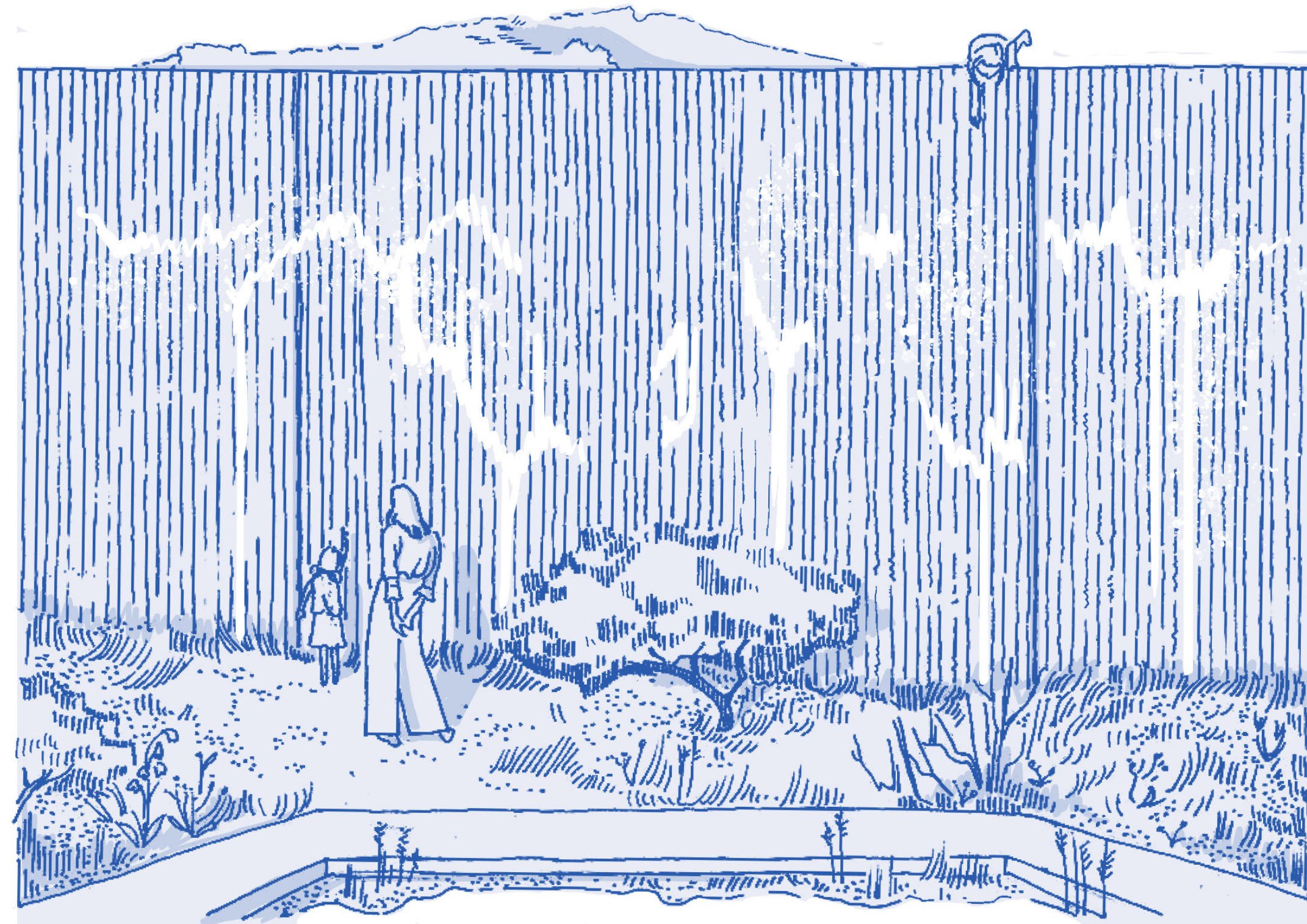


# the rediscovery of *duinwater*.

A transformation and spatial experience of the dune drinking water system.

# the rediscovery of *duinwater*



A transformation and spatial experience of the dune drinking water system.





verboden toegang  
artikel 461  
wetboek van strafrecht  
dunes.



Dune landscape



Dune lakes



Dune drinking water





INTERVIEW **TJEERD ROZENDAAL EN MARTIJN DADEMA** BESTUURSVORZITTER VITENS EN GEDEPUTEERDE OVERIJSEL

# Drinkwaterkwaliteit onder druk: 'We zitten vet in de problemen'

Zonder maatregelen zal drinkwater voor burgers, net als elektriciteit, binnenkort **niet langer vanzelfsprekend** zijn.

niet langer vanzelfsprekend  
=**no longer self-evident**

OPINIE

## Tekort aan drinkwater? In Nederland?

**Water** Schoon drinkwater komt zo uit de kraan, en dat is ons probleem, schrijft *Corine Nijenhuis*. We zijn ons er **onvoldoende bewust** van dat water drinkbaar maken een lang proces is.

onvoldoende bewust  
=**insufficient awareness**

Corine Nijenhuis  
5 december 2024 • Leestijd 6 minuten

*How can **landscape architectural strategies** mediate a **renewed relationship** between contemporary coastal inhabitants and sources of freshwater within the **drinking water extraction landscape of the Dutch dune system**?*

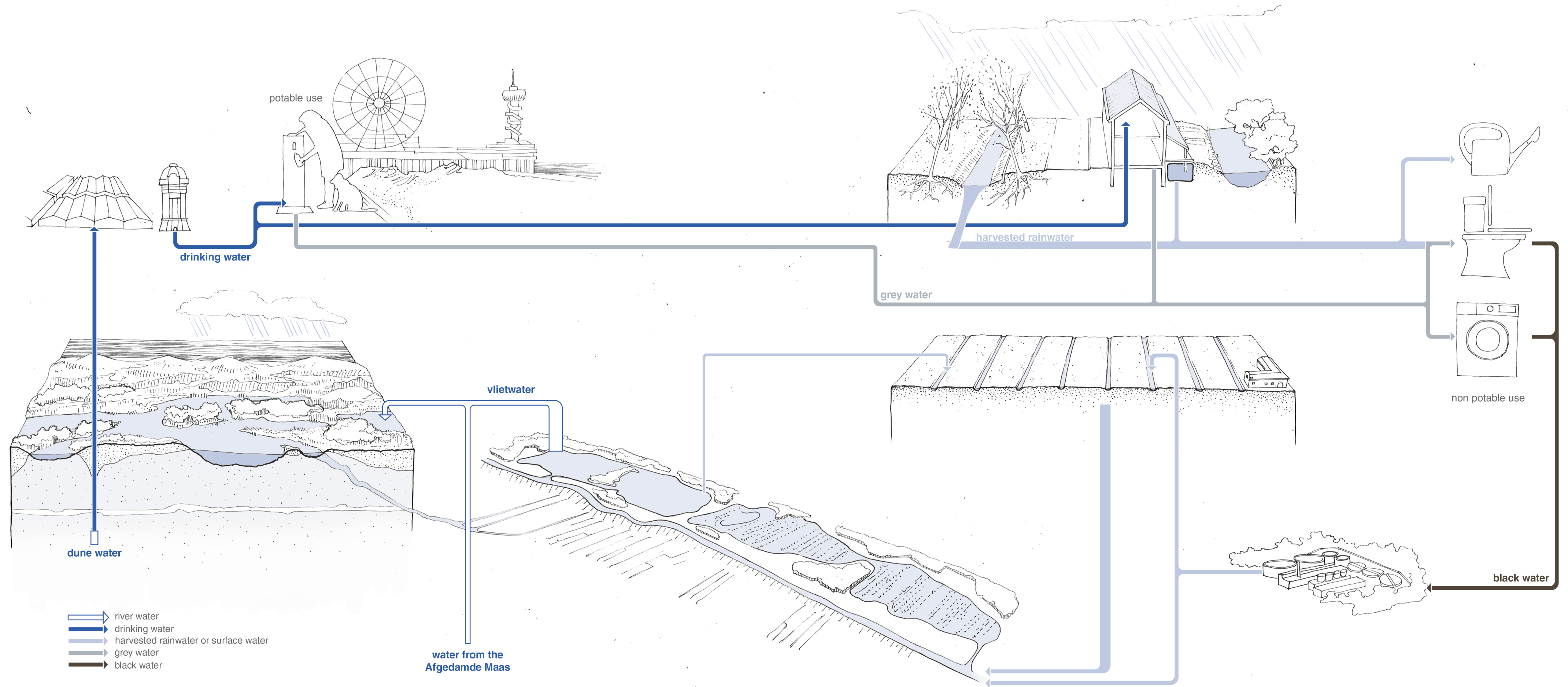
RELATIONAL

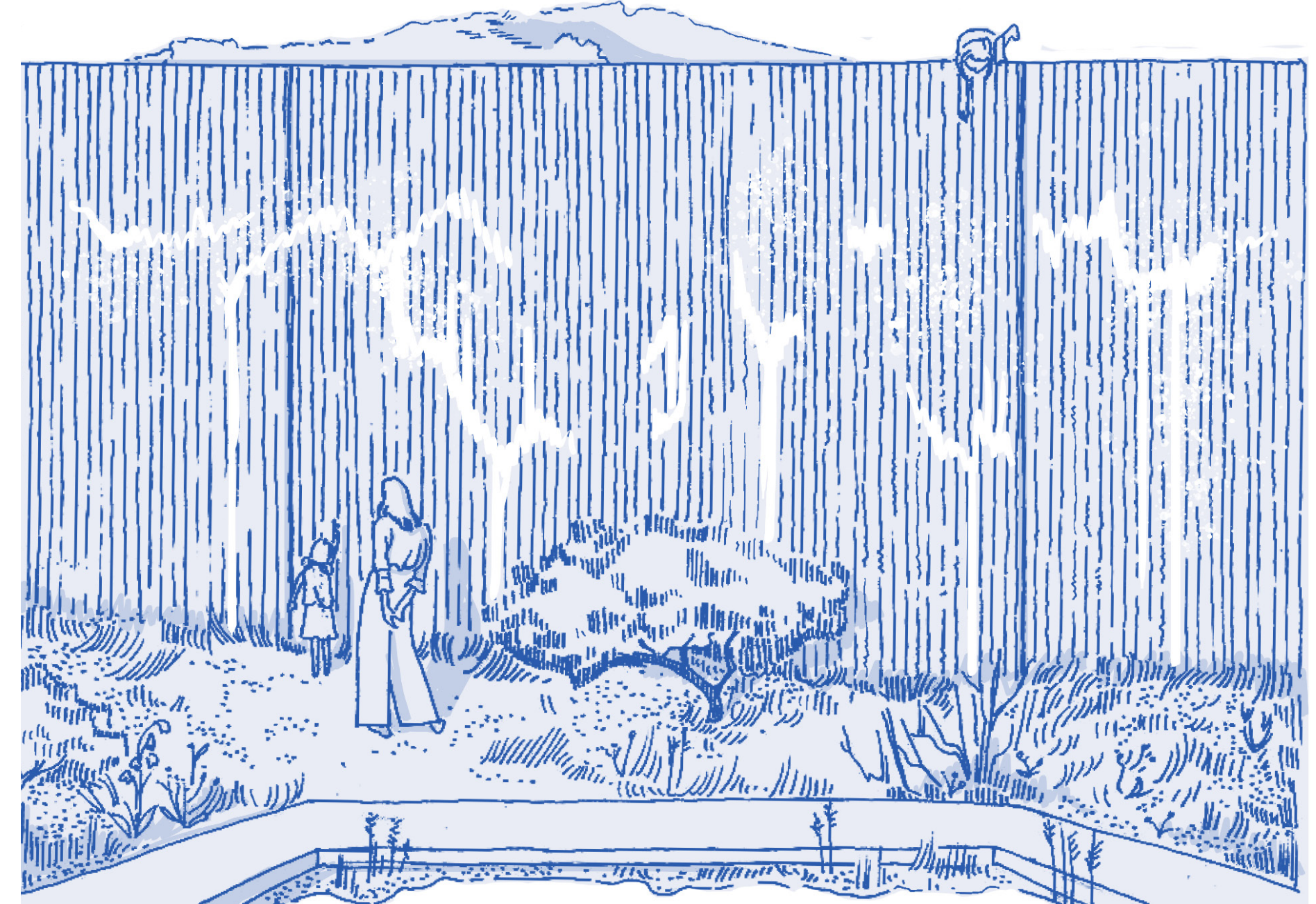
- Coastal resident – drinking water relations
- Landscape Architecture strategies → relate people to drinking water landscapes
- Design interventions → inspire care for drinking water landscapes

*How can **landscape architectural strategies** mediate a **renewed relationship** between contemporary coastal inhabitants and sources of freshwater within the **drinking water extraction landscape of the Dutch dune system**?*

- Development of the infrastructural and landscape systems
- Sustainable transition of the system

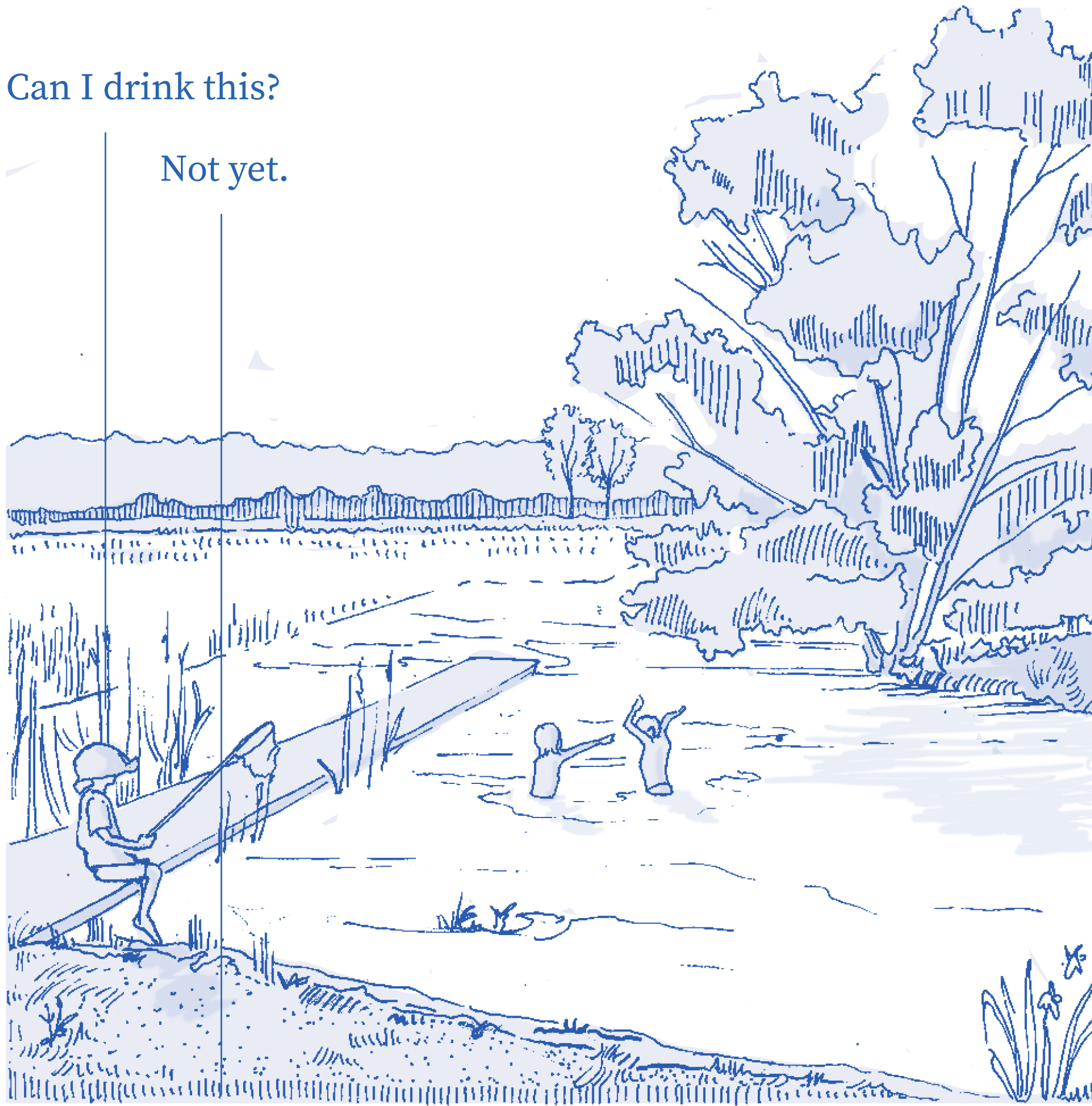
SYSTEMIC





Can I drink this?

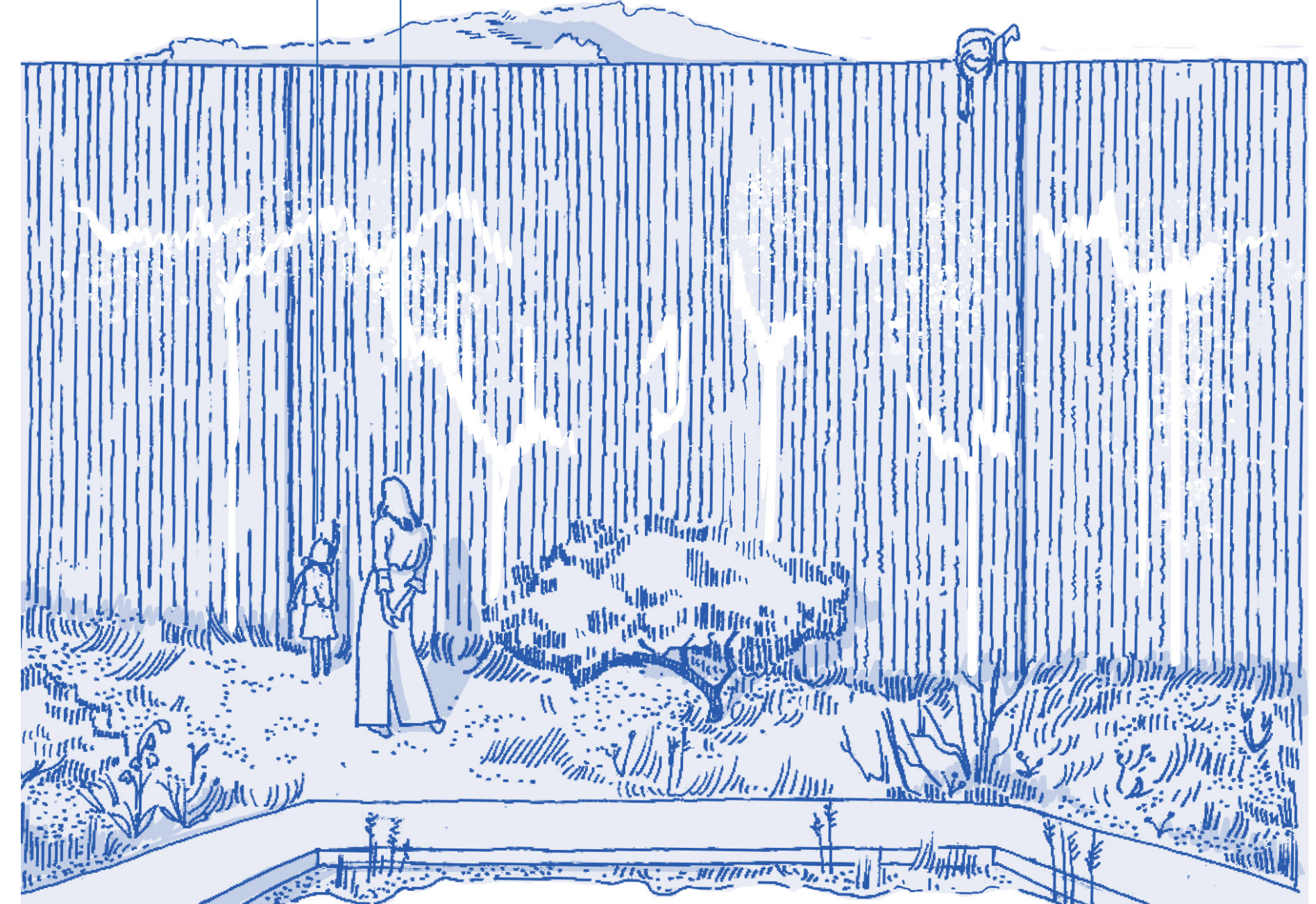
Not yet.



Can I drink this?

Almost.

Water is sinking into the sand?

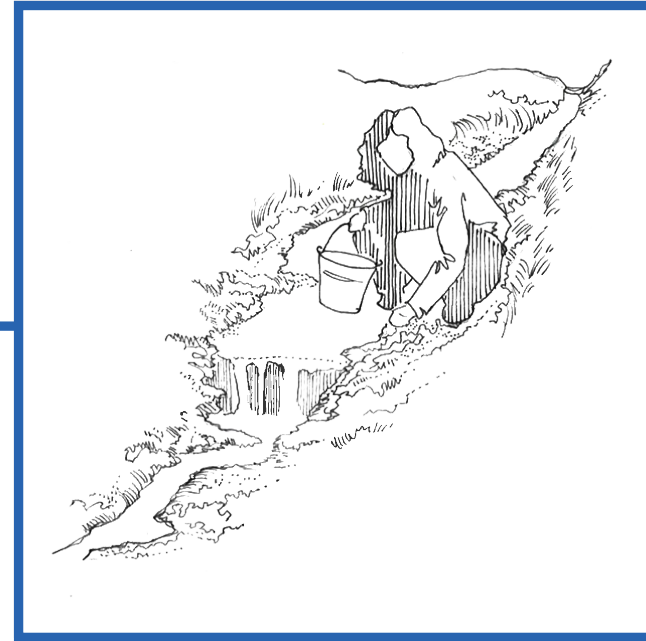


But first, we have to understand the system.

