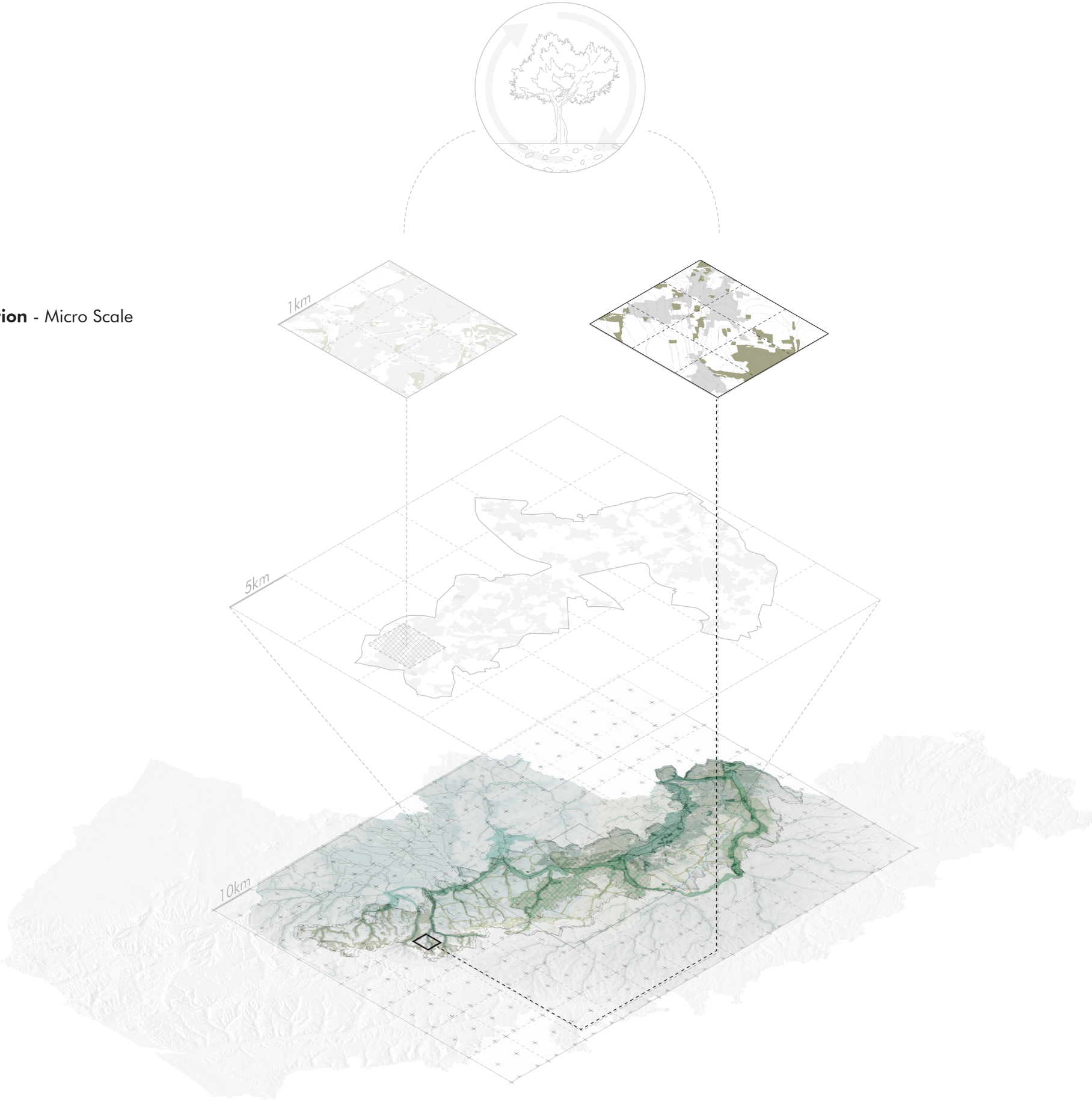


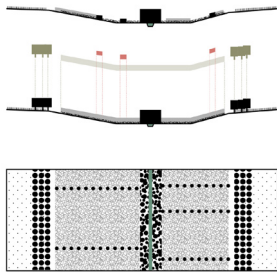