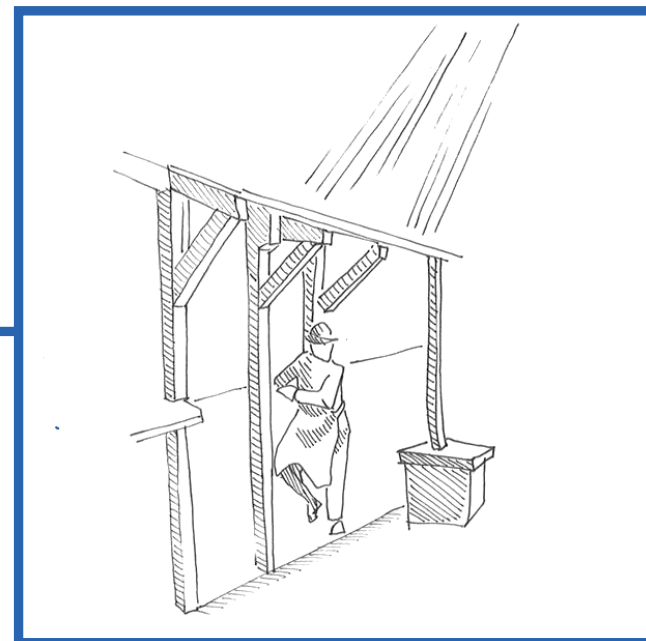
groundwater



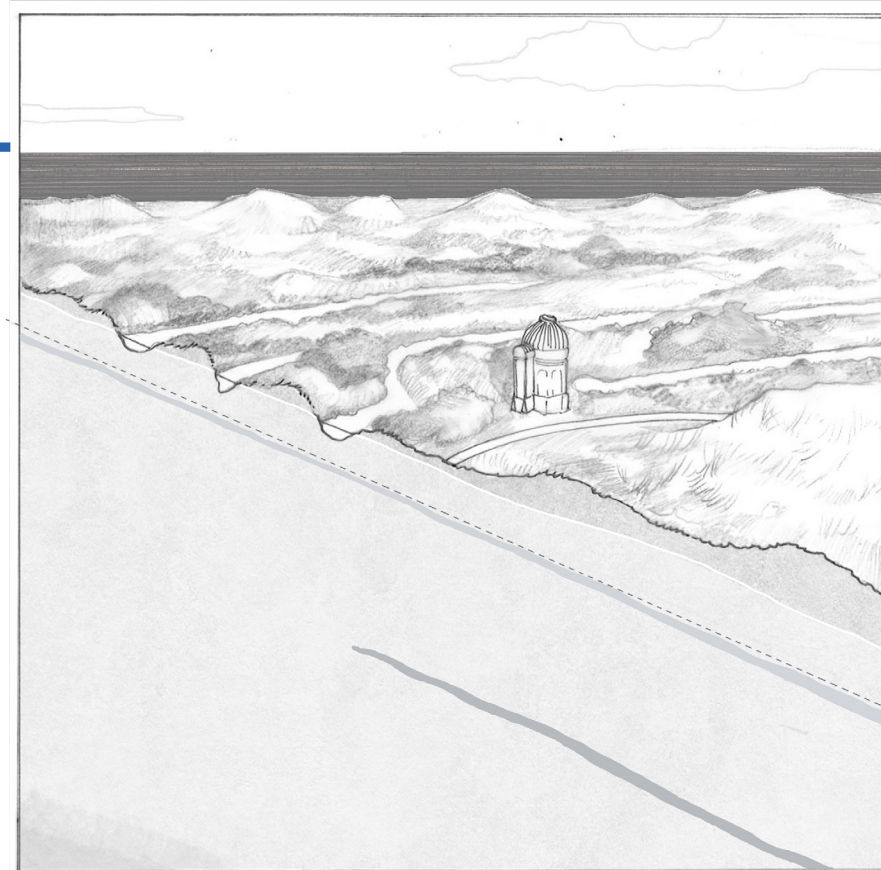
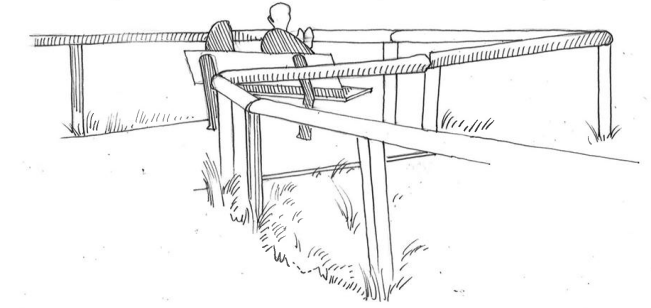
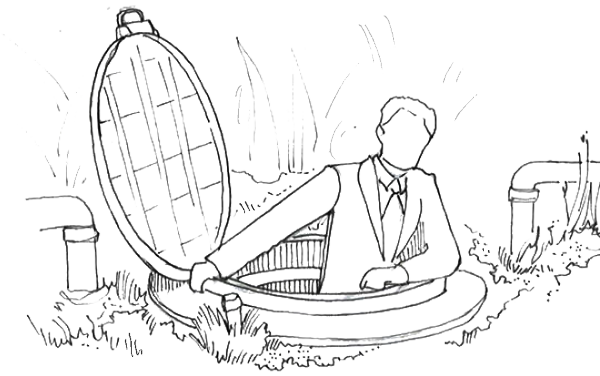
surface water



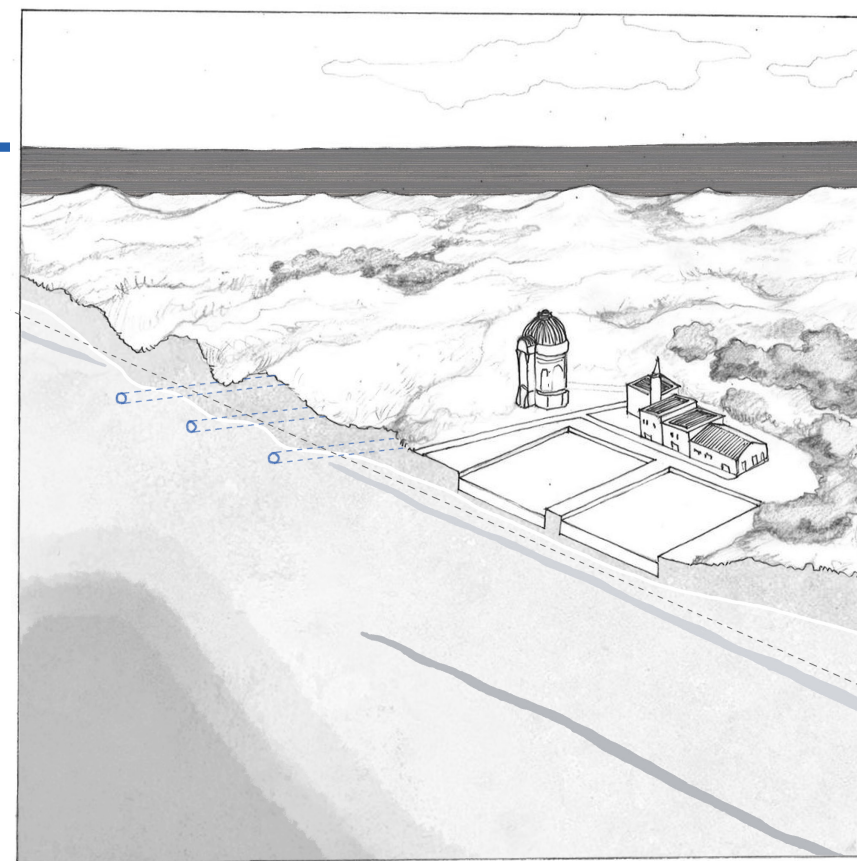
rain water



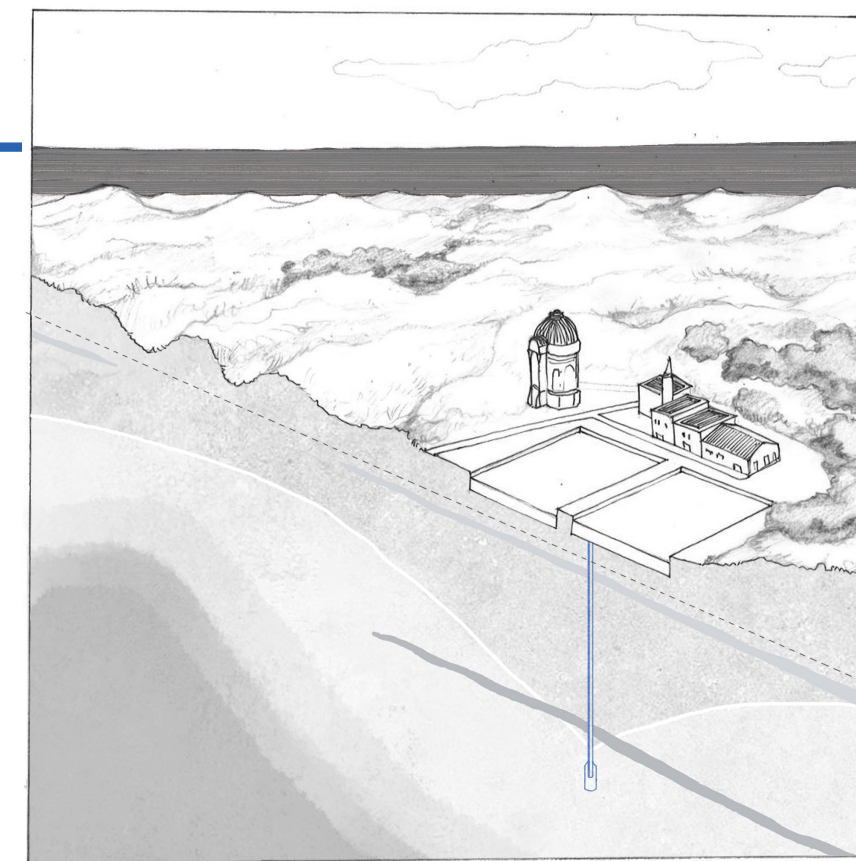
centralizing  
the system



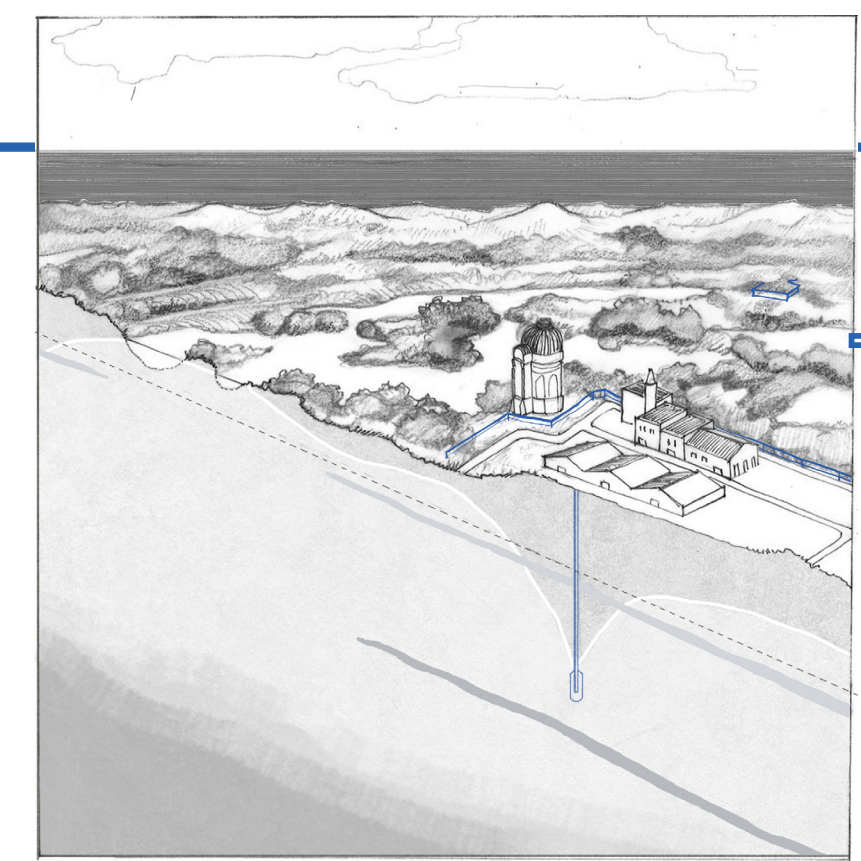
1874-1930



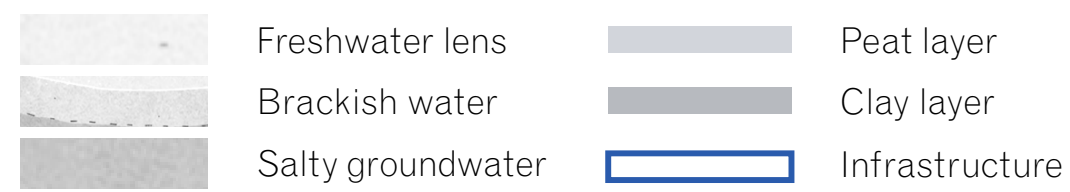
~1930

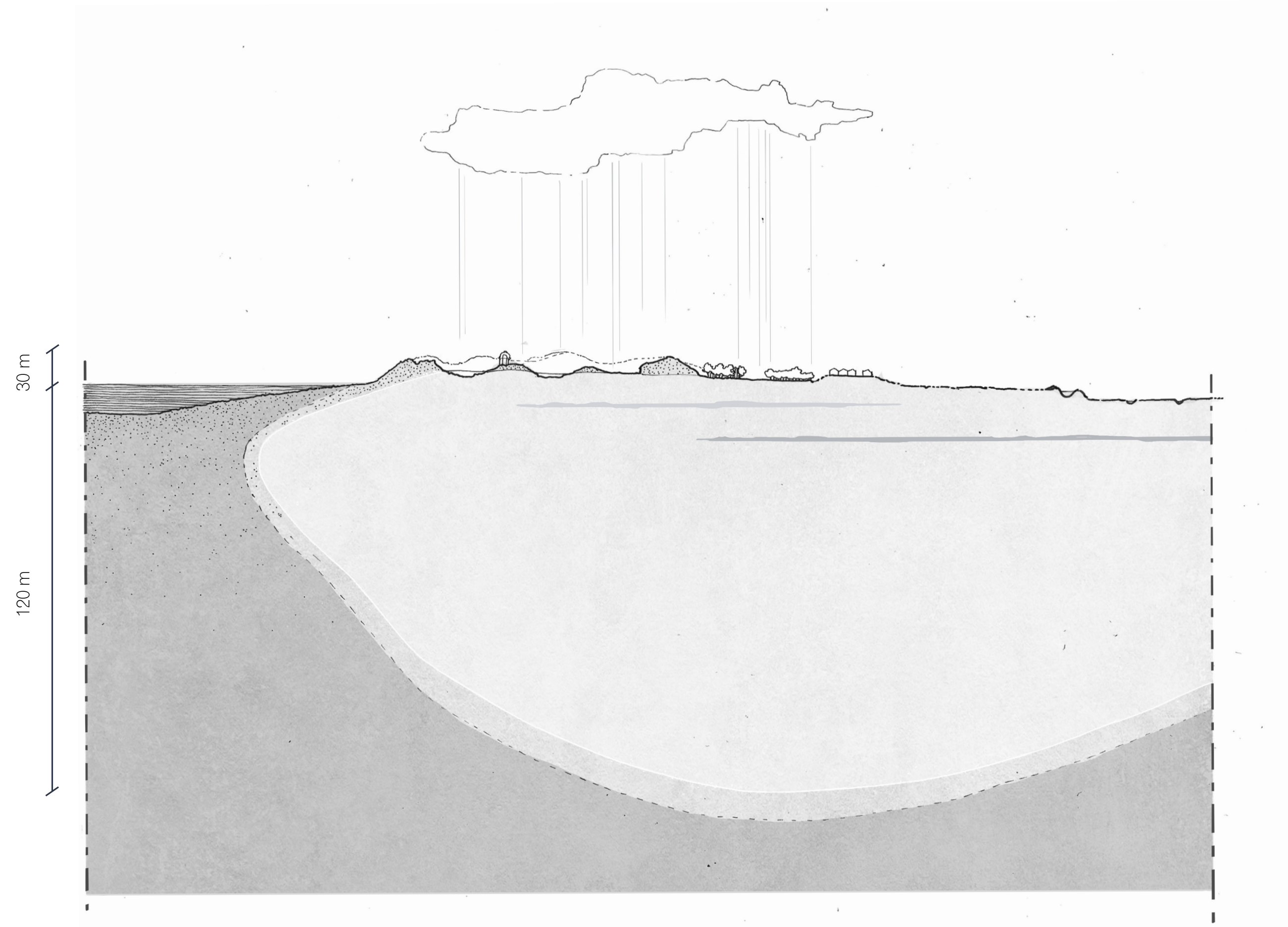


1930-1955

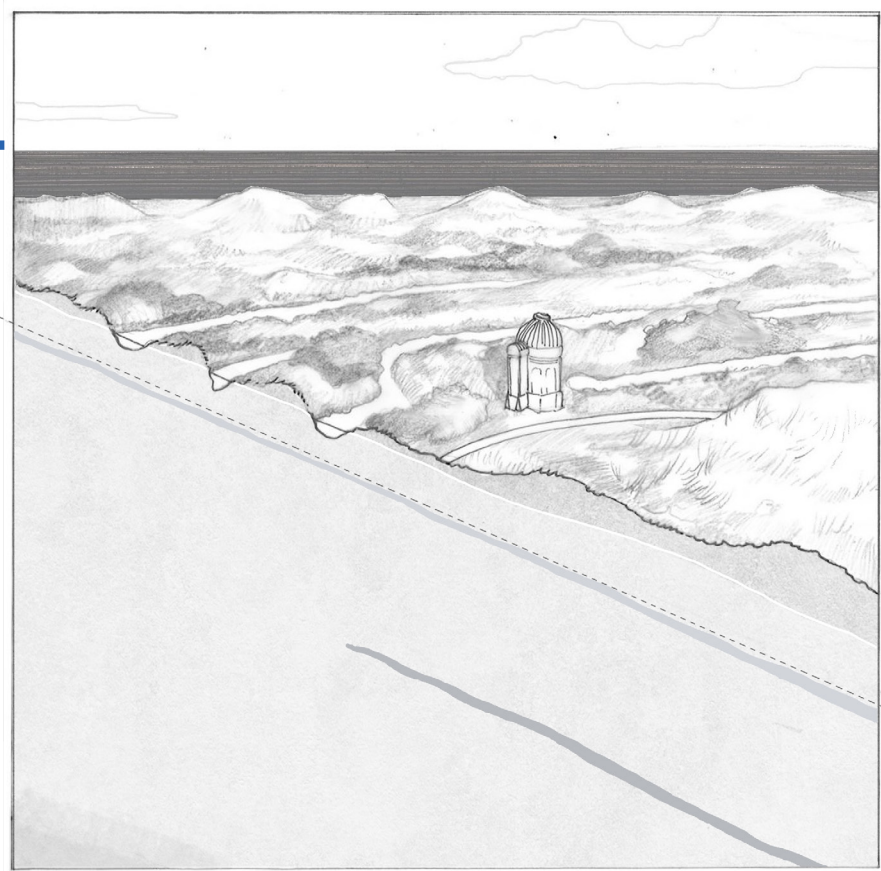
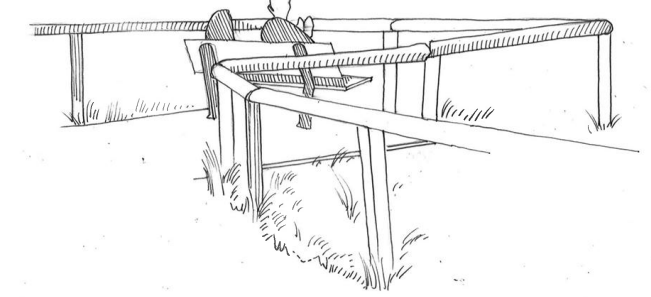
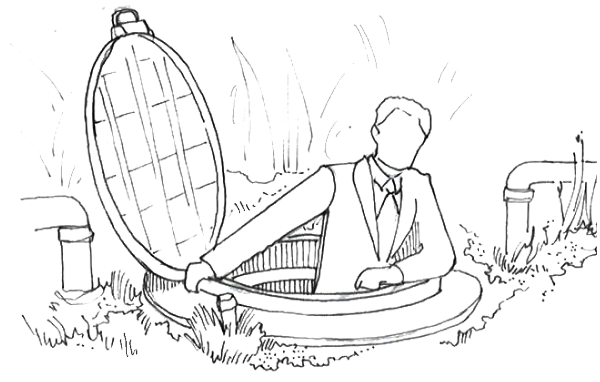