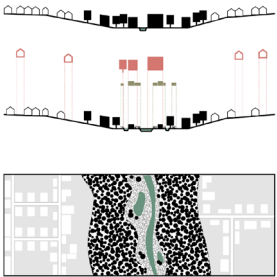
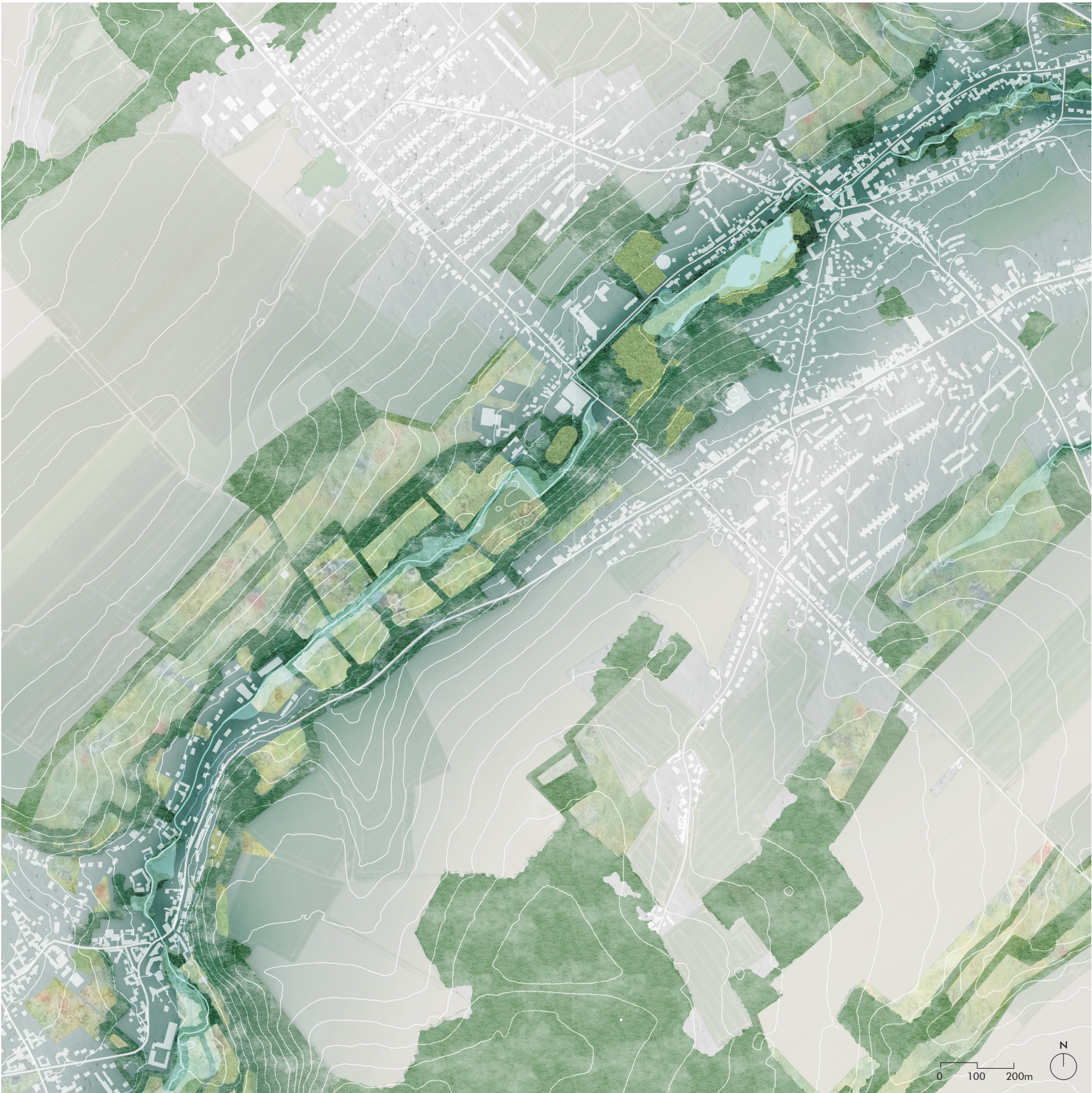
Within the city



Within the city

Local Projection - Micro Scale



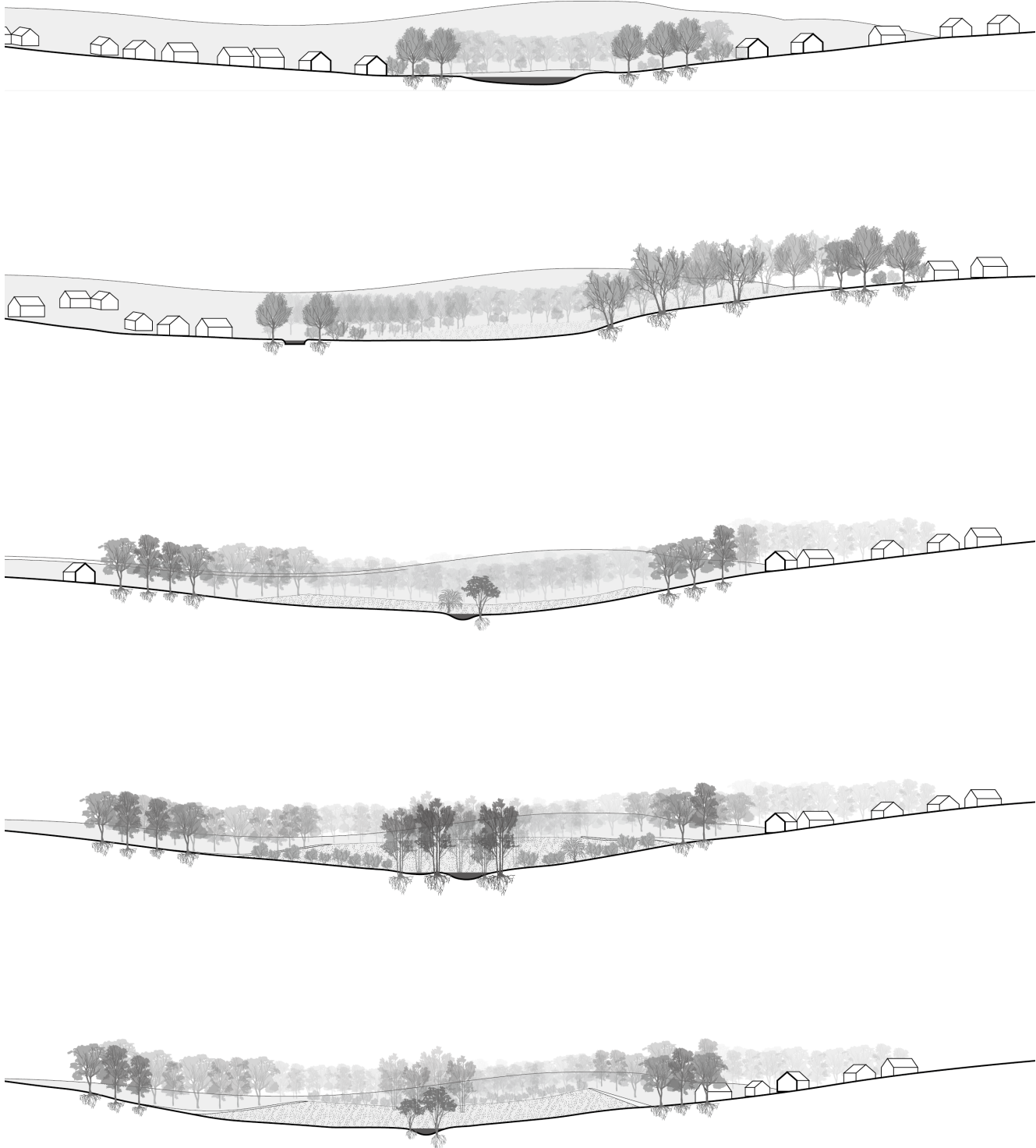


Research by Design