1955-2025

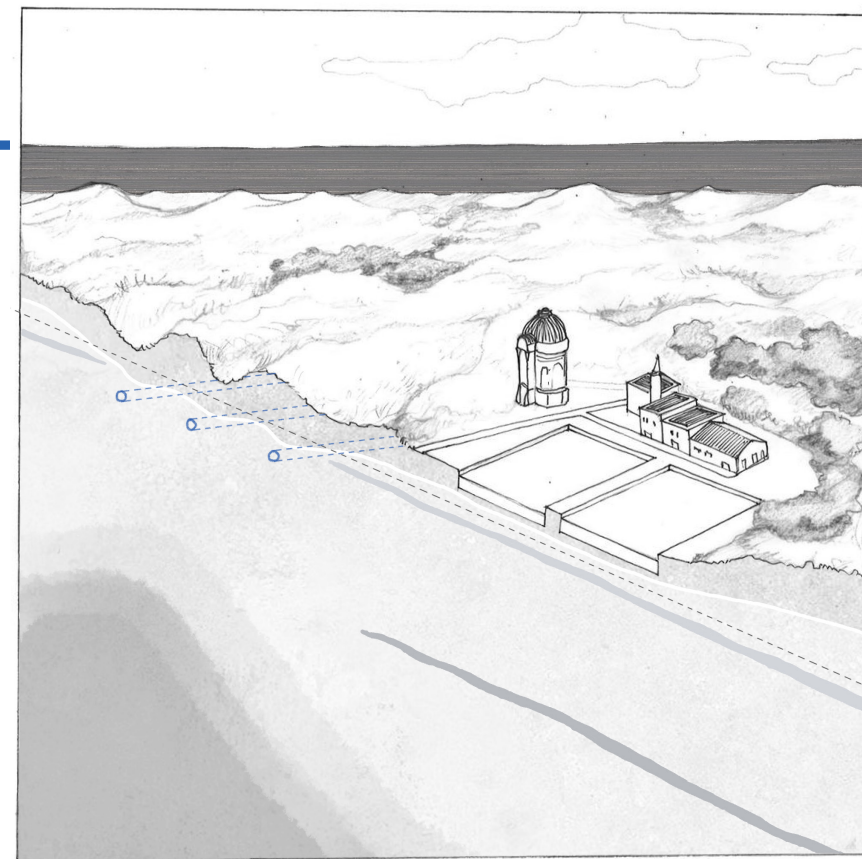




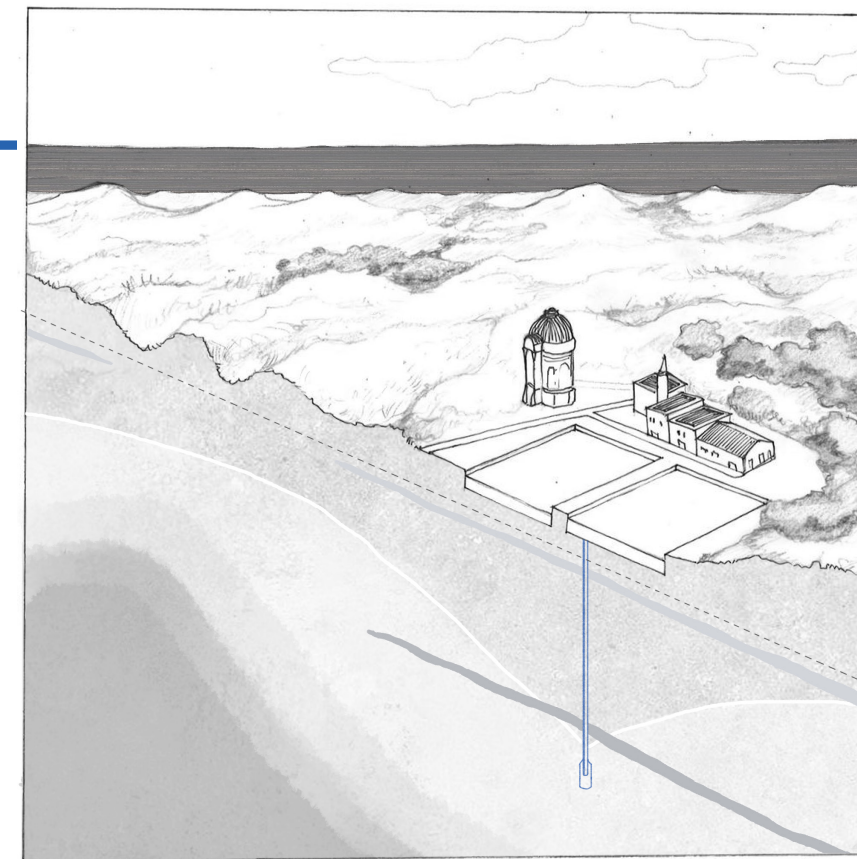
- Freshwater lens
- Brackish water
- Salty groundwater



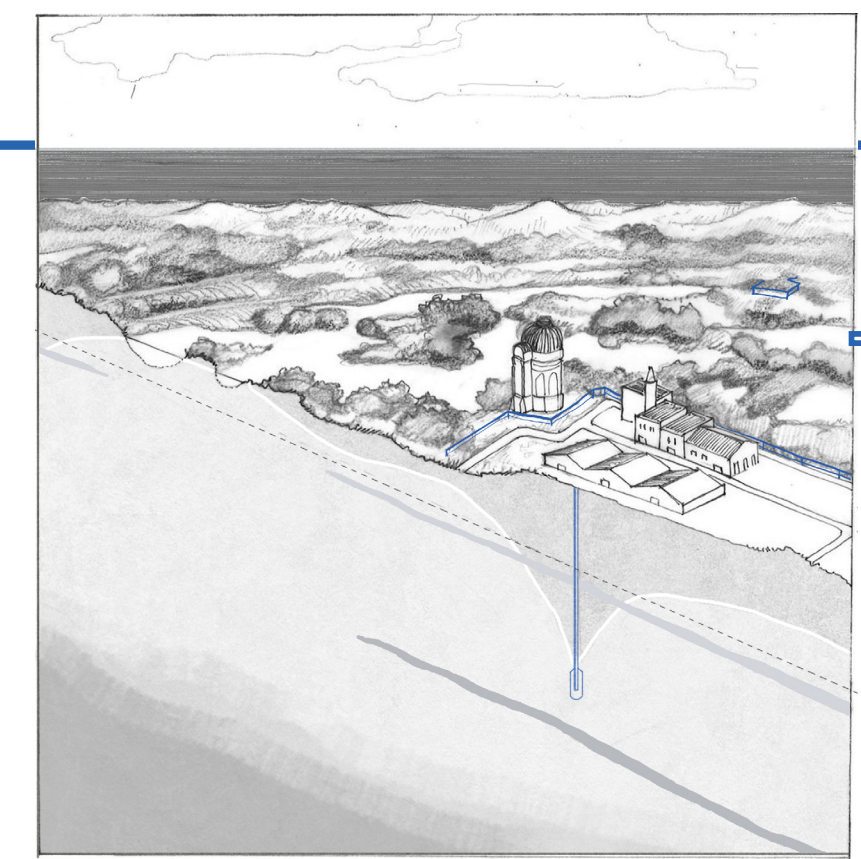
1874-1930









~1930

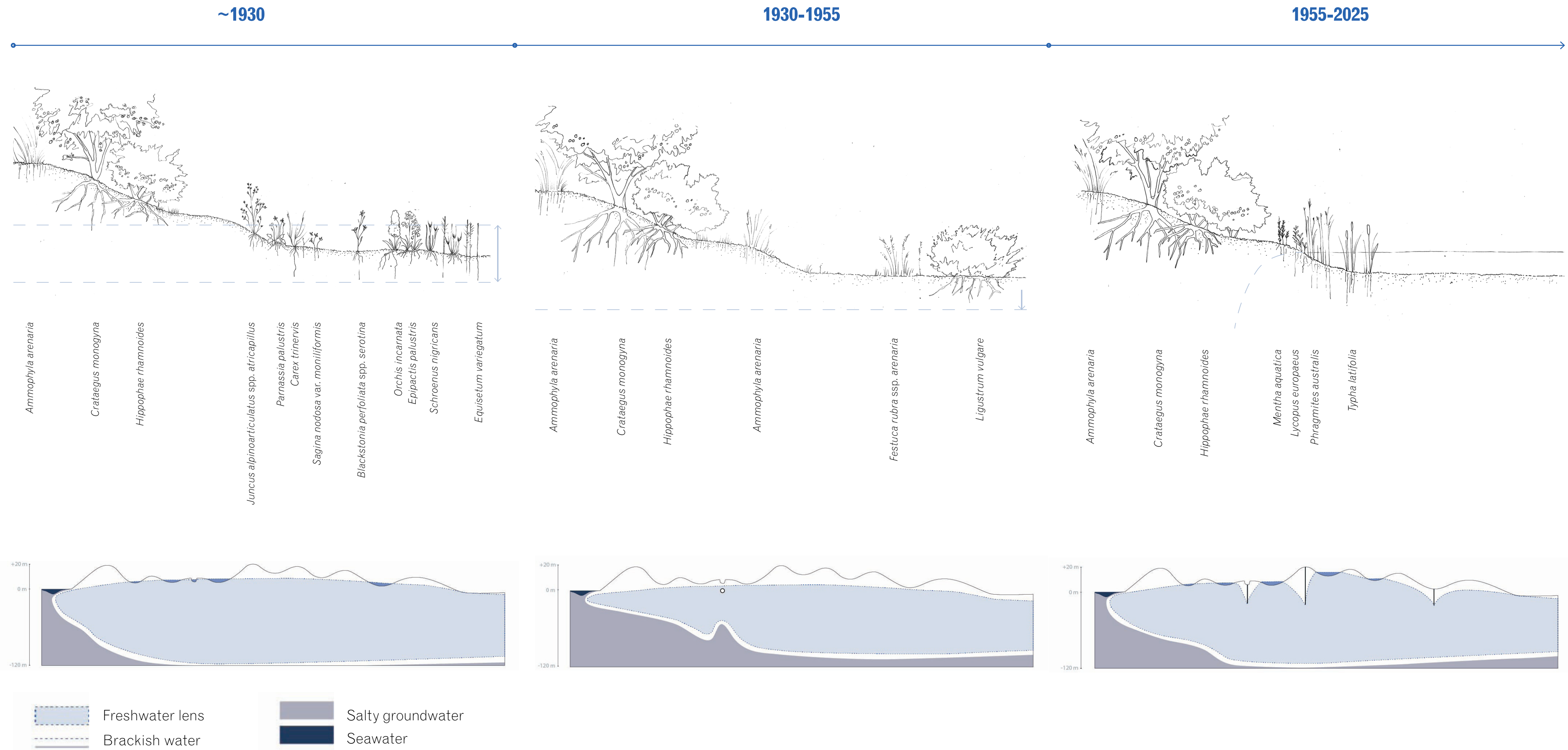


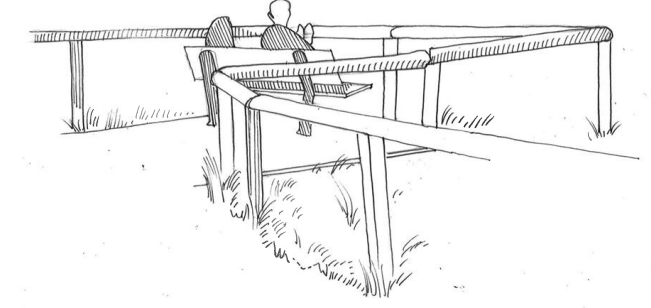
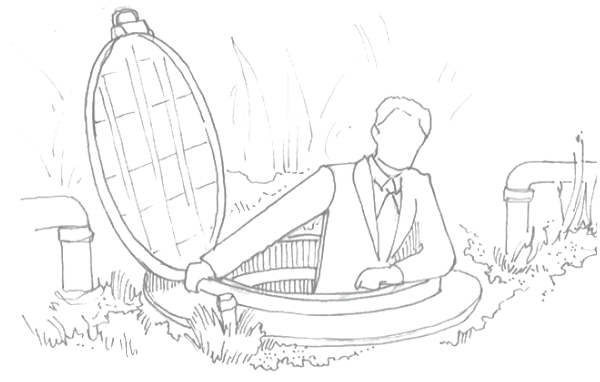
1930-1955



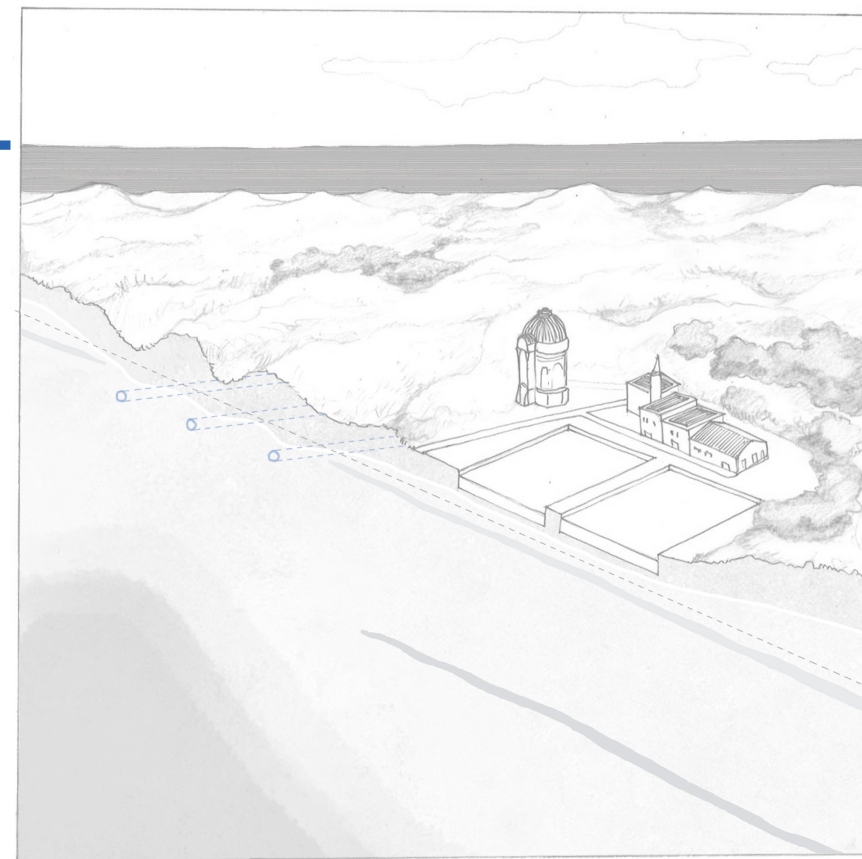
1955-2025

- |   |                   |   |                |
|---|-------------------|---|----------------|
|  | Freshwater lens   |  | Peat layer     |
|  | Brackish water    |  | Clay layer     |
|  | Salty groundwater |  | Infrastructure |

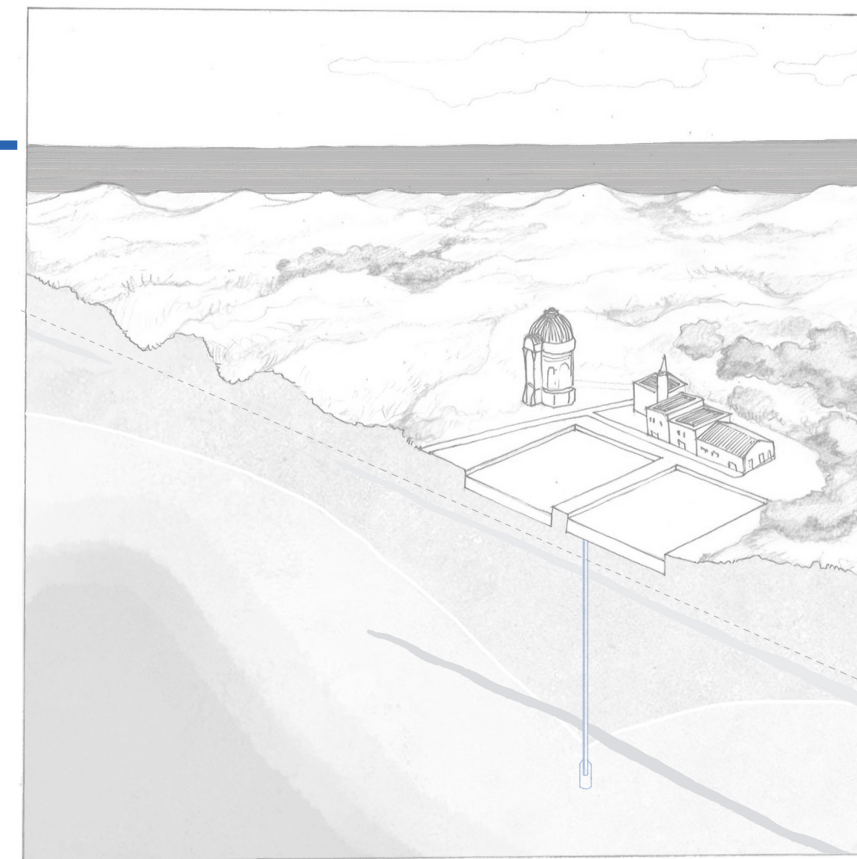




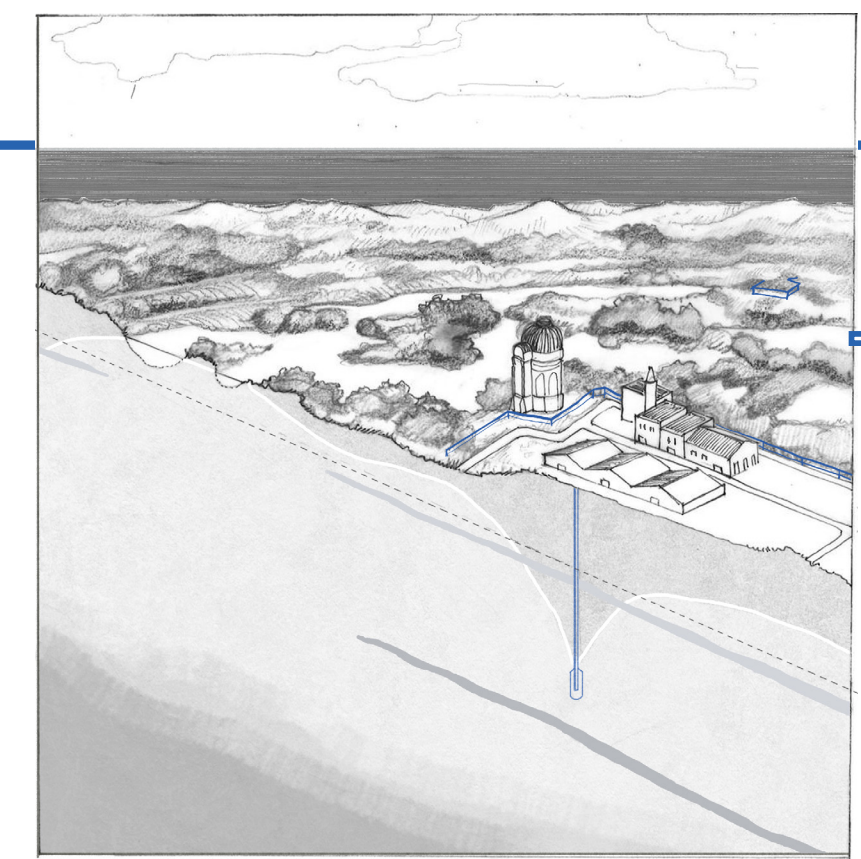
1874-1930









~1930

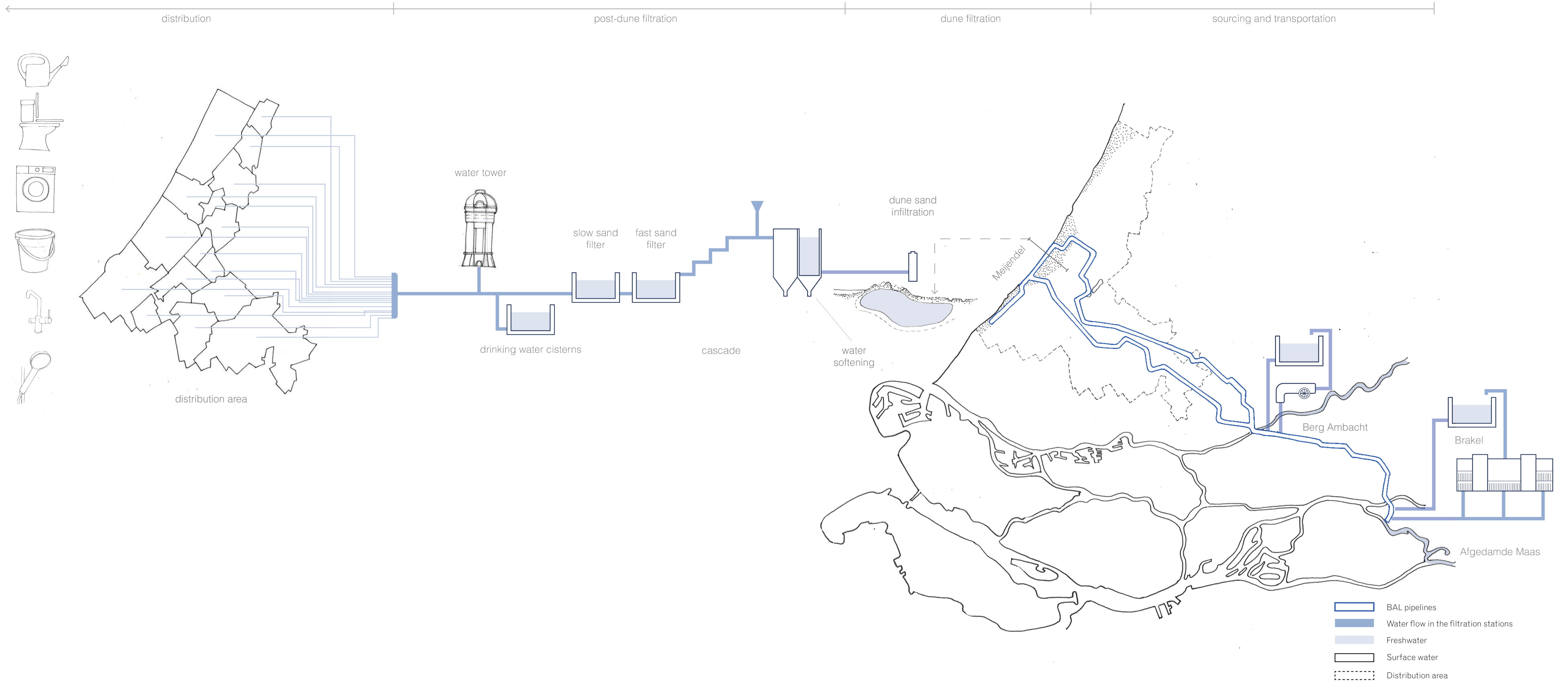


1930-1955



1955-2025

- |   |                   |   |                |
|---|-------------------|---|----------------|
|  | Freshwater lens   |  | Peat layer     |
|  | Brackish water    |  | Clay layer     |
|  | Salty groundwater |  | Infrastructure |