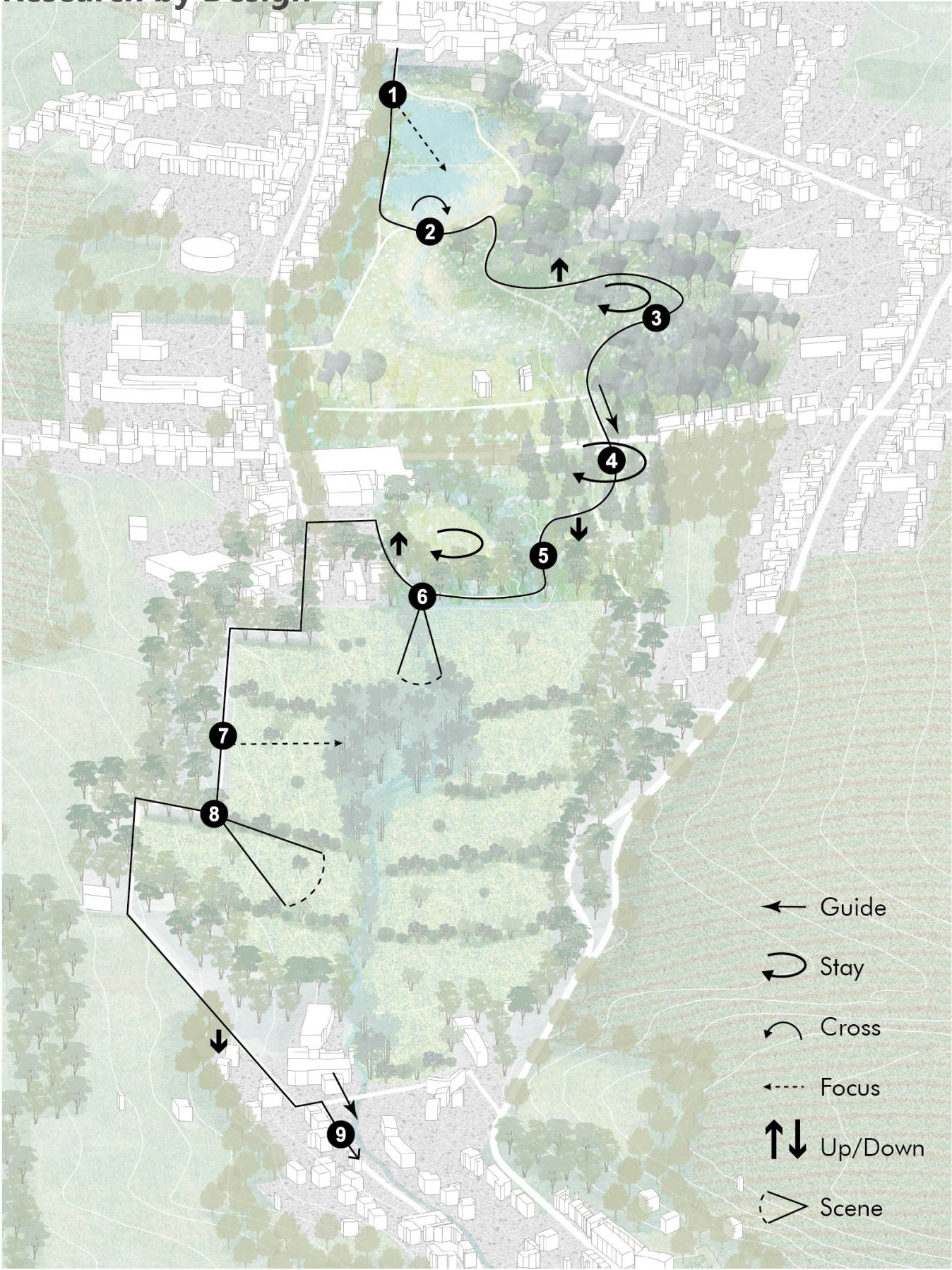


Between the valleys

Local Projection - Micro Scale



Research by Design

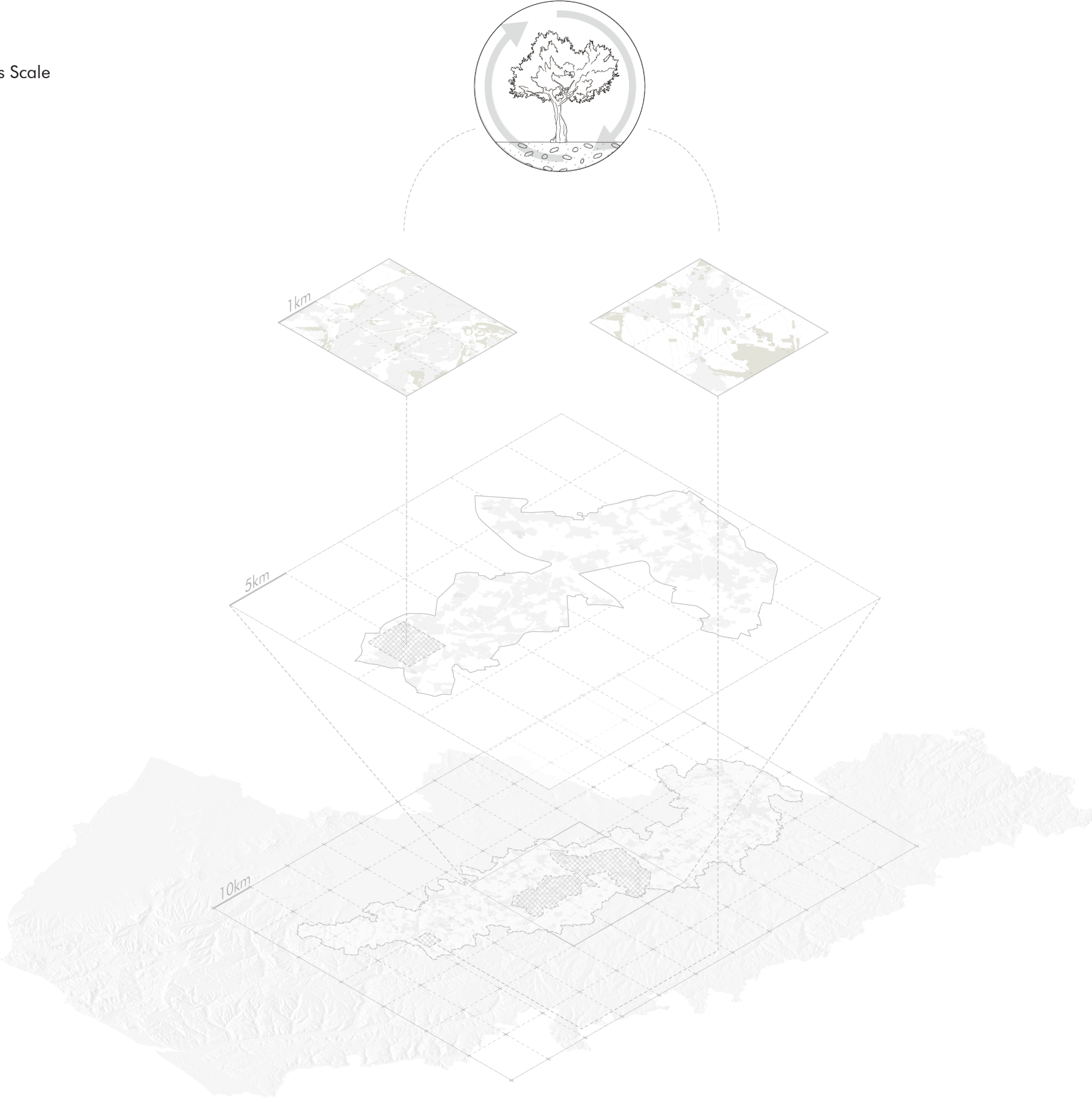


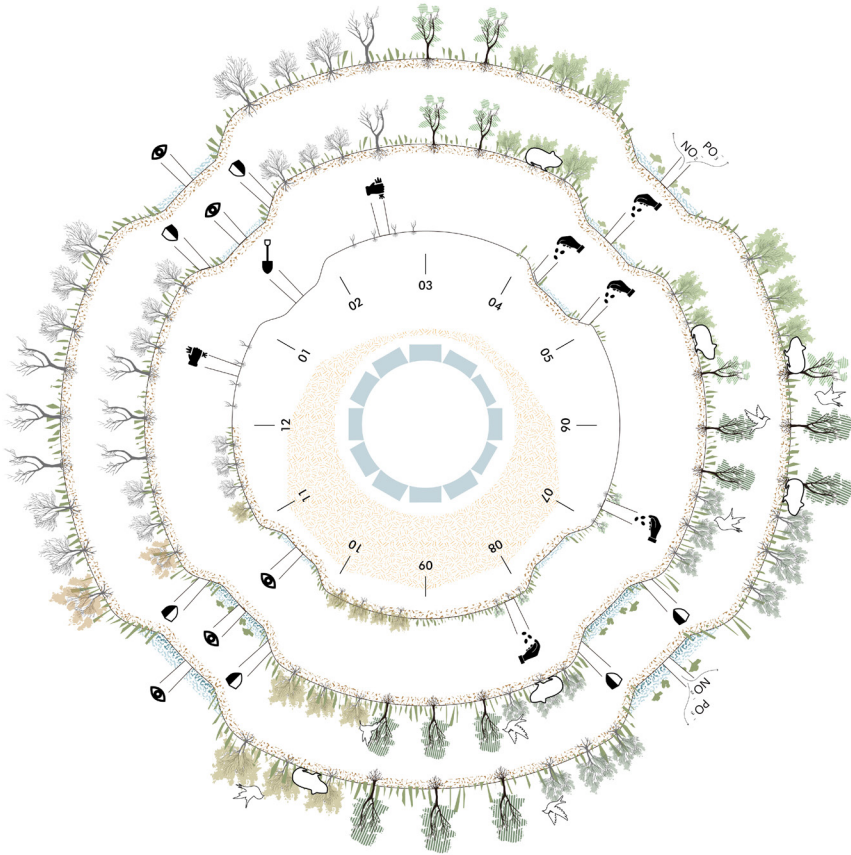