Linear, singular thinking

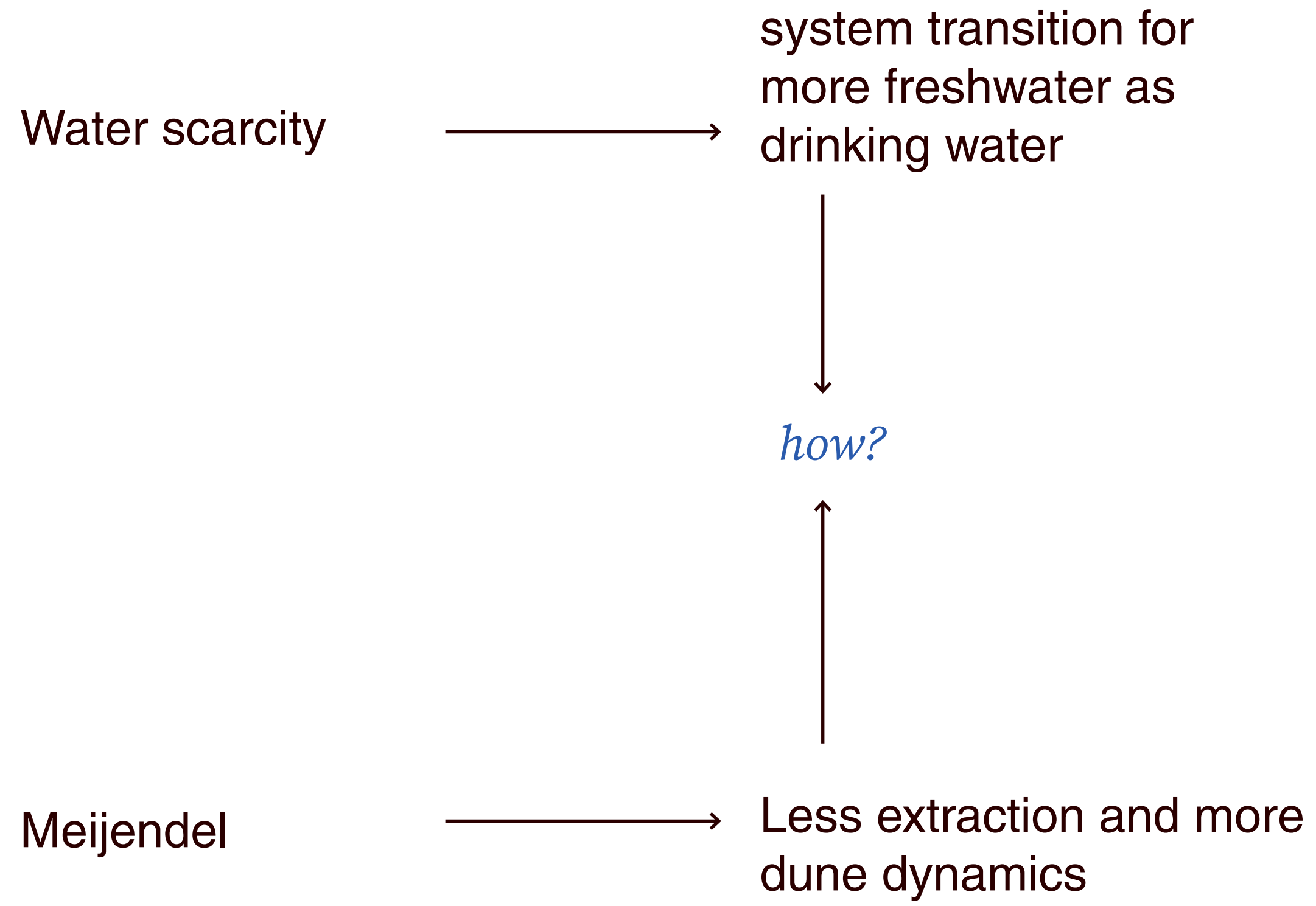


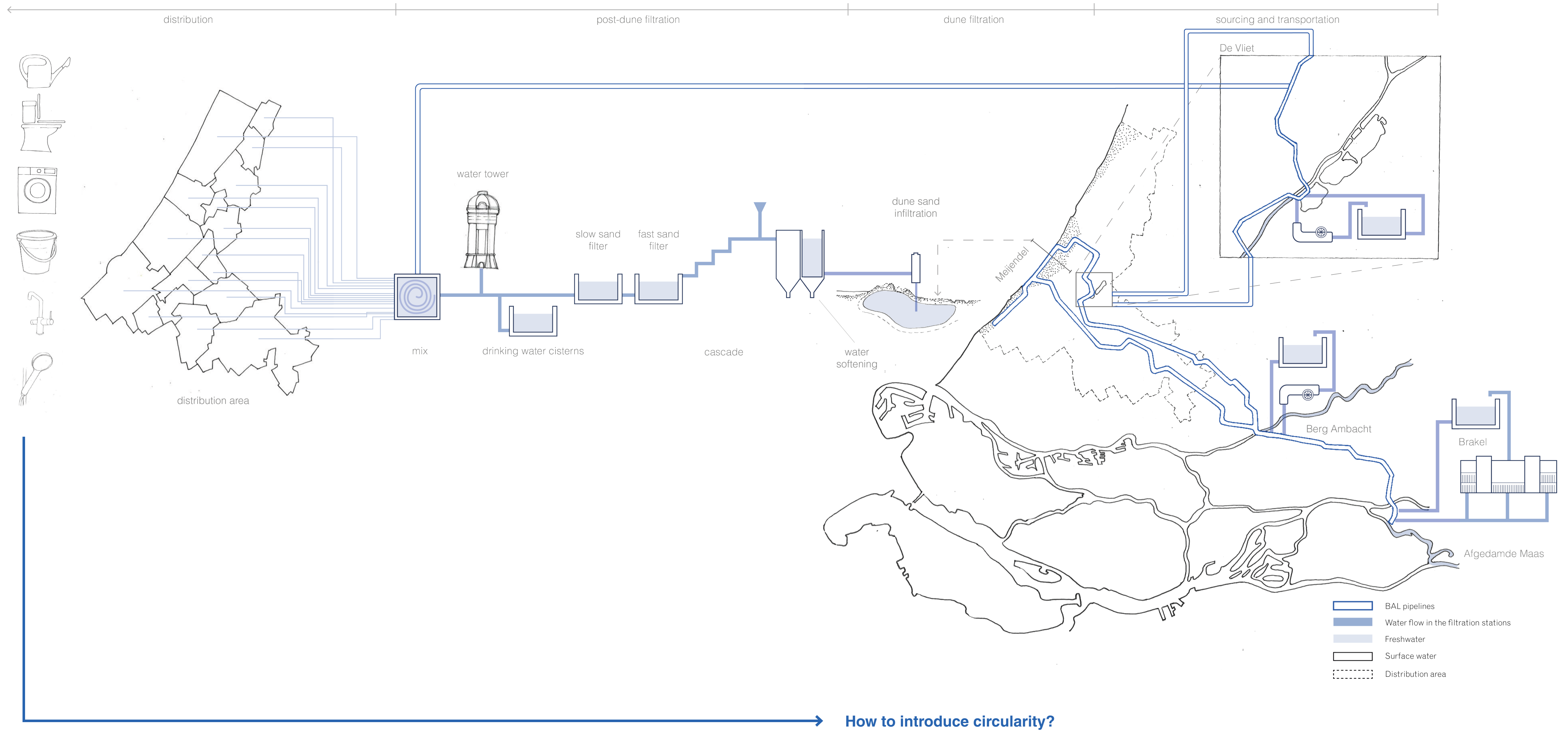


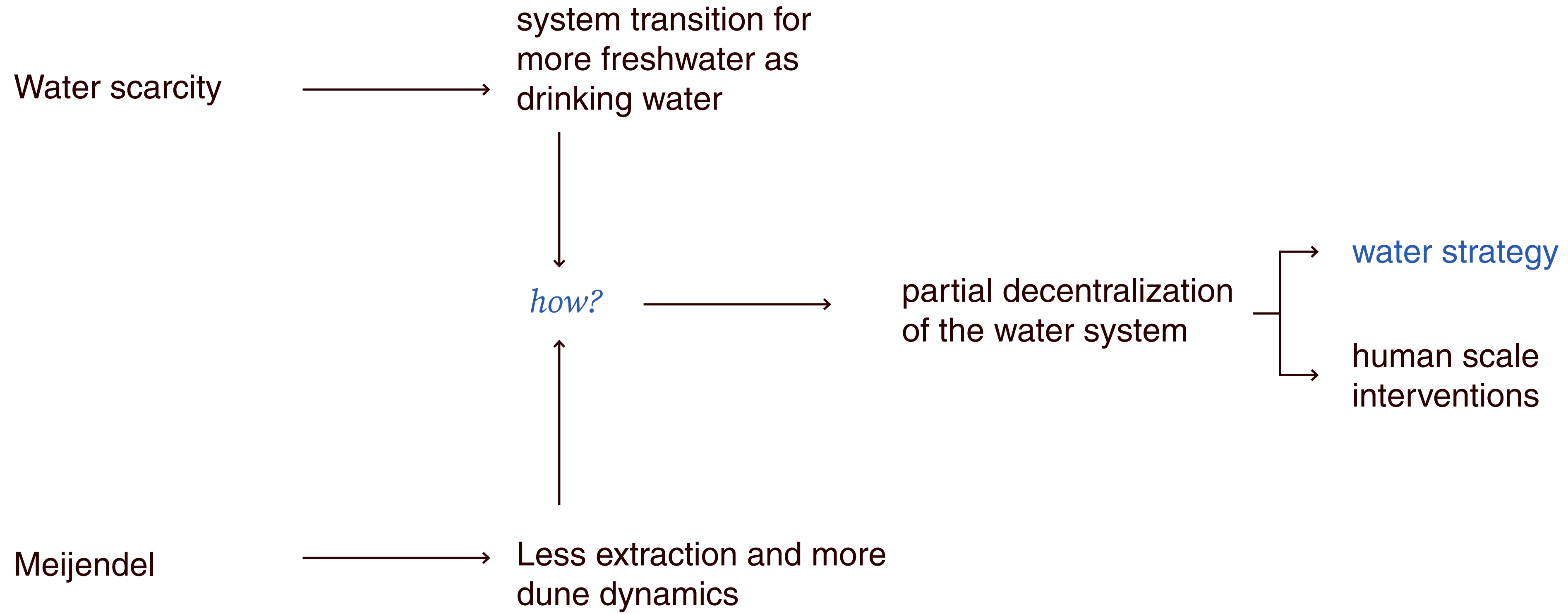


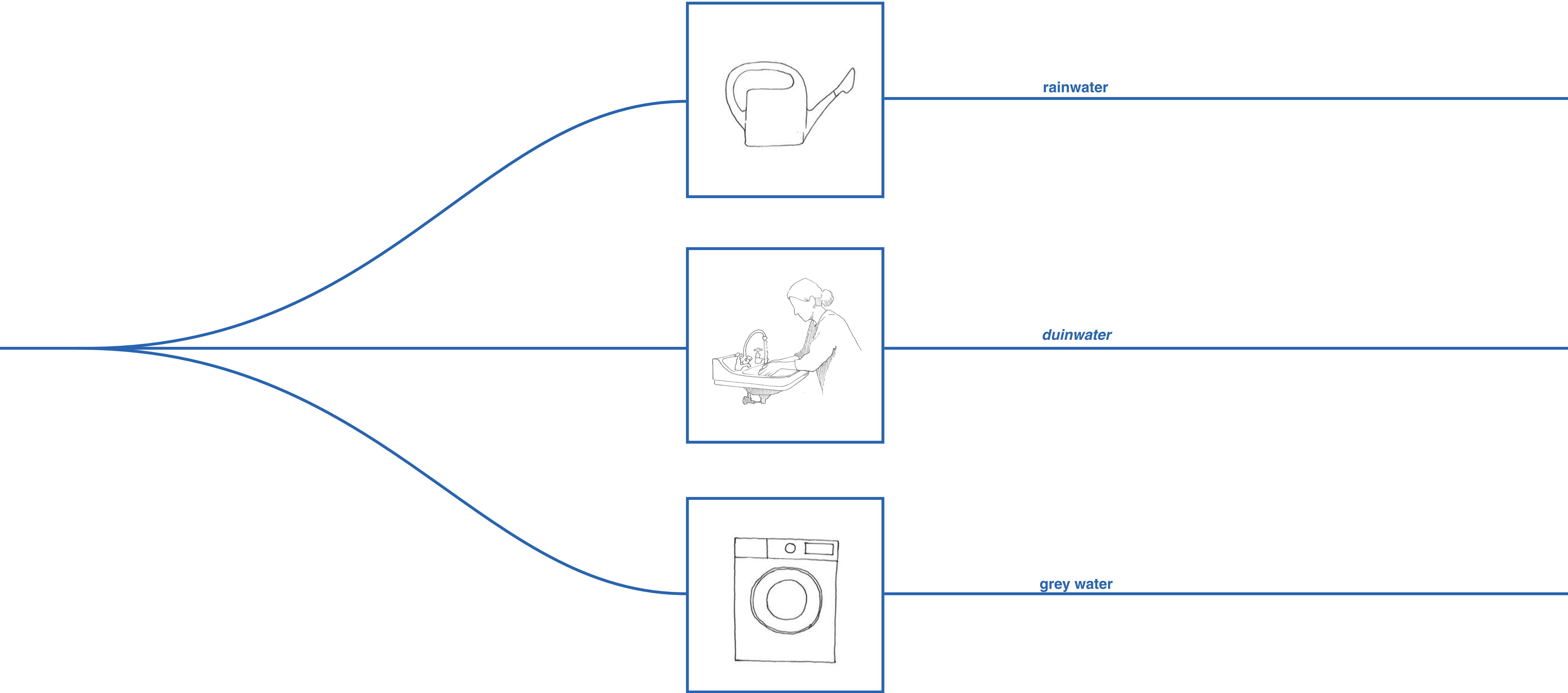


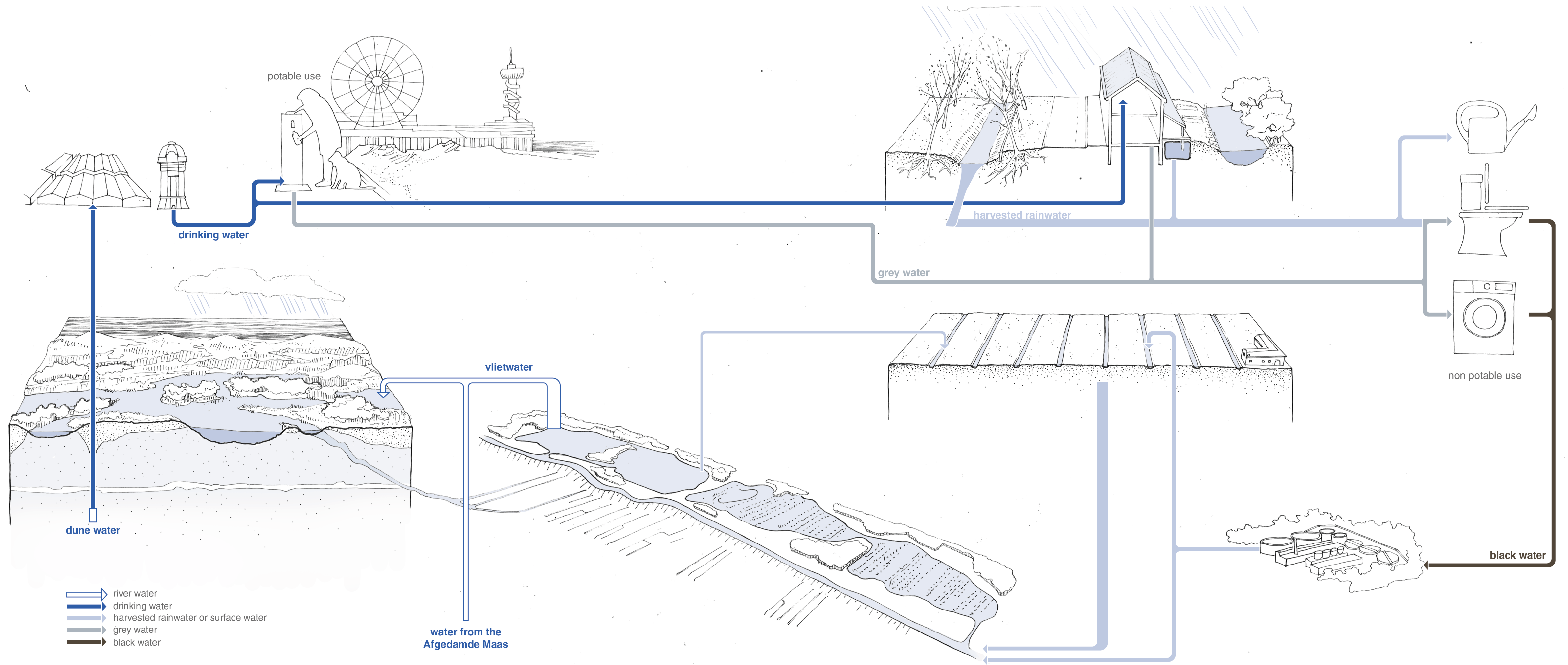




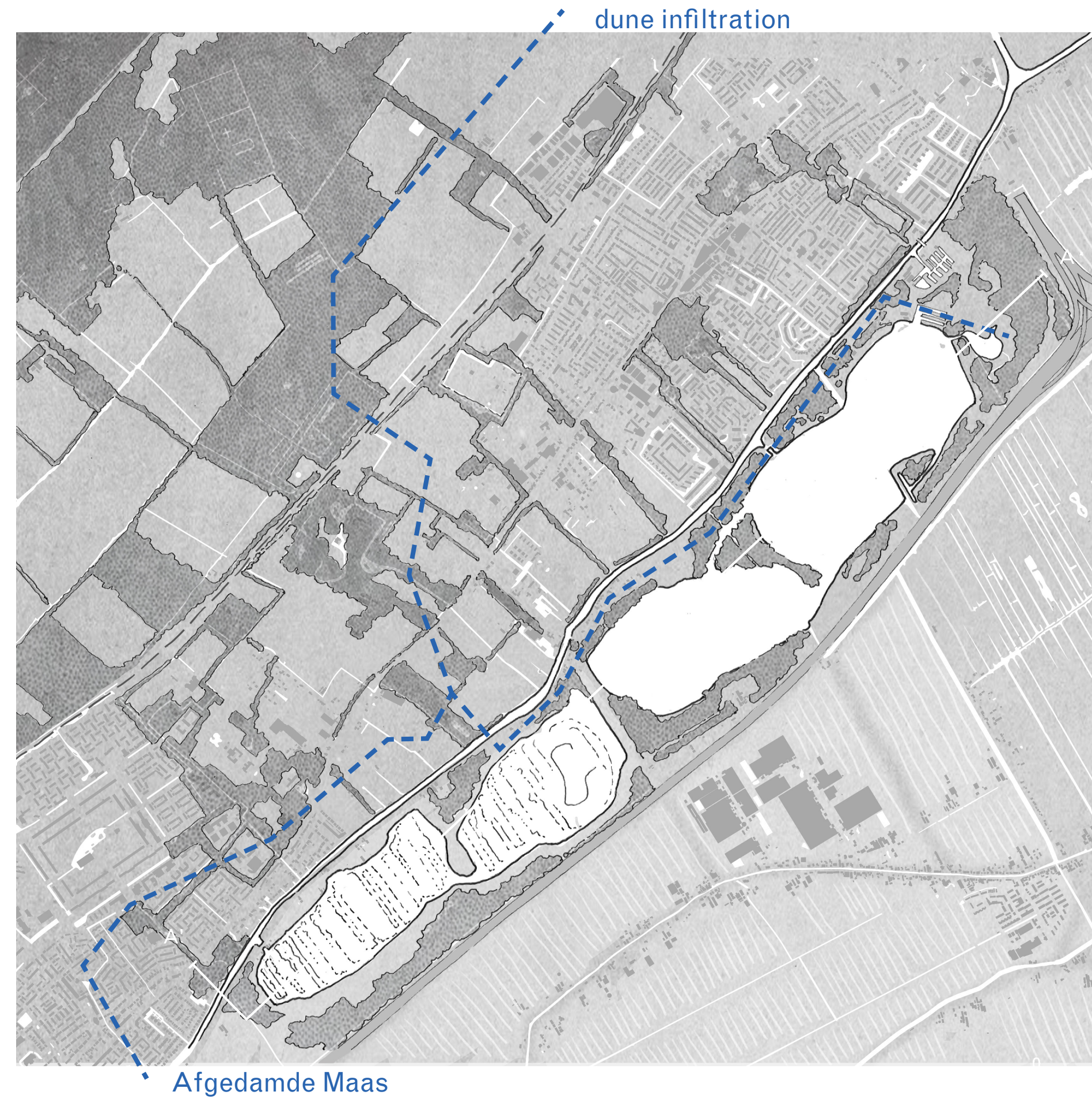






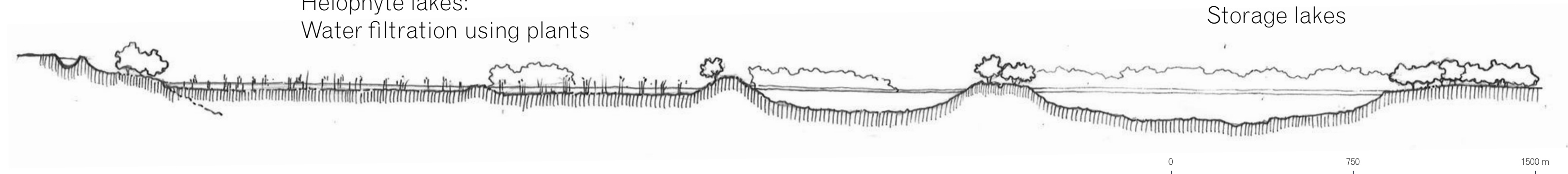