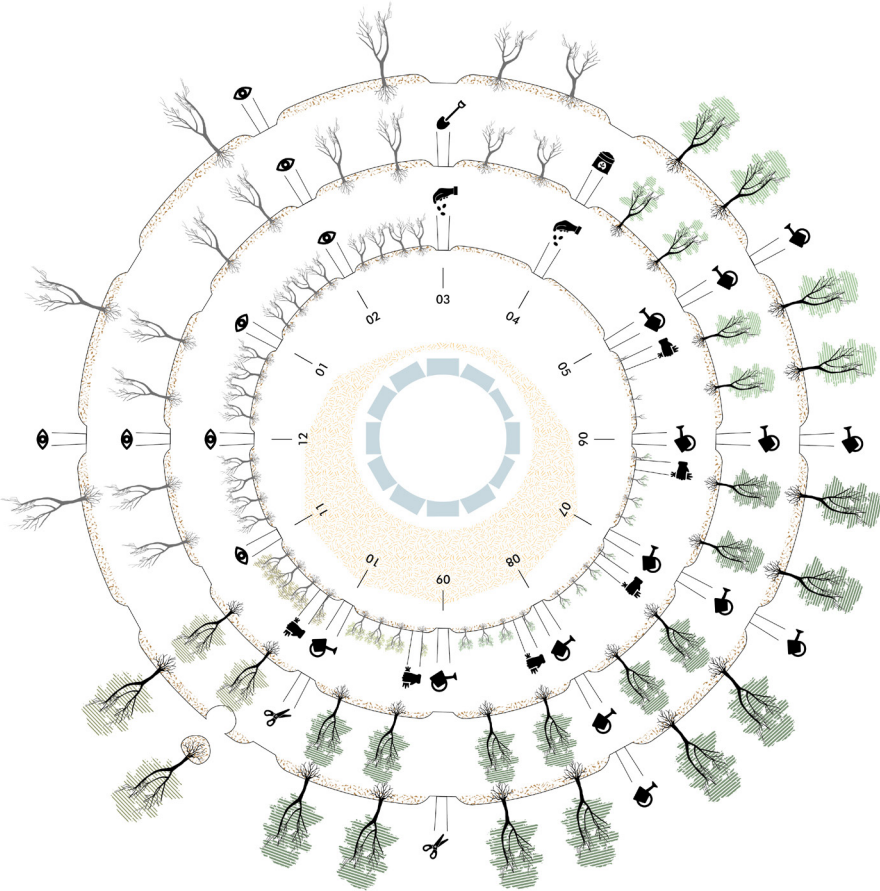
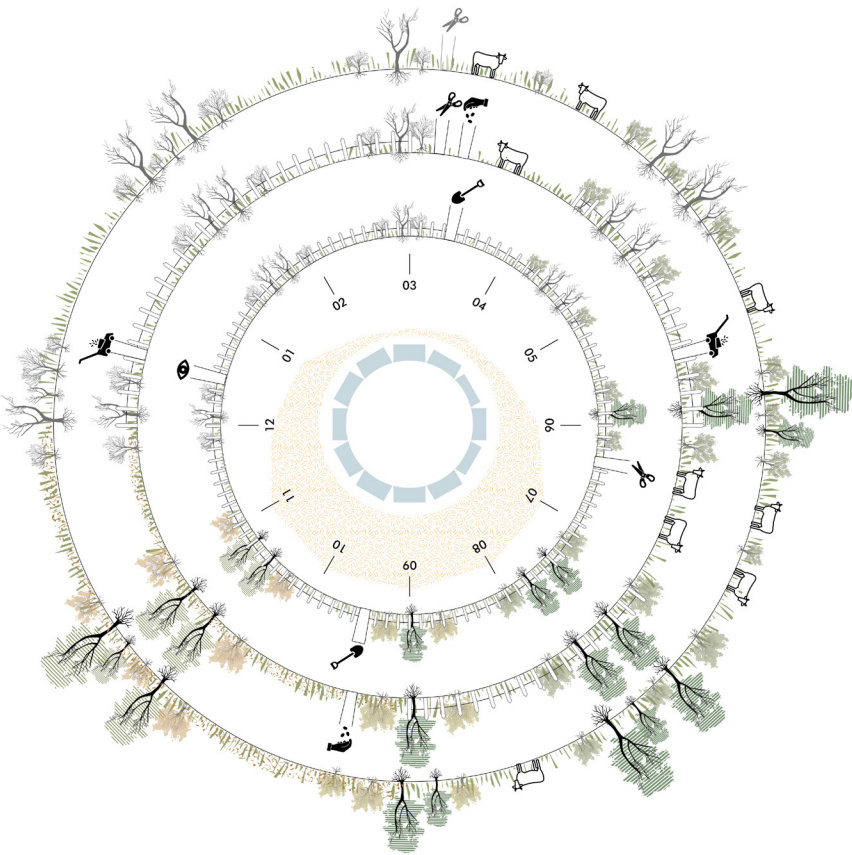
Between the valleys