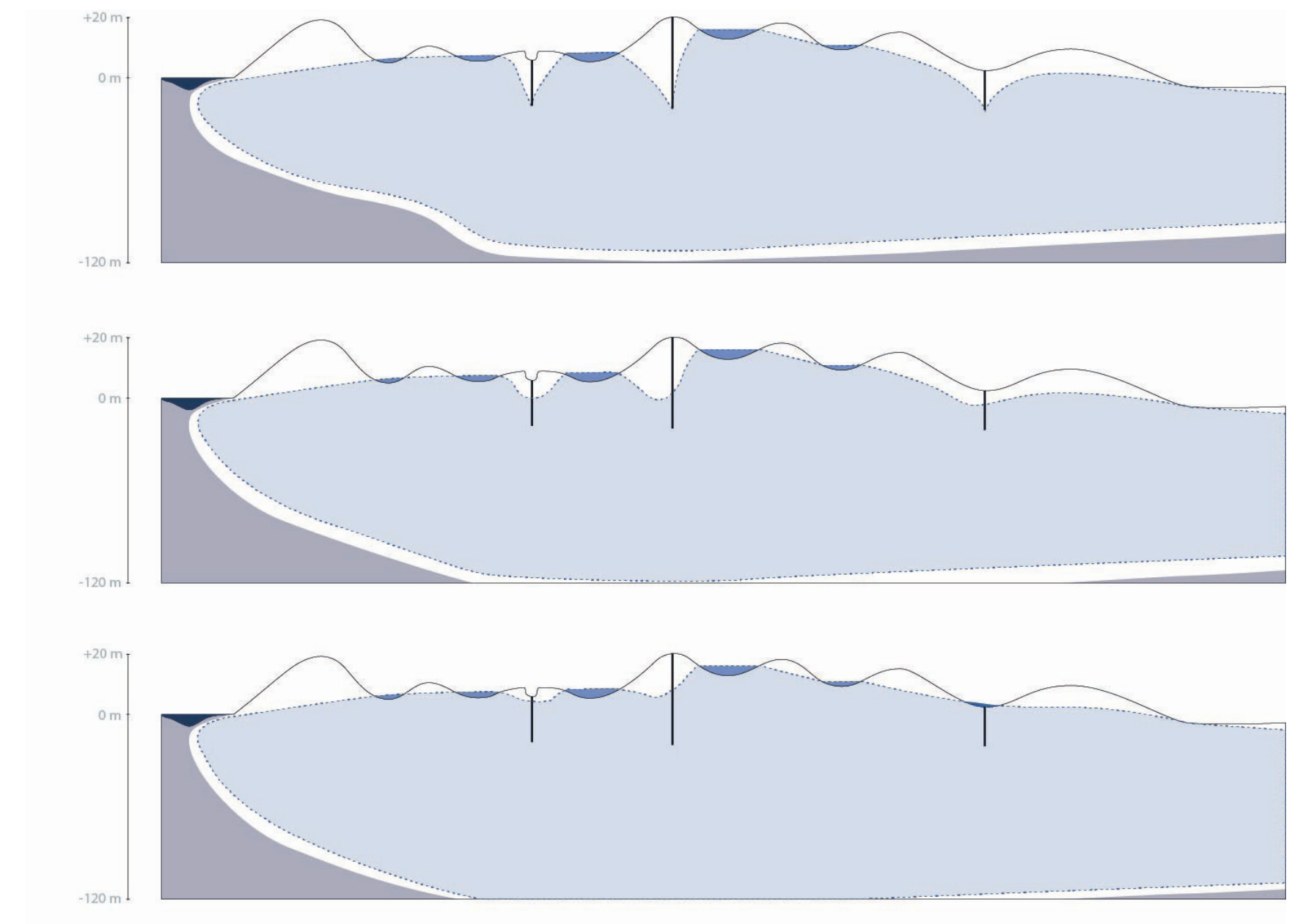
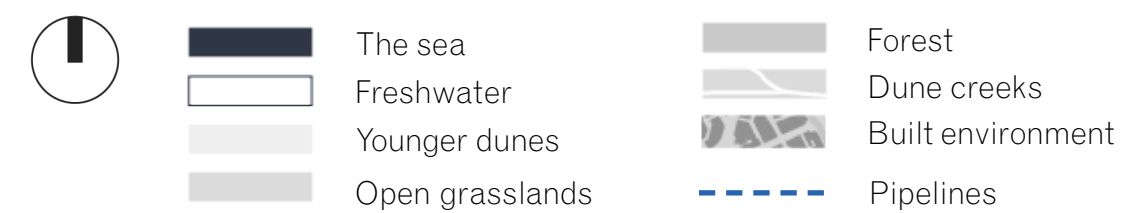
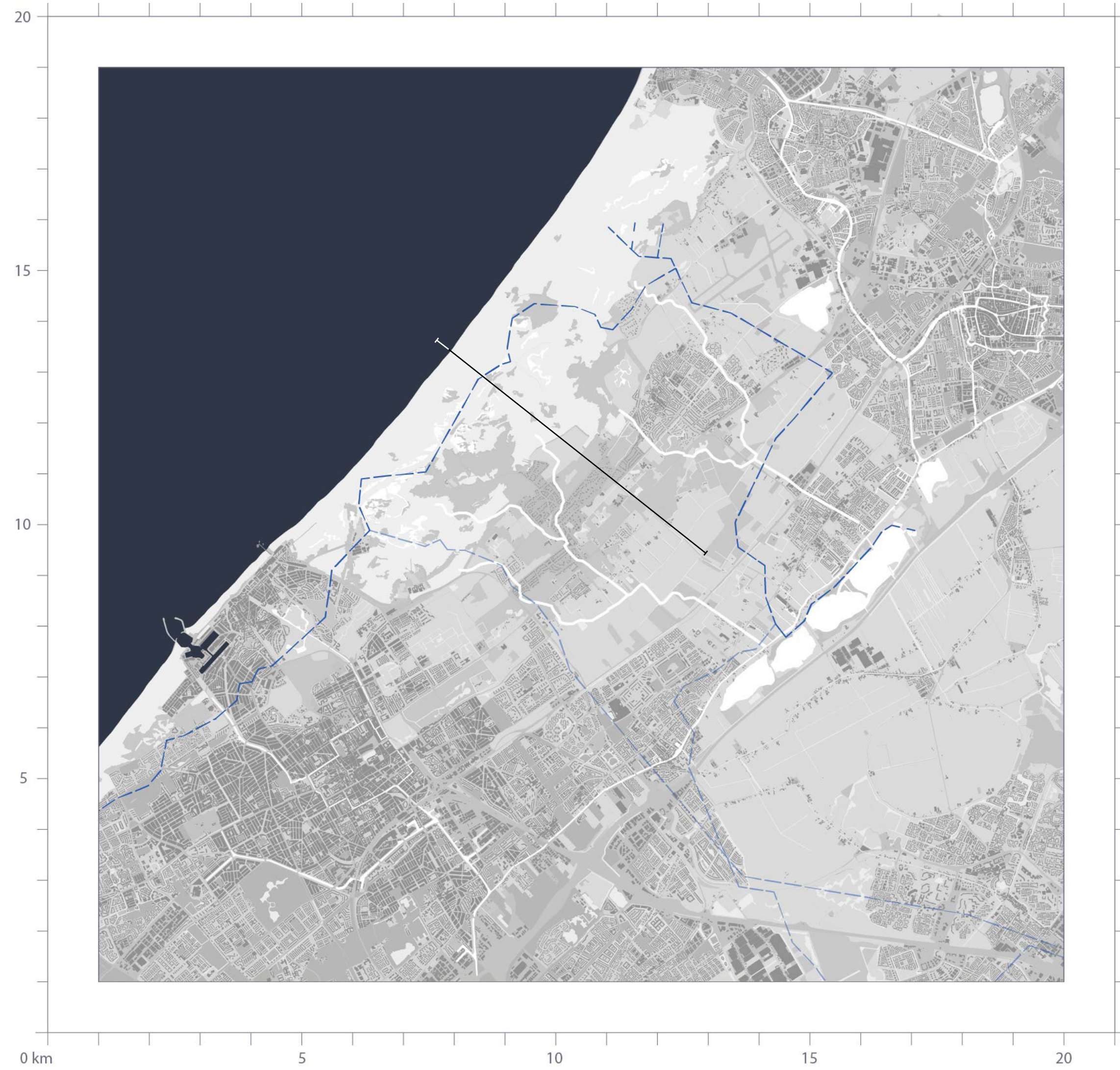


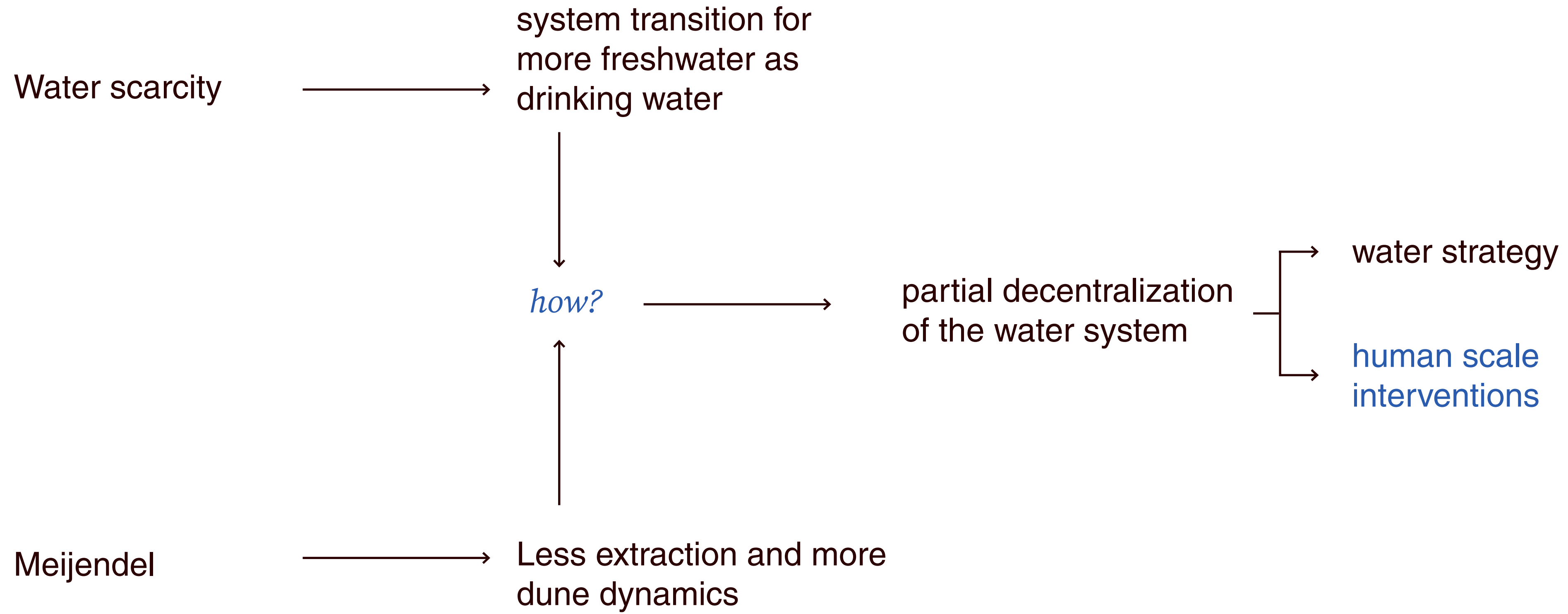


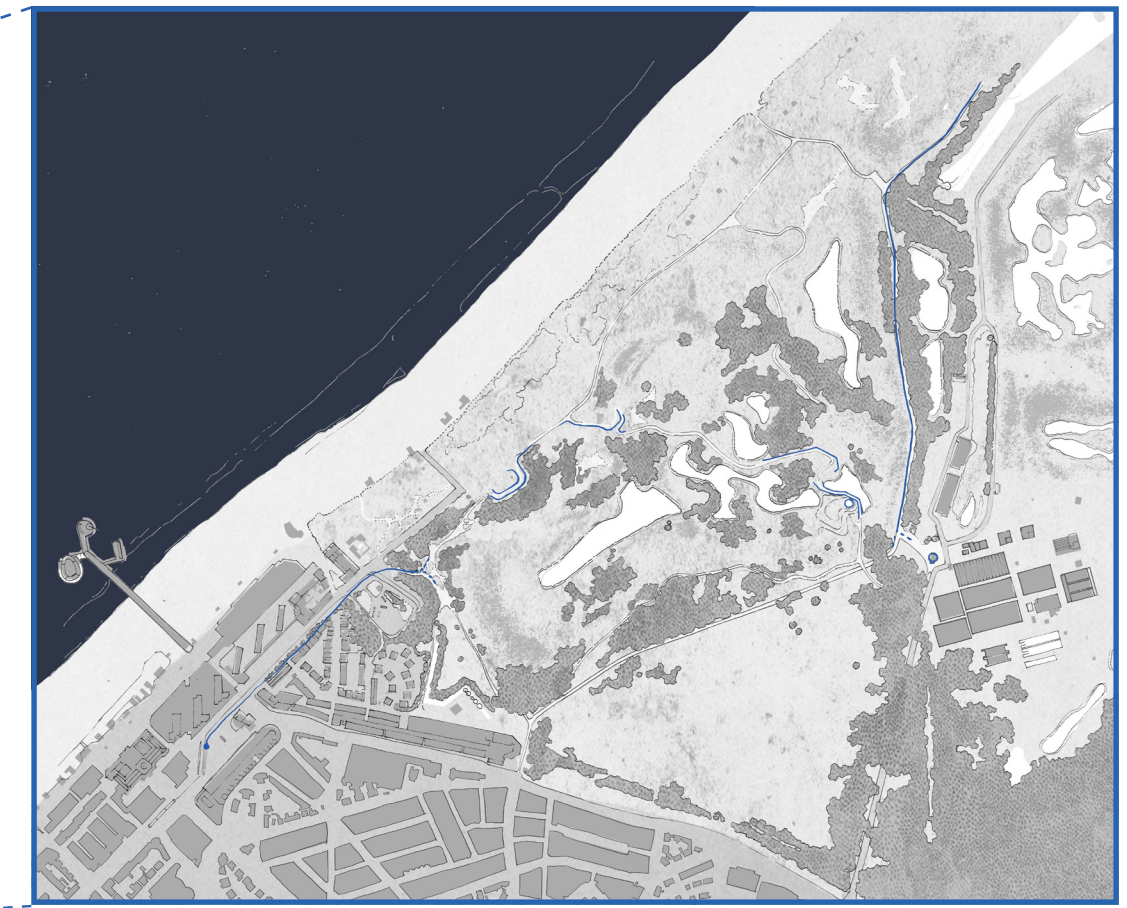
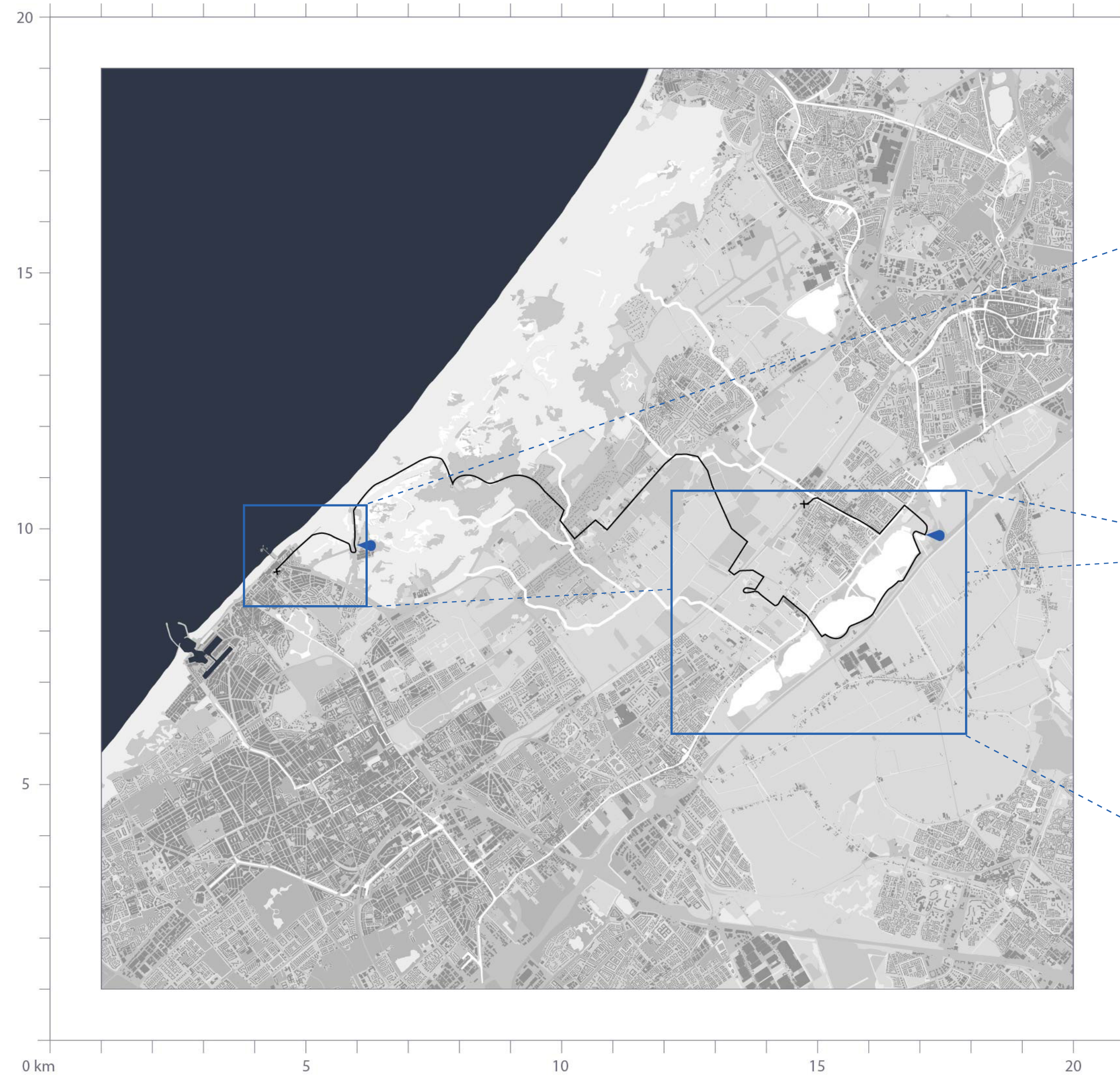
Helophyte lakes:  
Water filtration using plants

Storage lakes

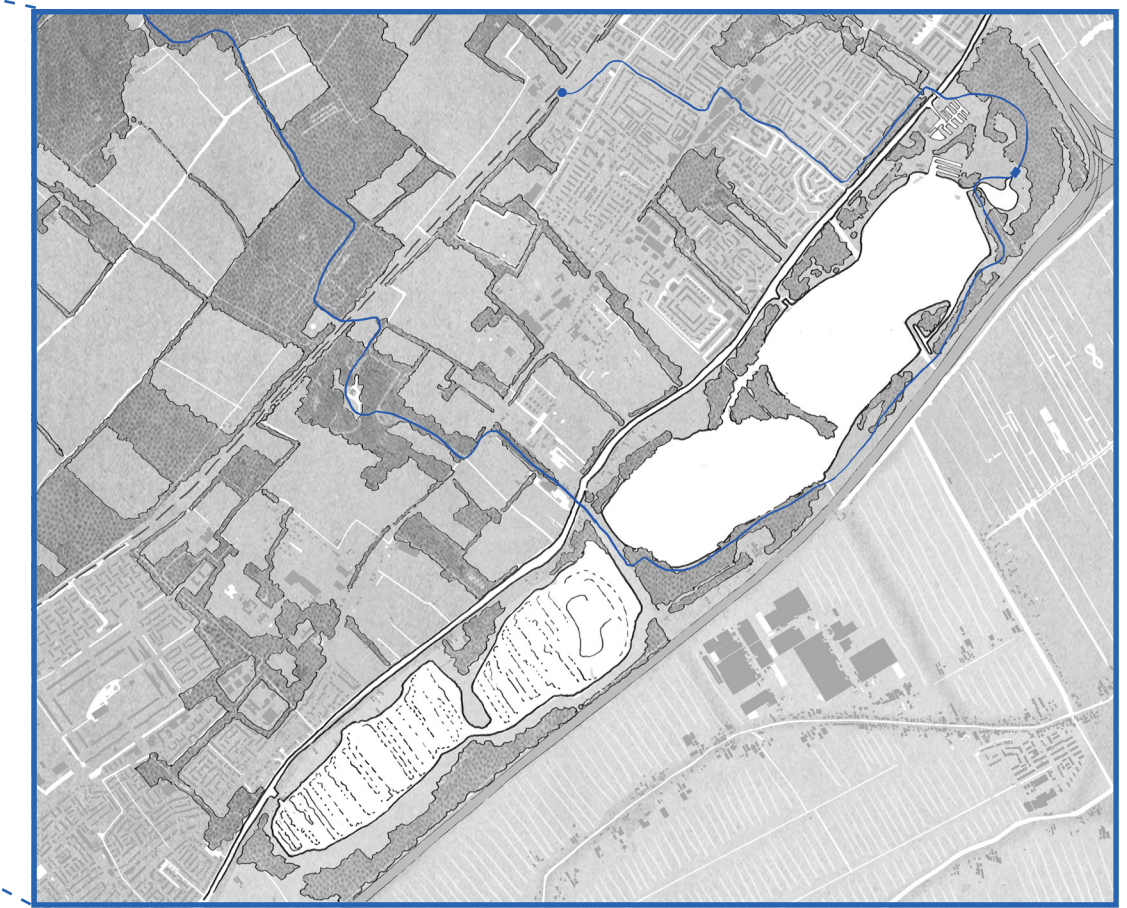




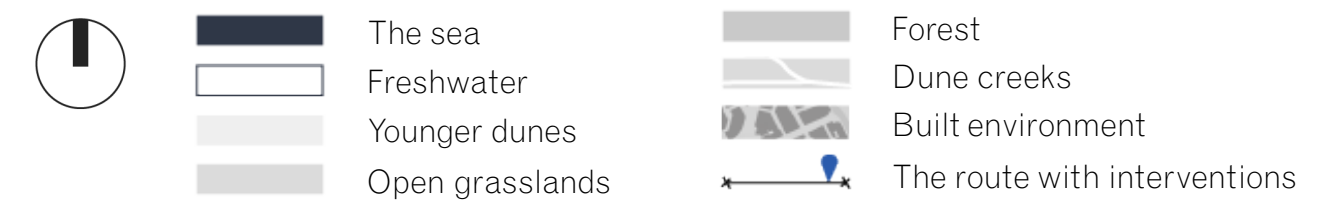




Oostduinpark



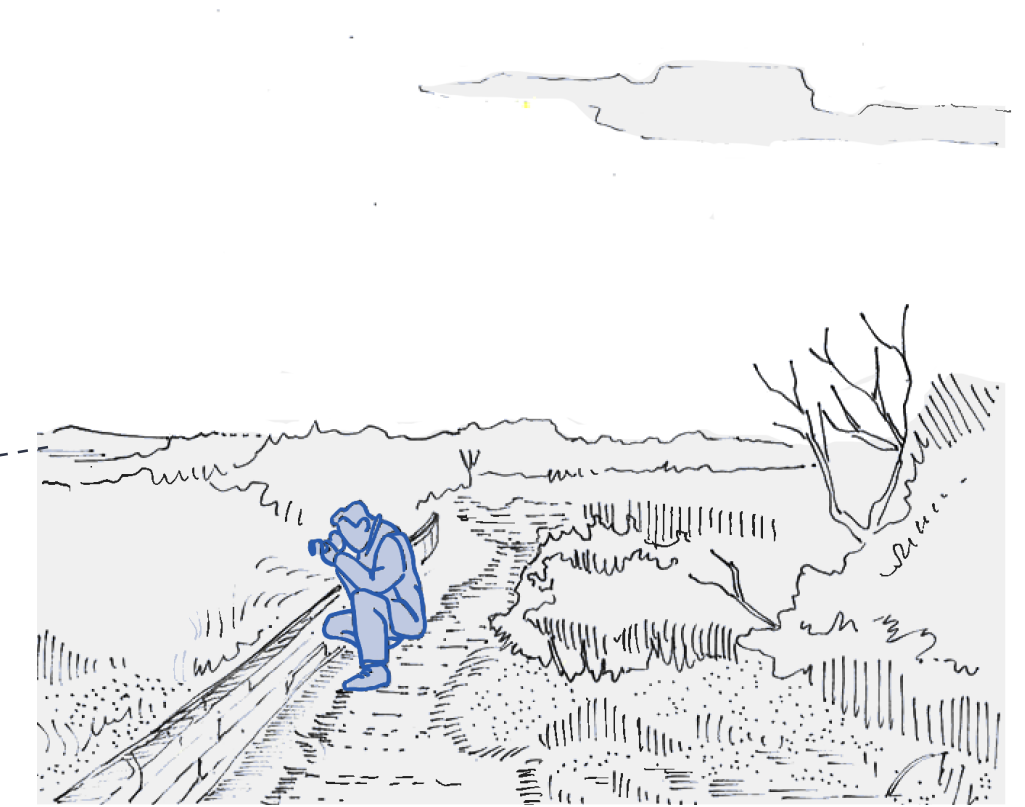
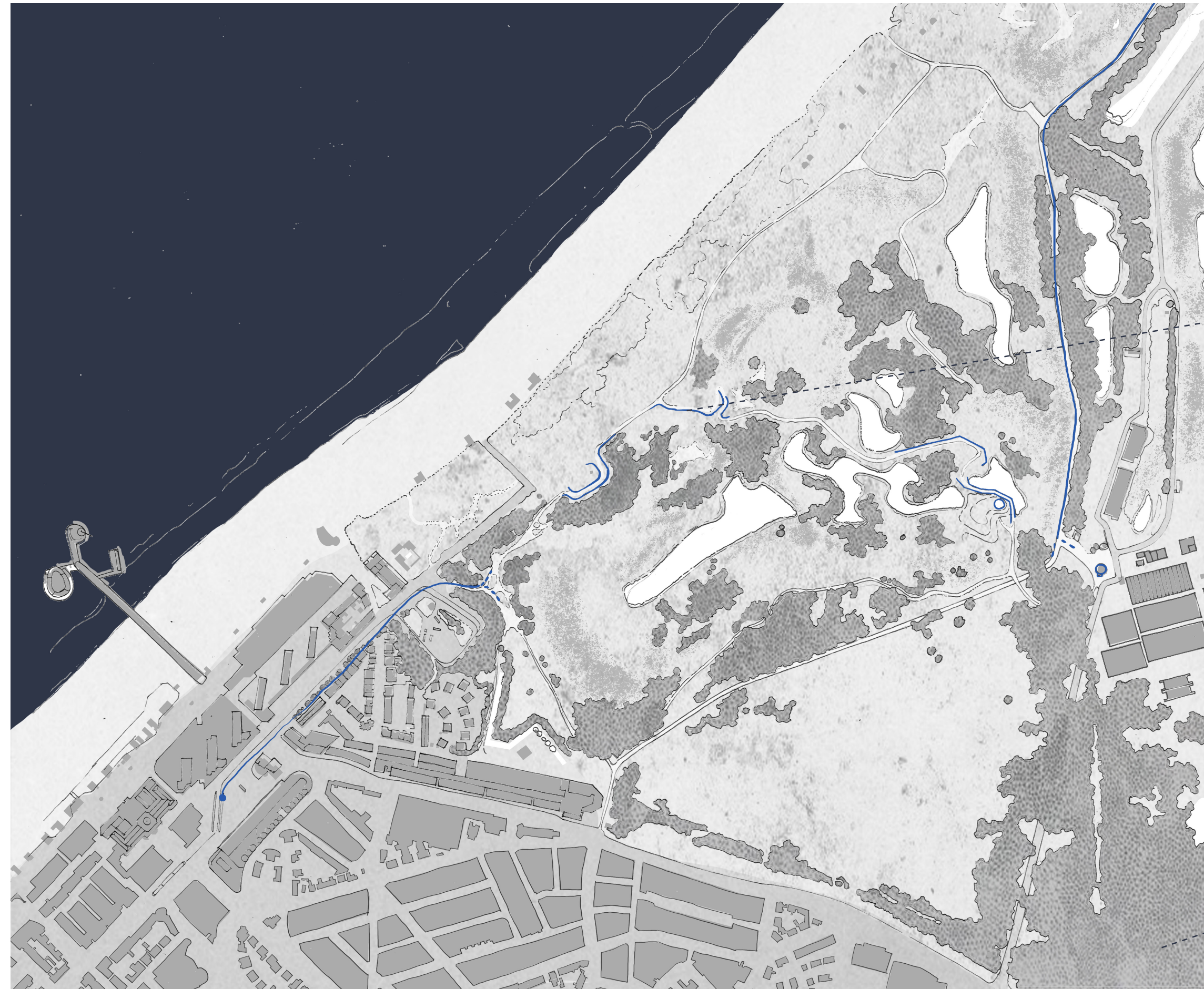
Vlietlanden



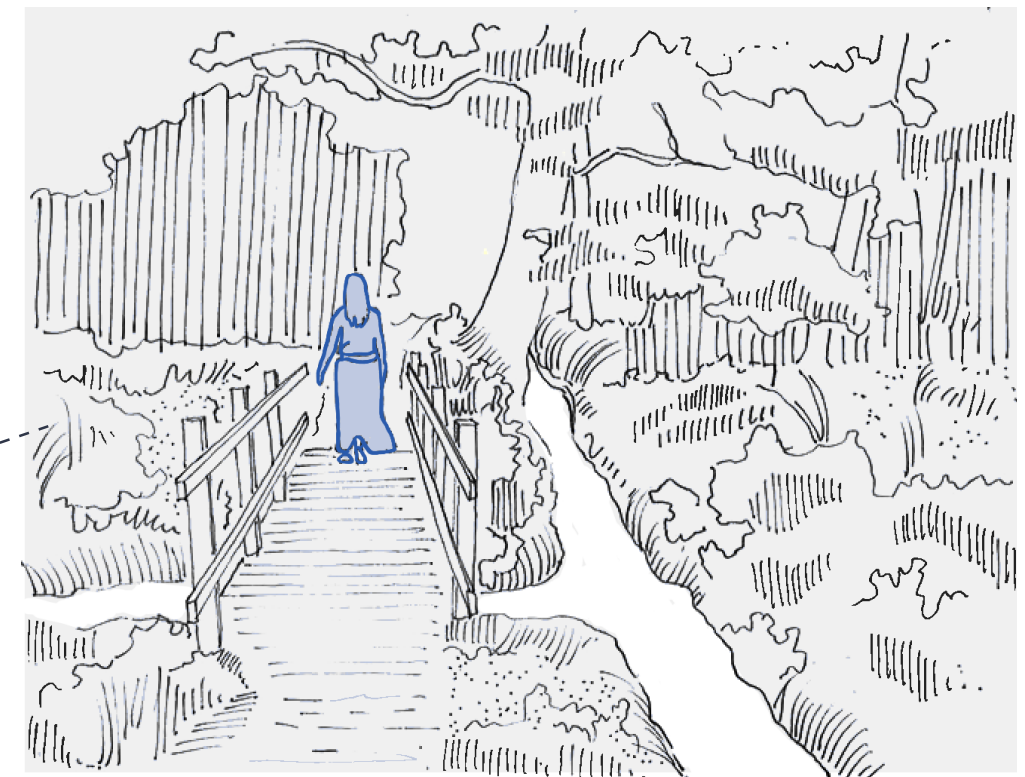




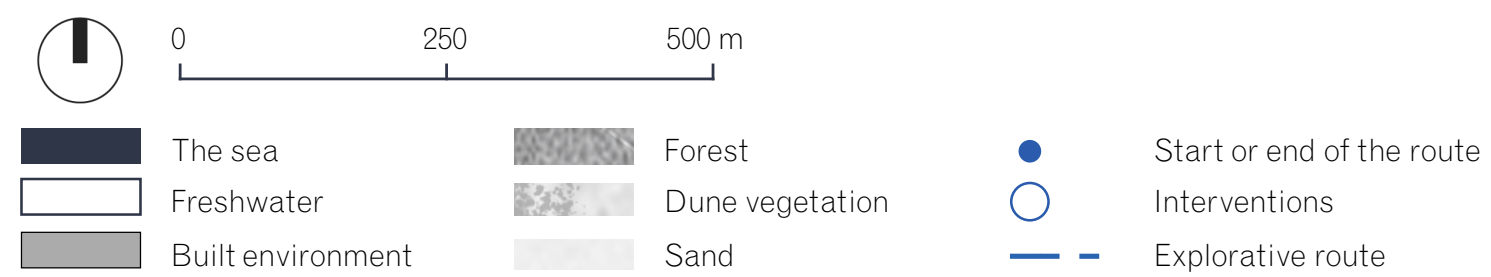




the coastal dunes



the dune creeks







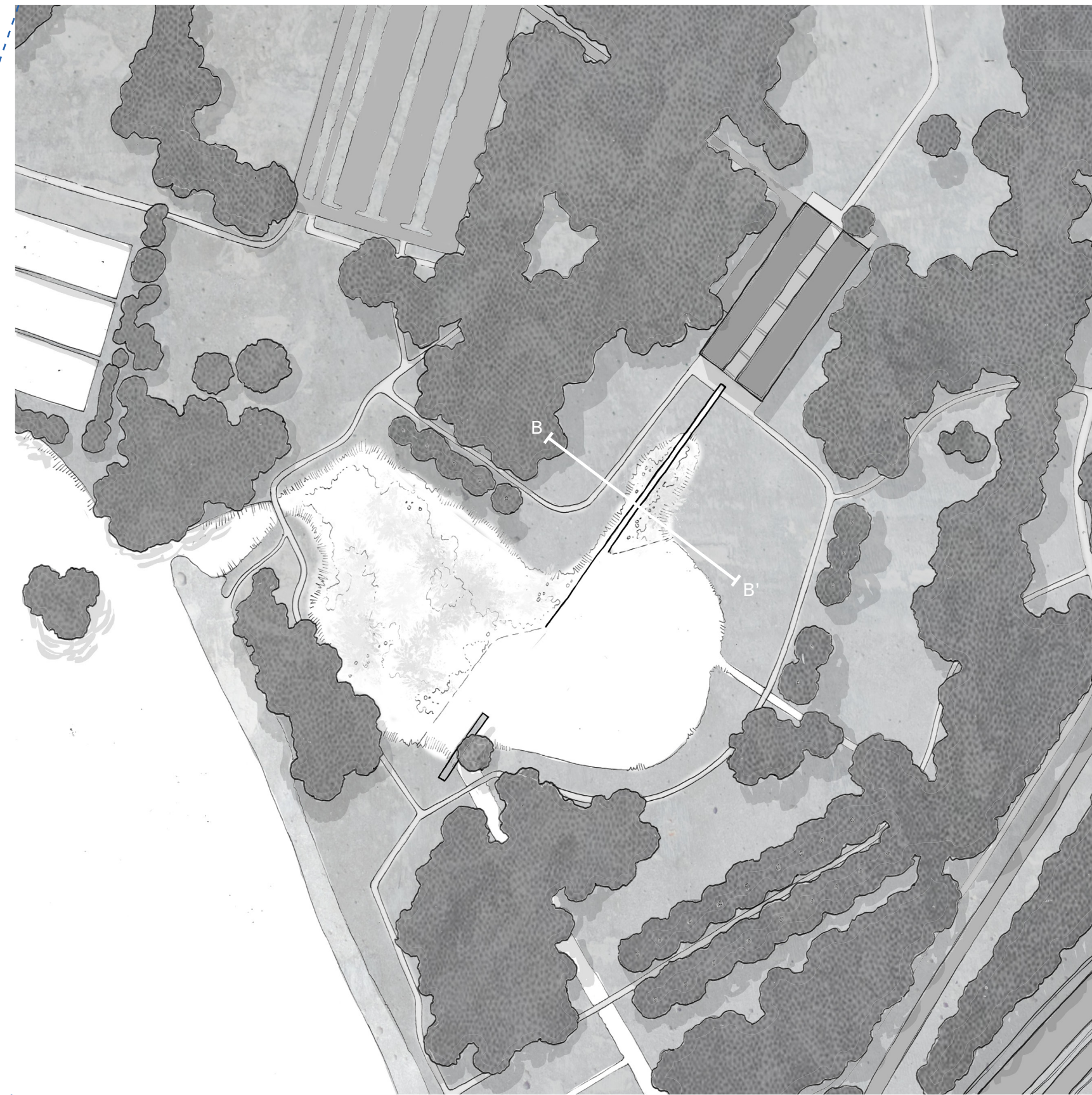
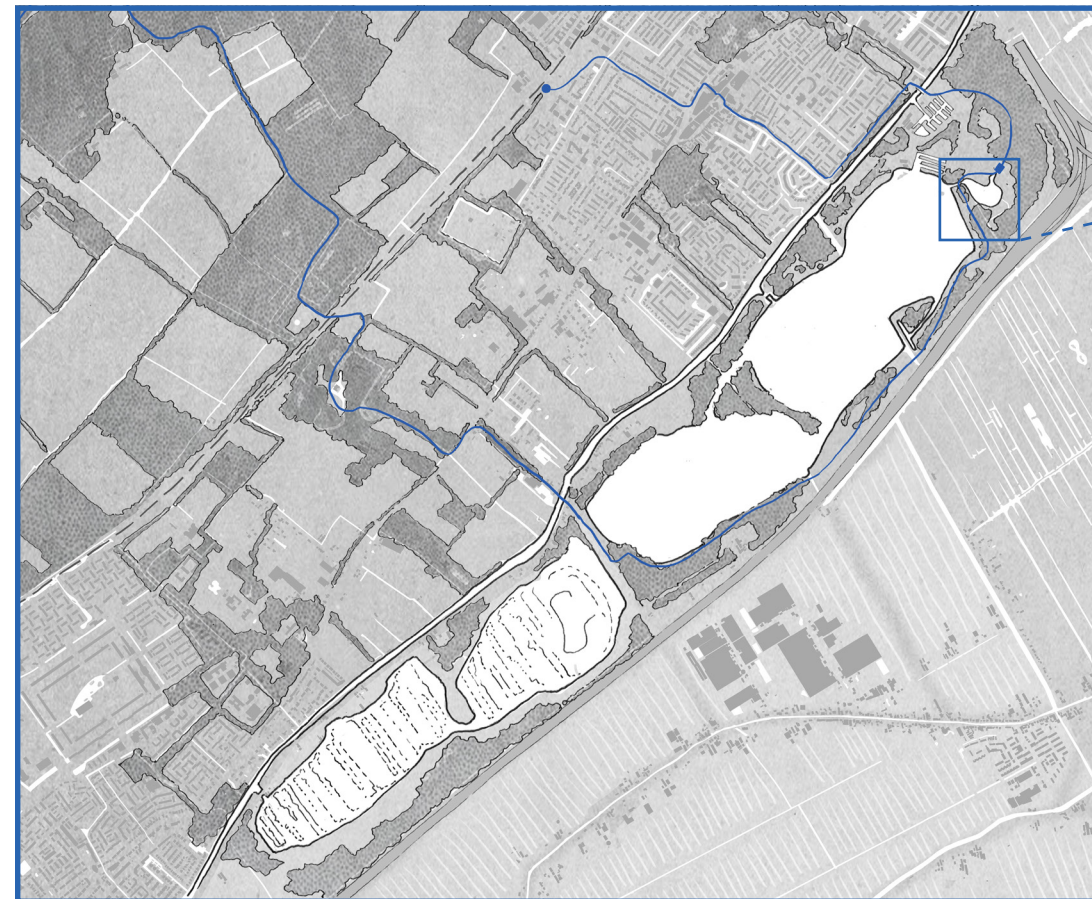











*‘Transformation is also a means of communicating [...] to internalise an awareness of human interaction with the nature we are rooted in and on which we depend so heavily.’*

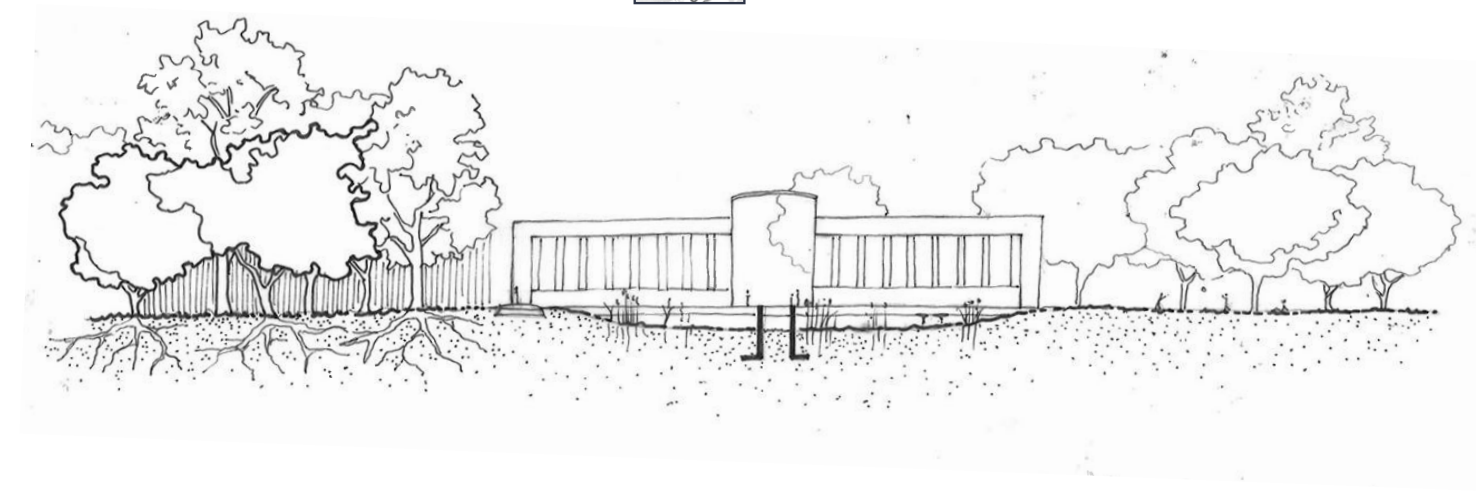
— Braae, 2015, p. 309 in *Beauty Redeemed: Recycling Post-Industrial Landscapes*