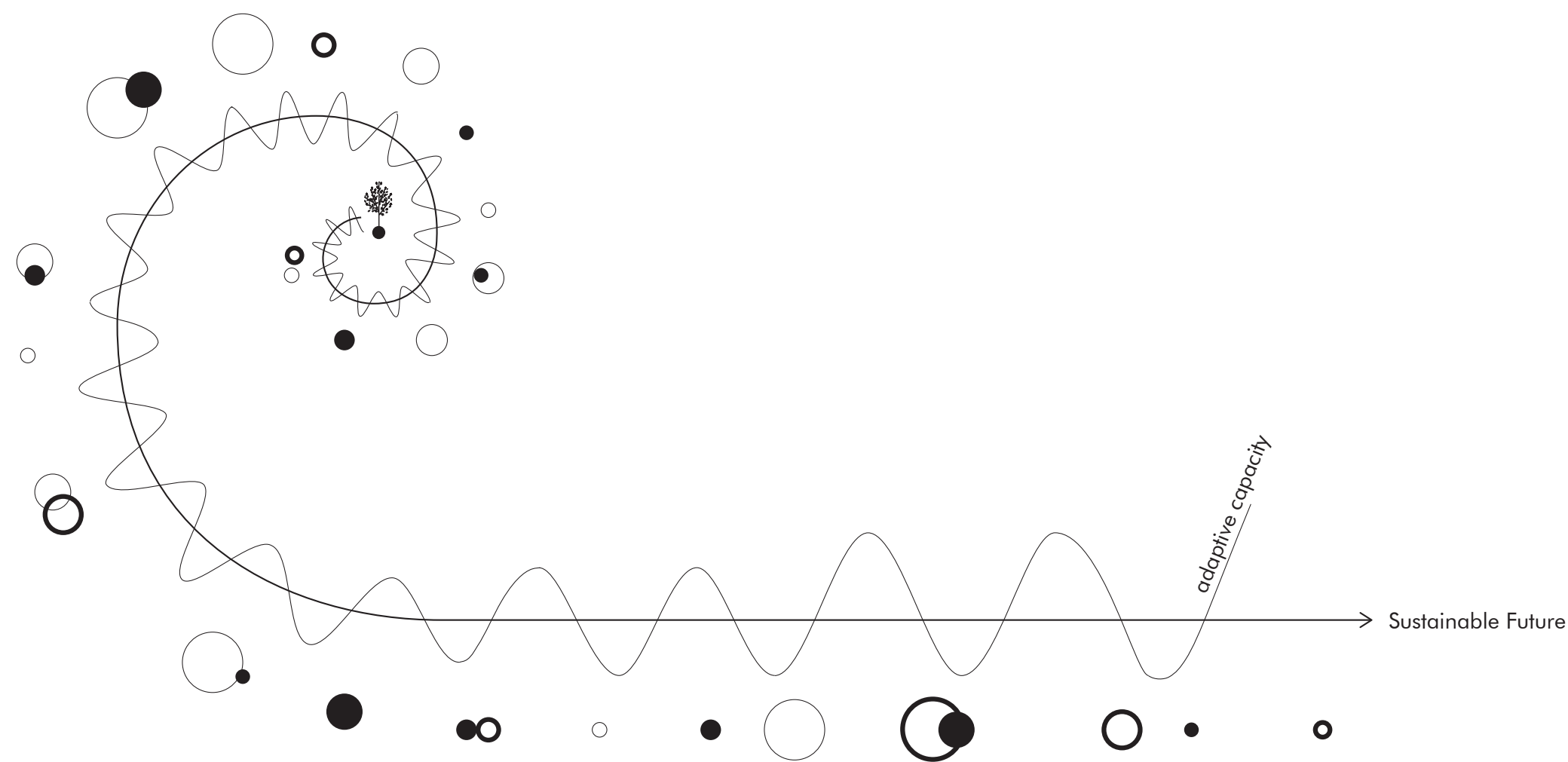
Local Projection - Micro Scale

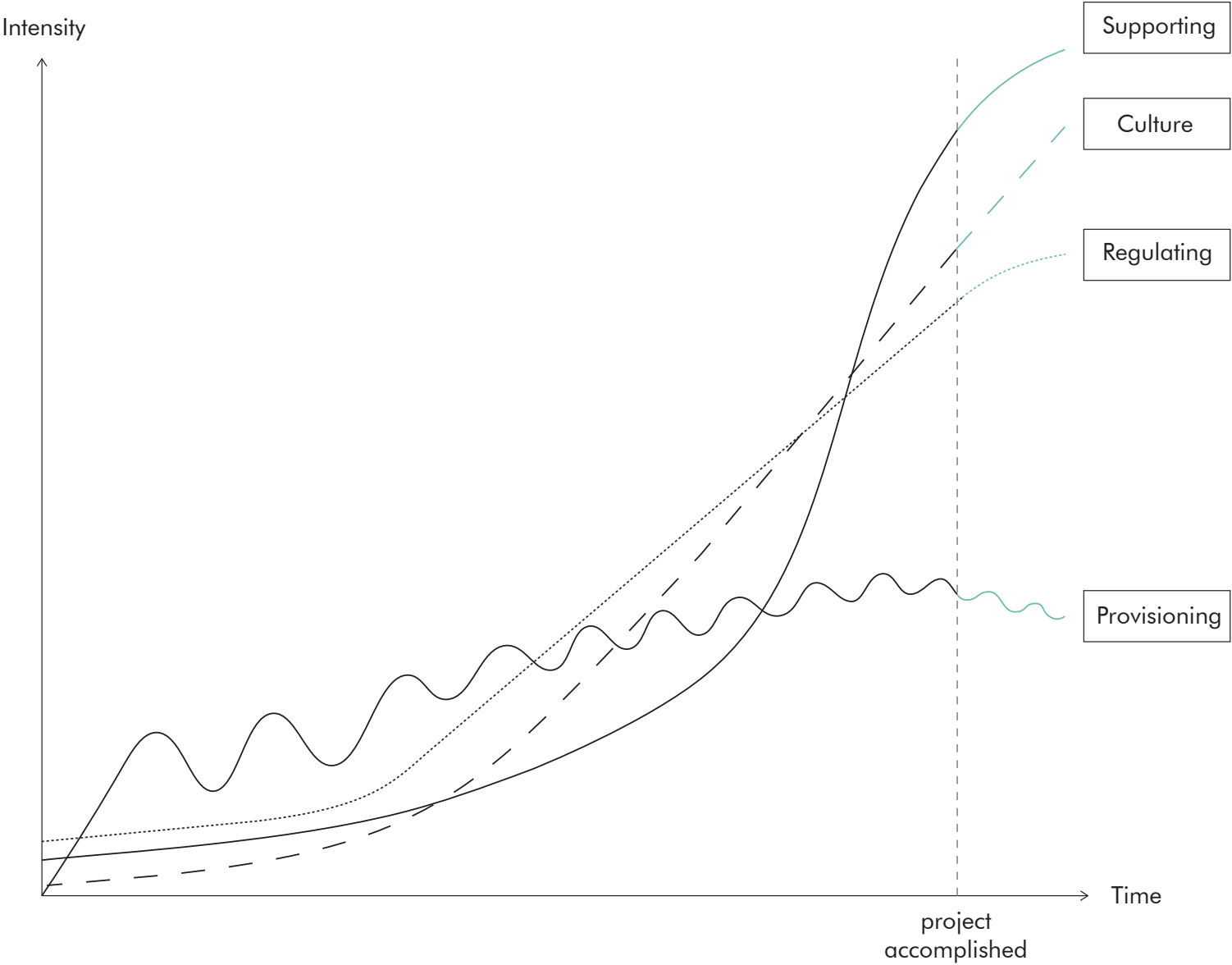


Tree - Process Scale



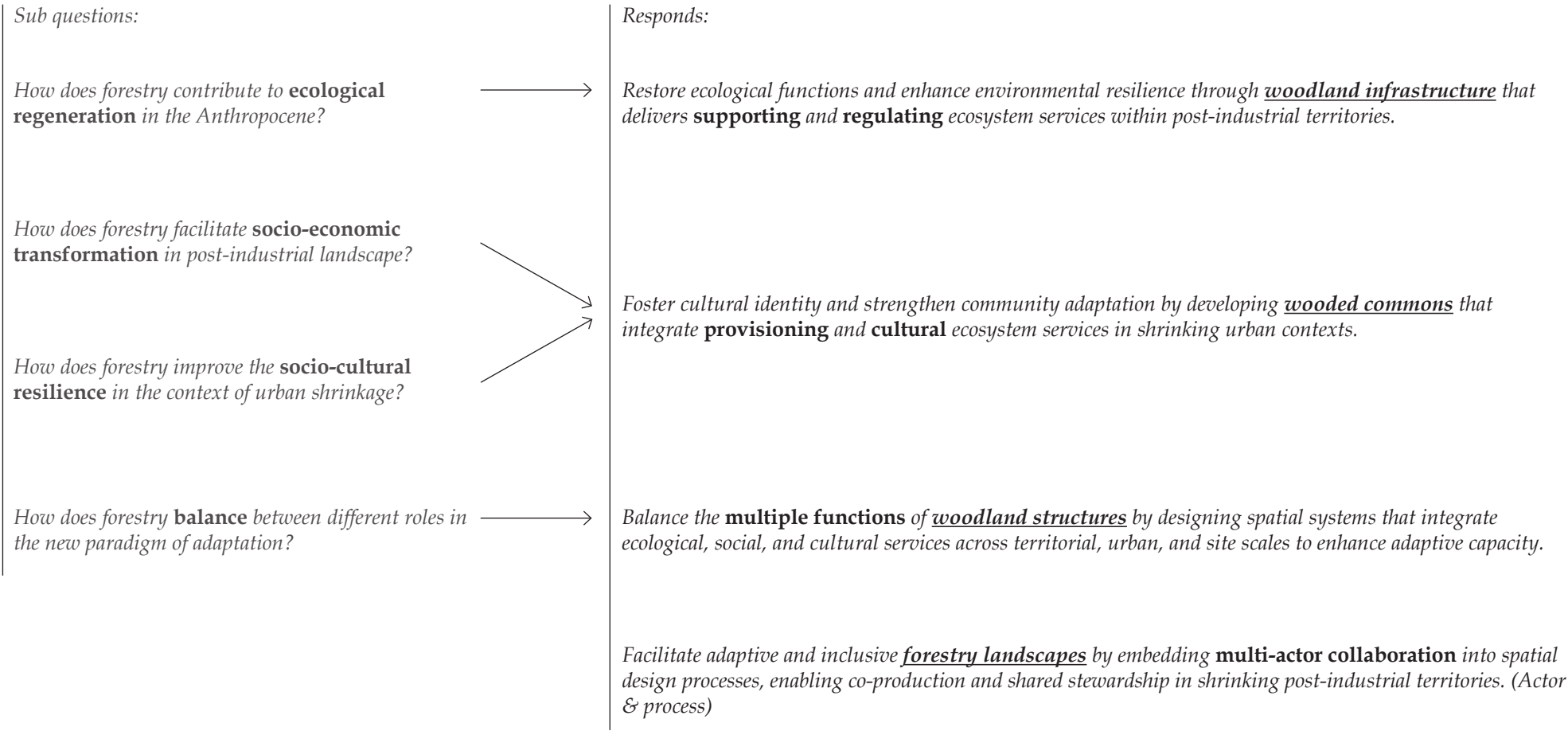






Conclusion

How can *urban forestry* serve as an **ecosystem services** tool to reshape the **post-industrial territory** and foster **socio-environmental adaptation**?





Thanks for listening!