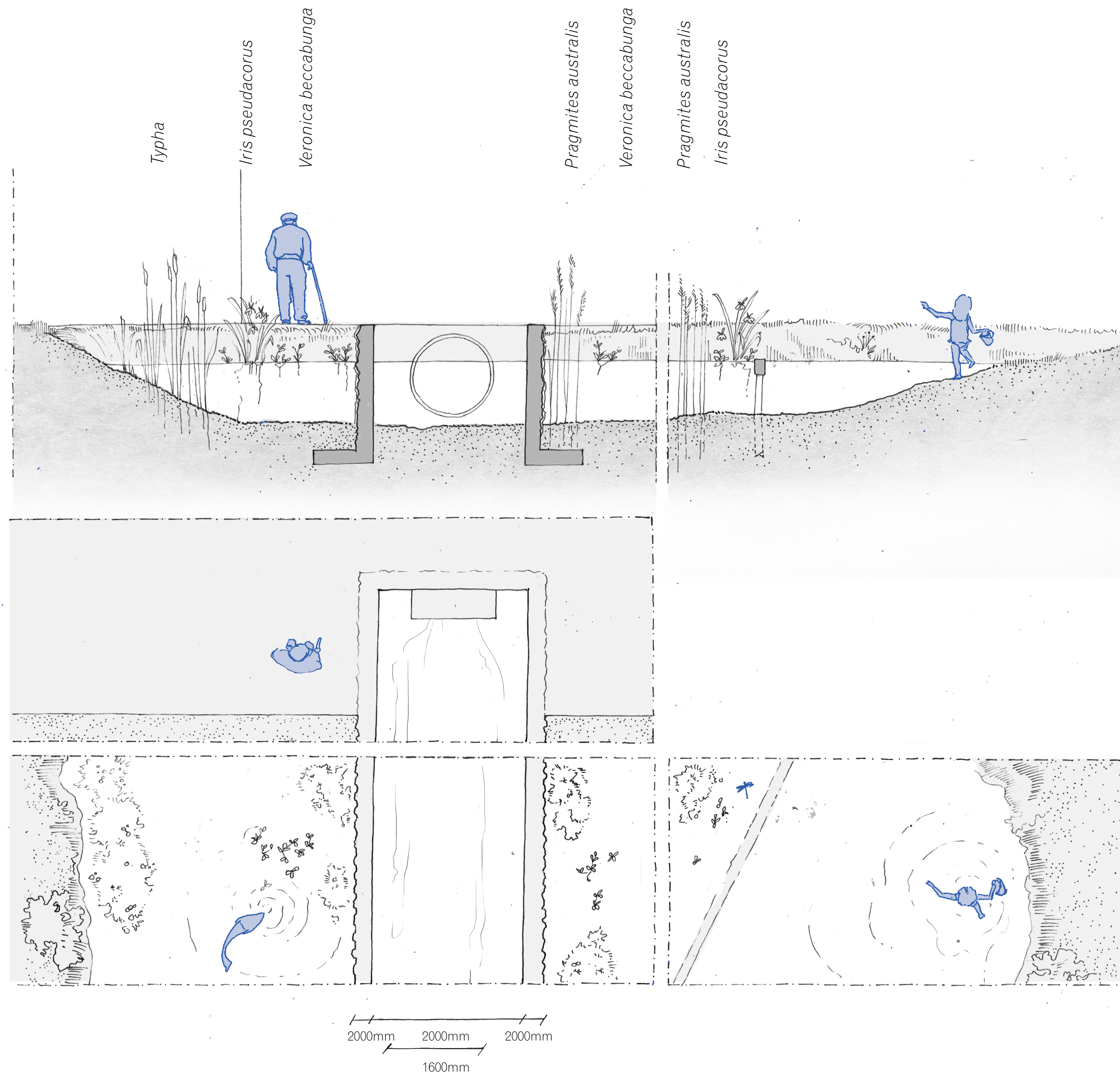
0 50 100 m

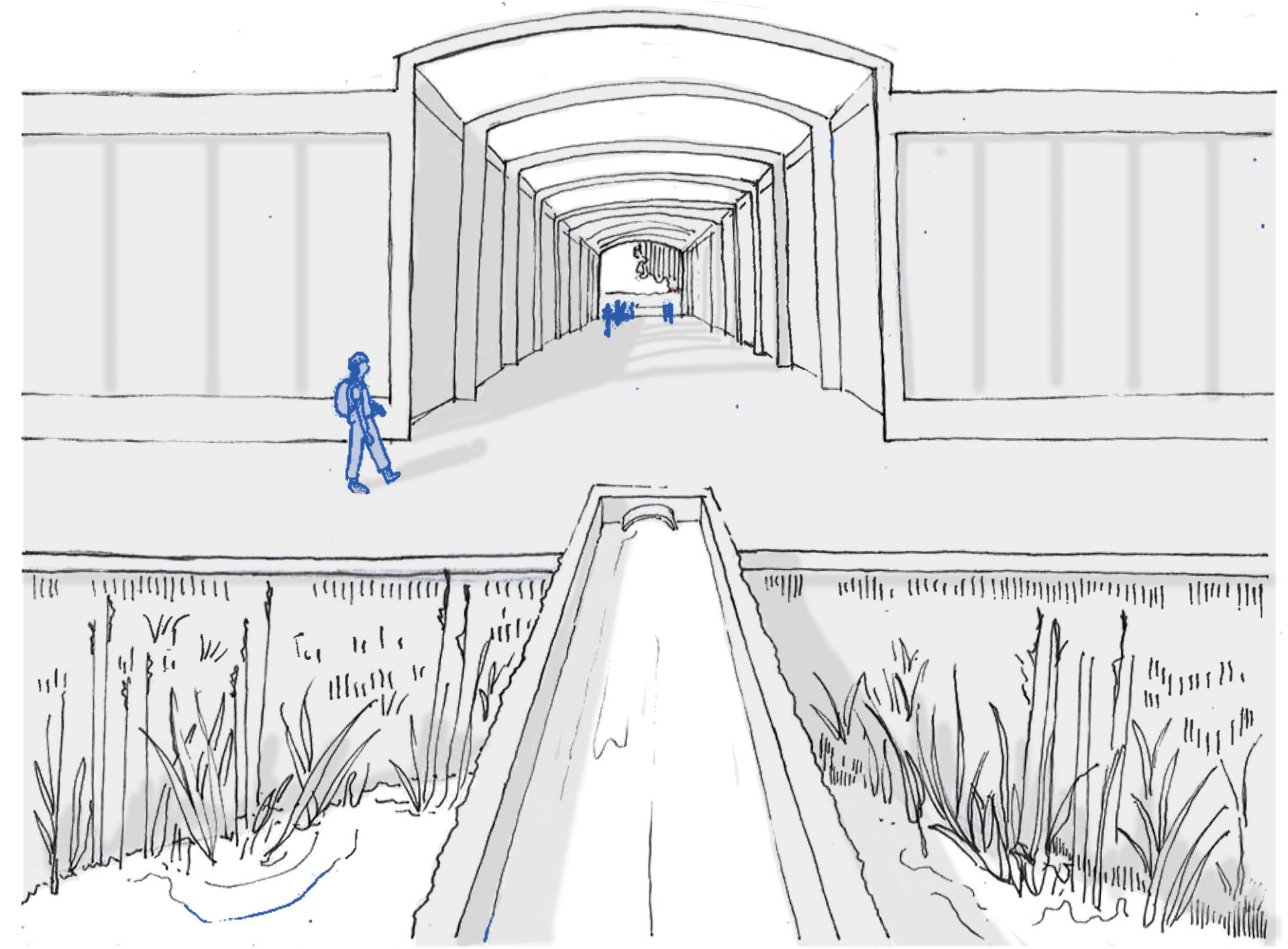
- |   |  |
|---|--|
|  Freshwater      |  Forest     |
|  Buildings       |  Grasslands |
|  'Open' pipeline |  Sand       |
|  Water plants    |  |

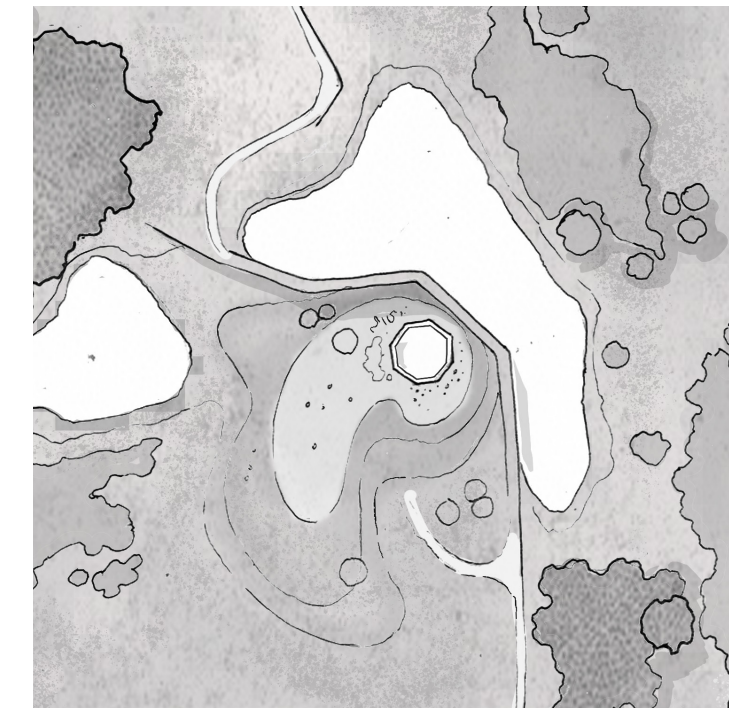
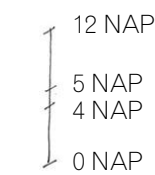
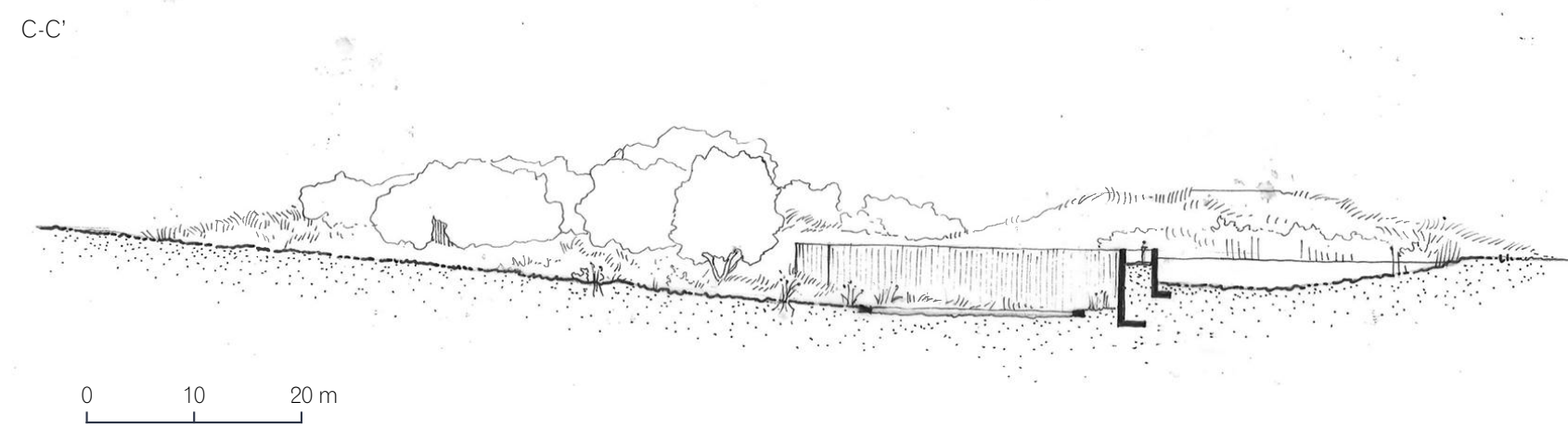
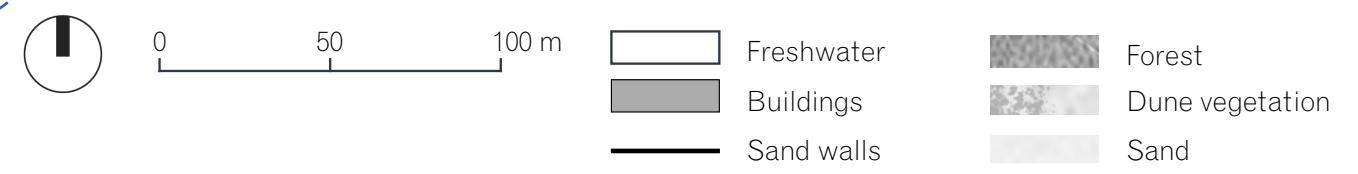
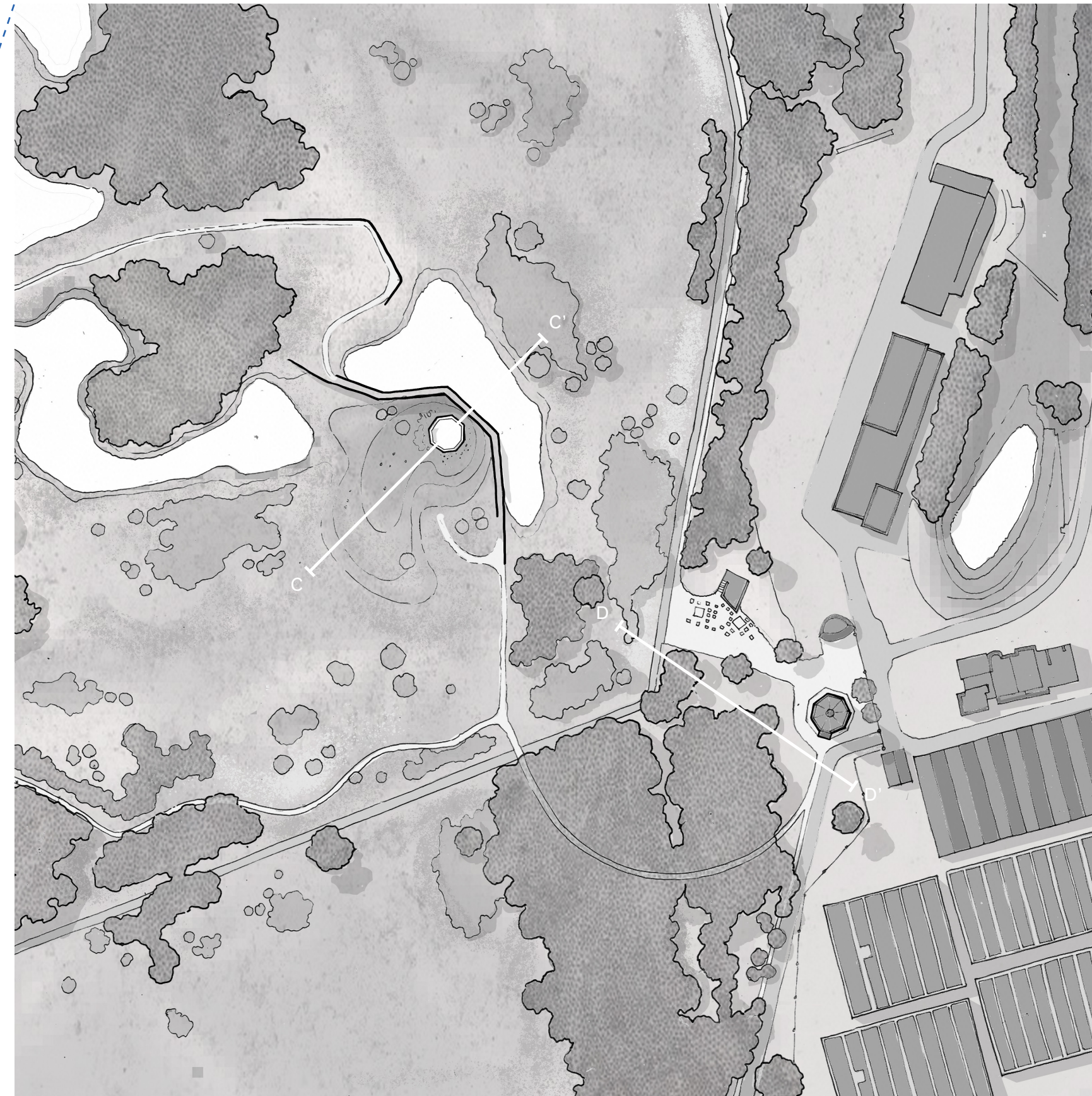
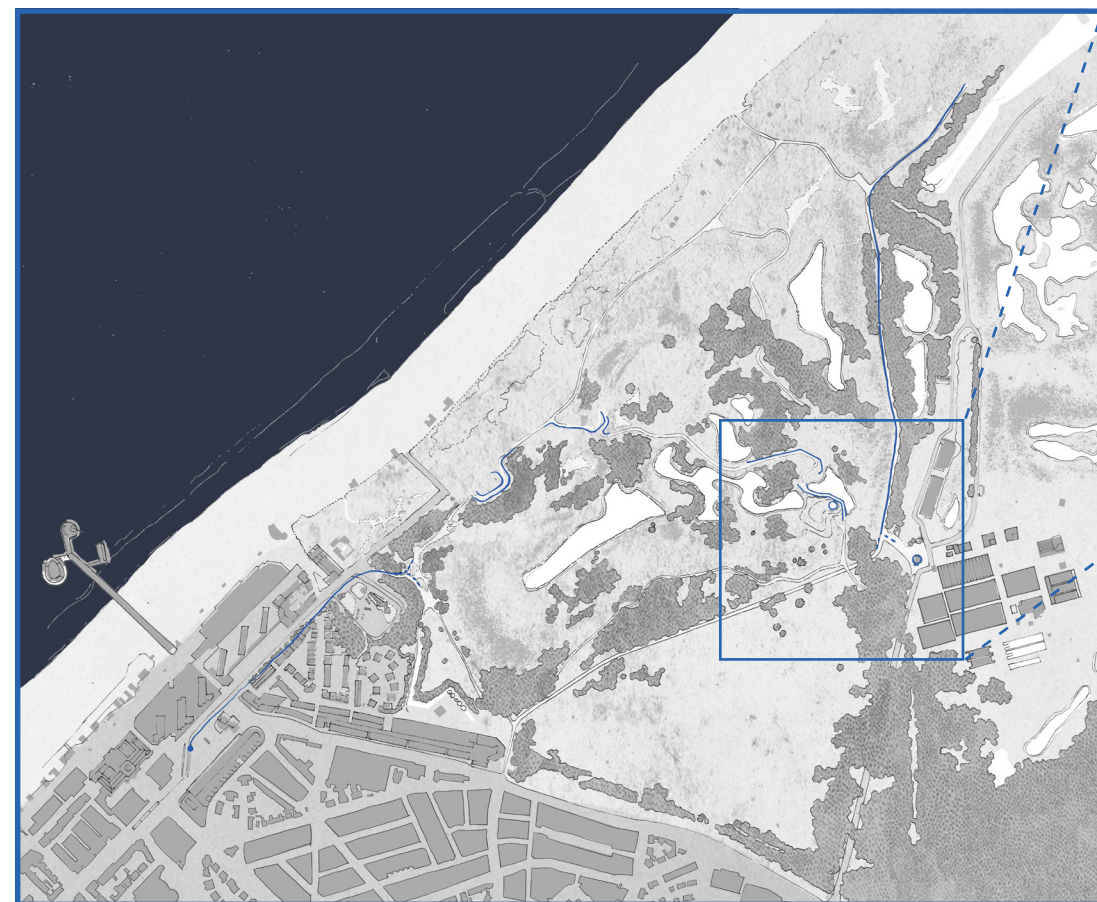


0 10 20 m

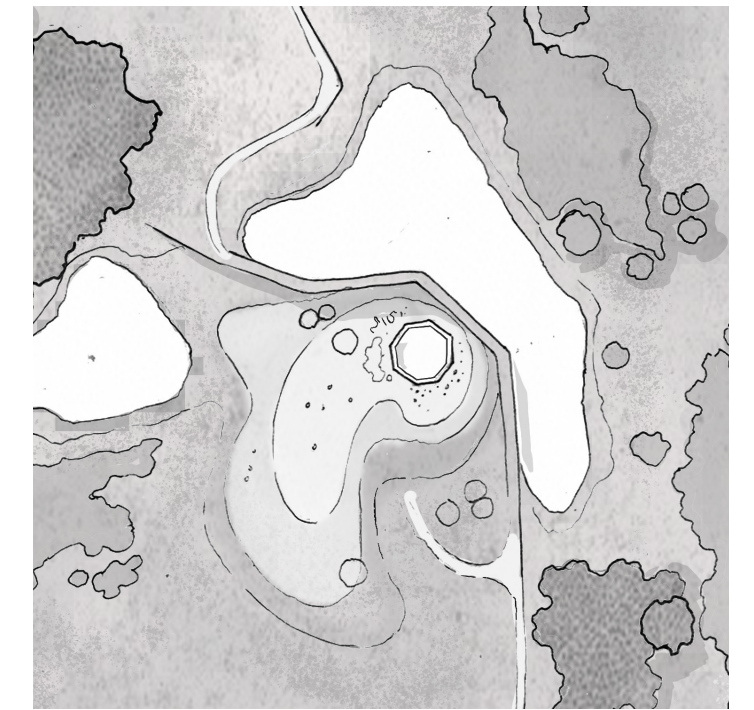




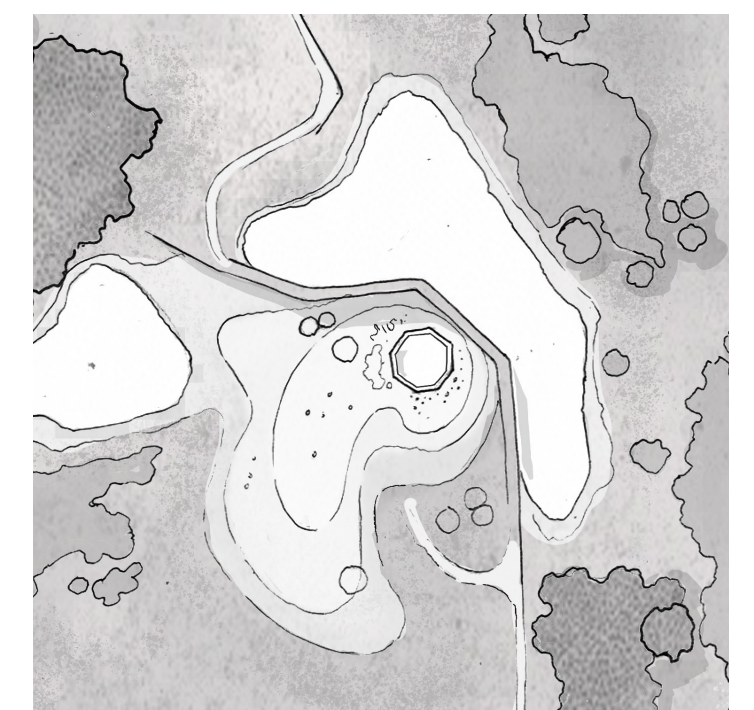




level 1 (0,5 meter)

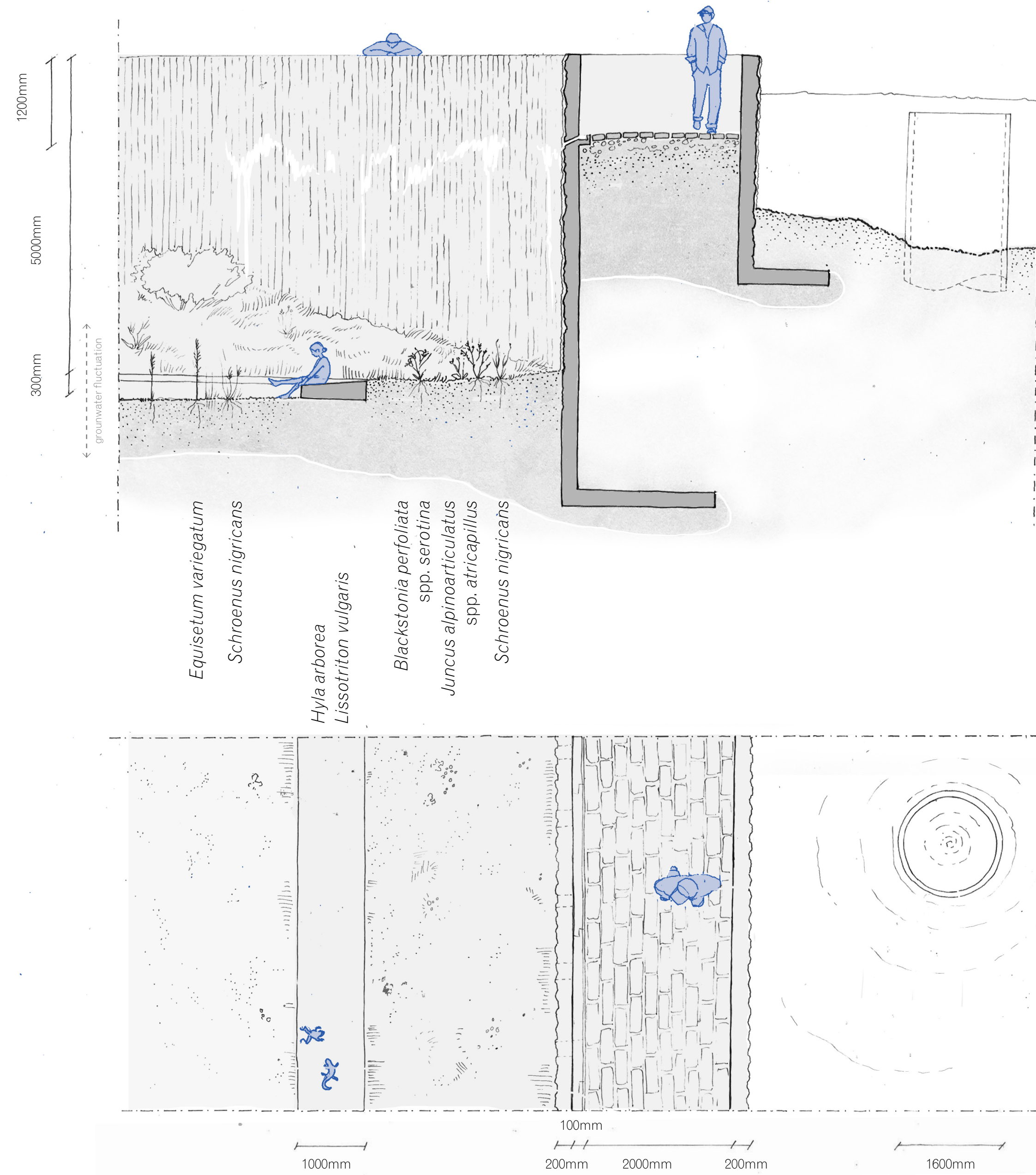


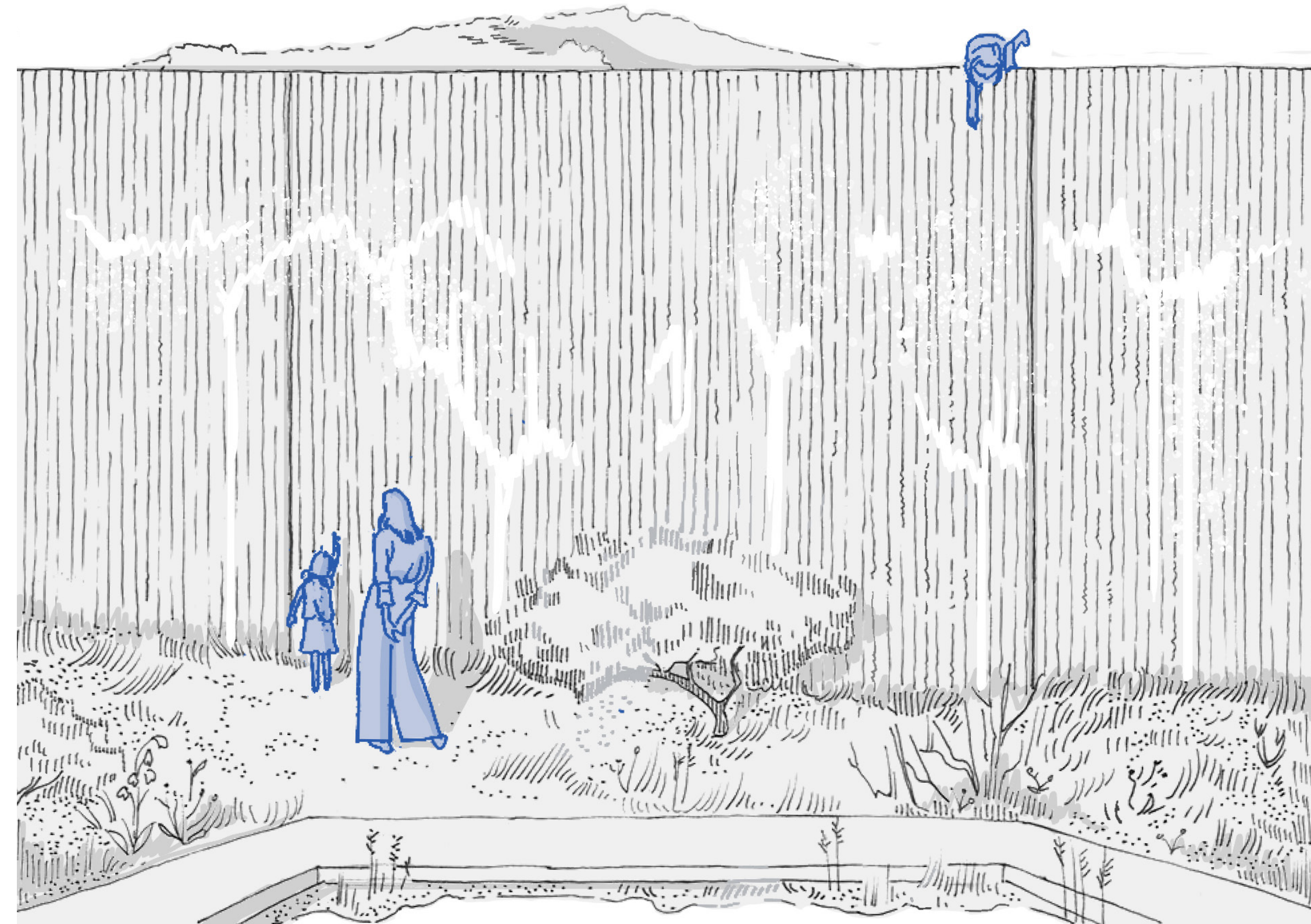
level 2 (2 metres)

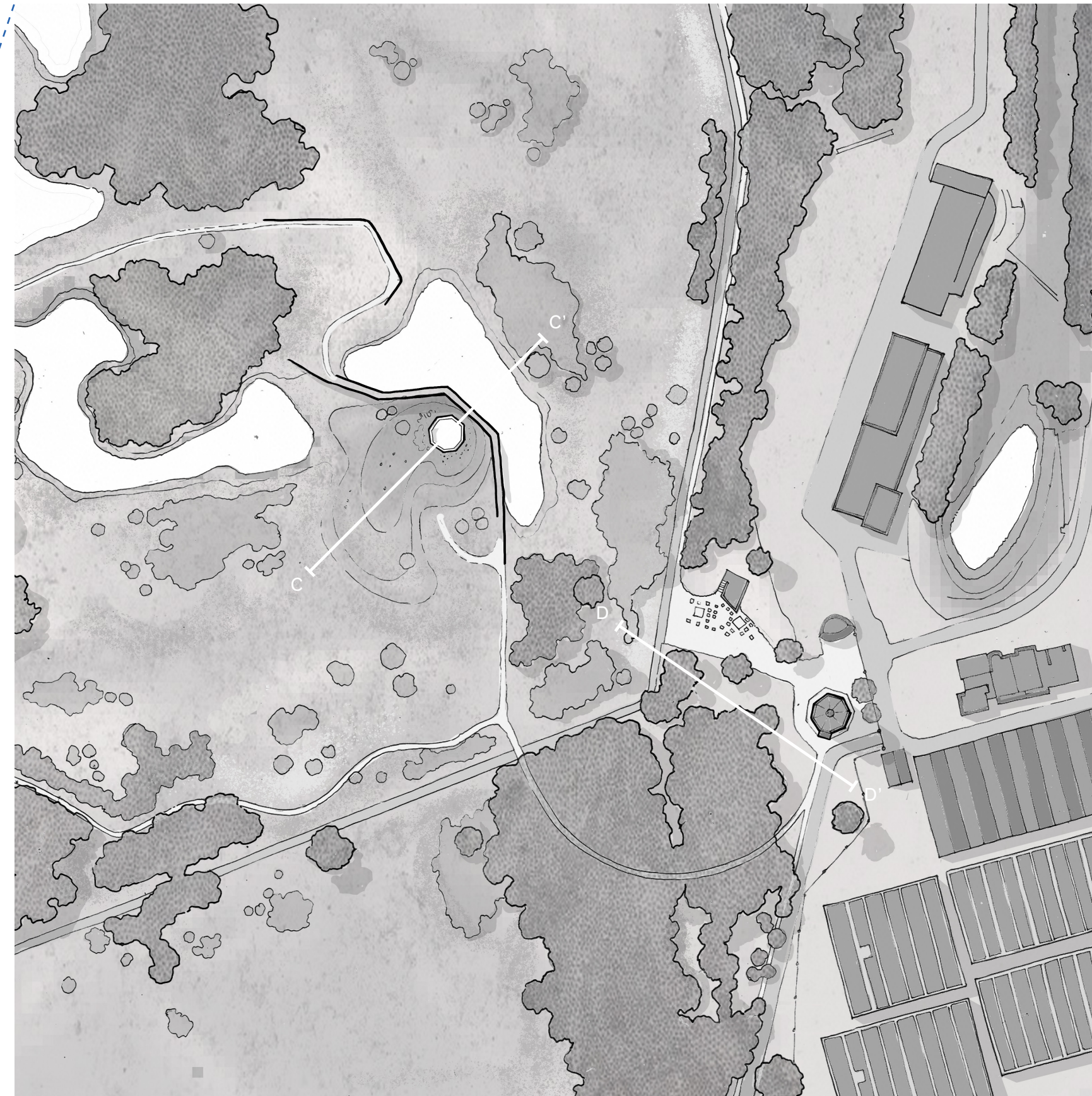
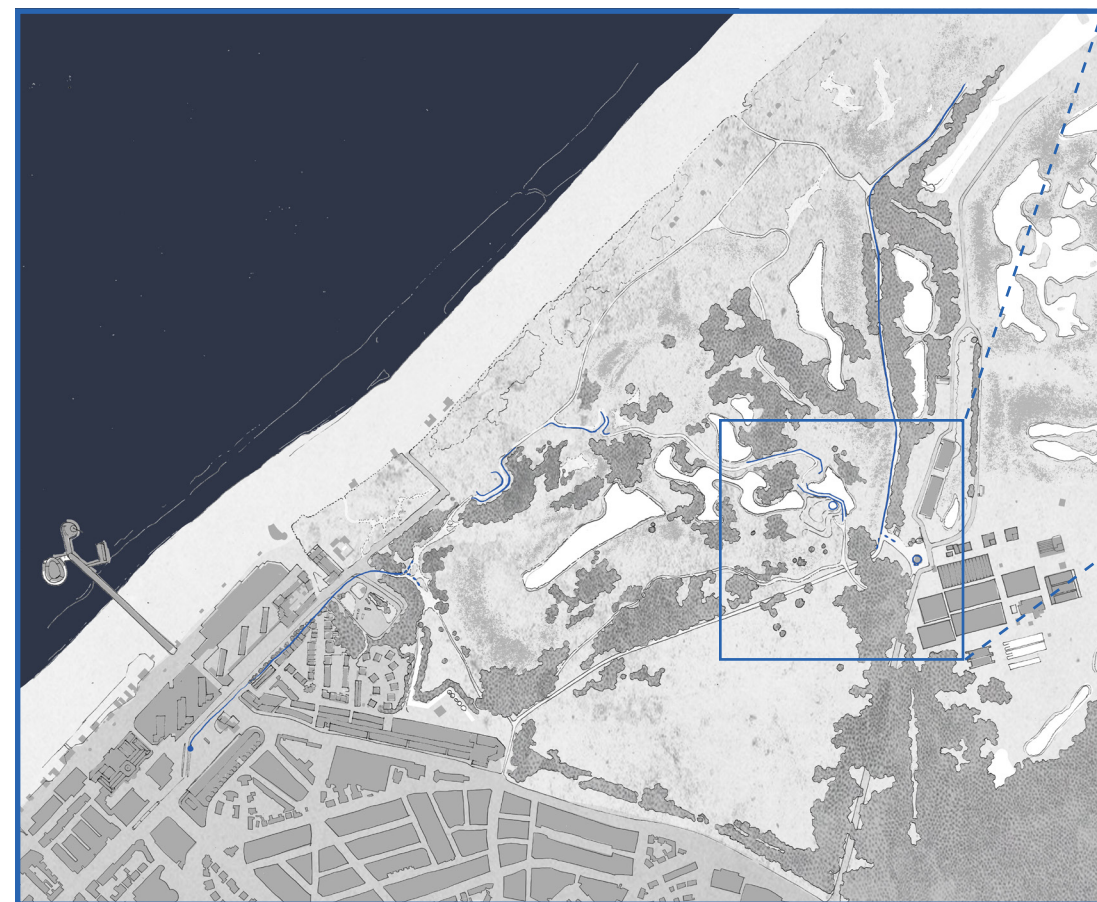


level 3 (4 metres)



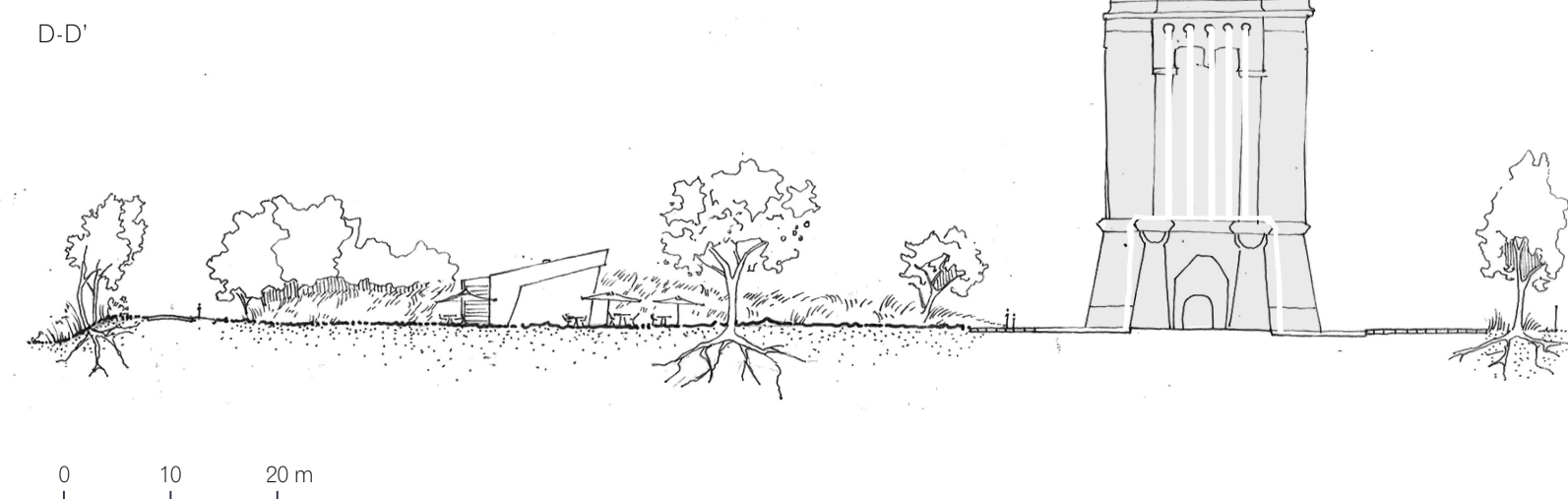


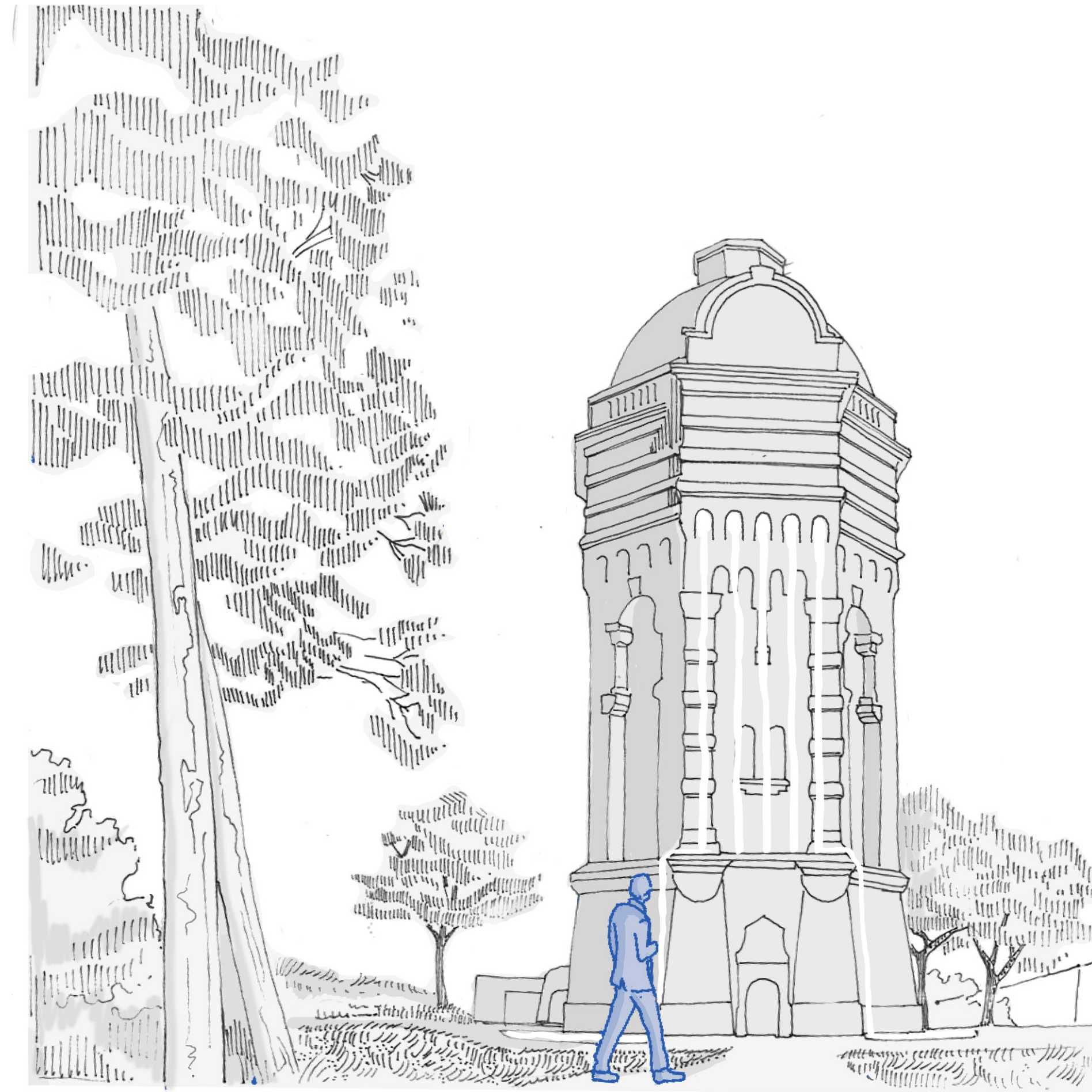


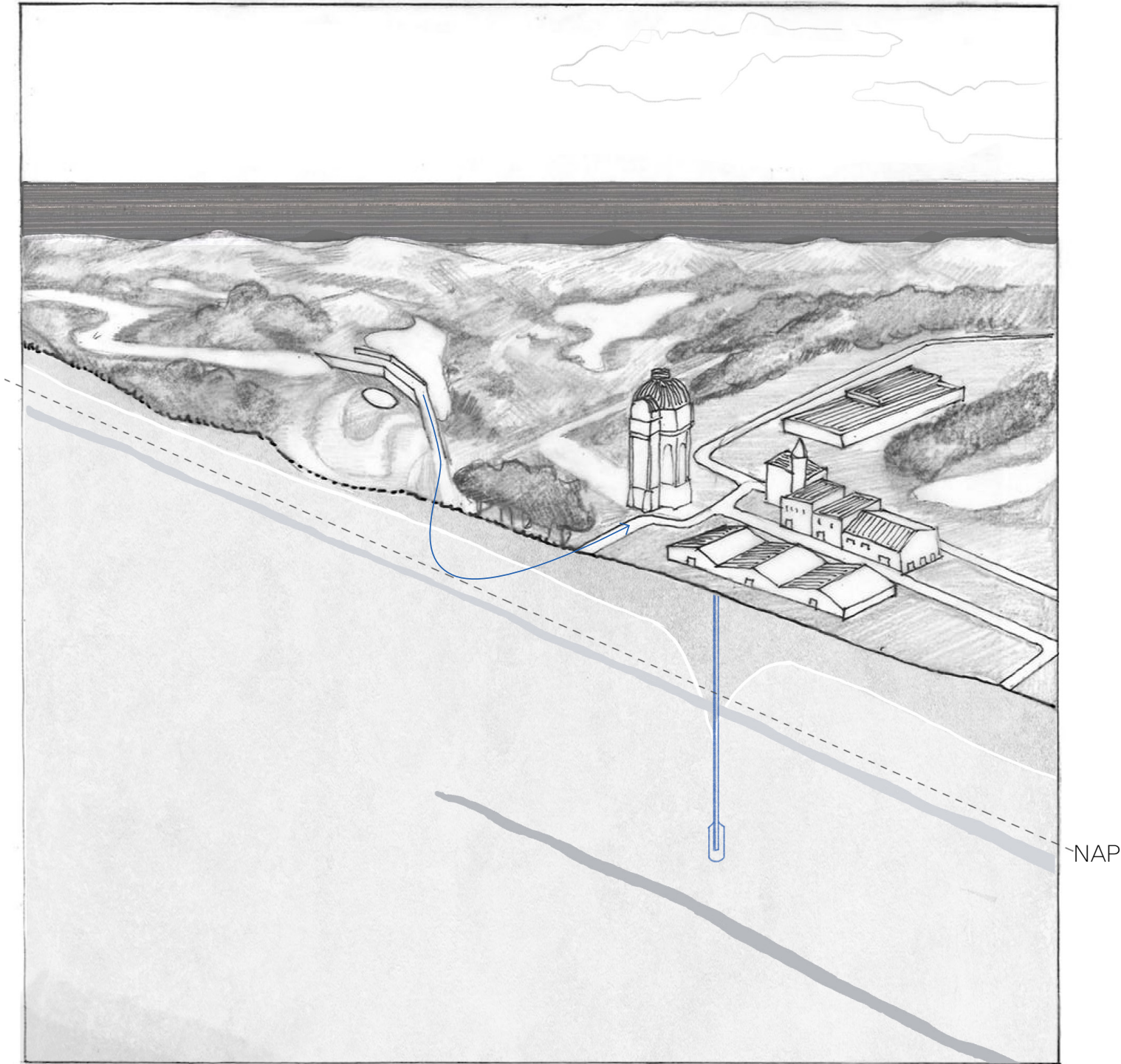


0 50 100 m

	Freshwater		Forest
	Buildings		Dune vegetation
	Sand walls		Sand







We end up with a renewed relationship between people, landscape and infrastructure.

Between coastal residents and their *duinwater*.



thank you!