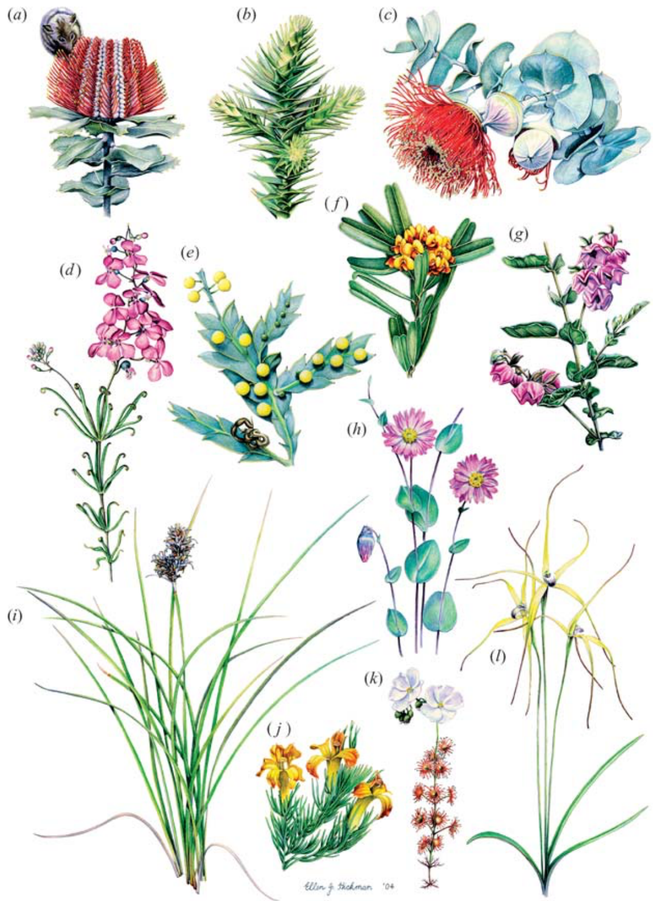
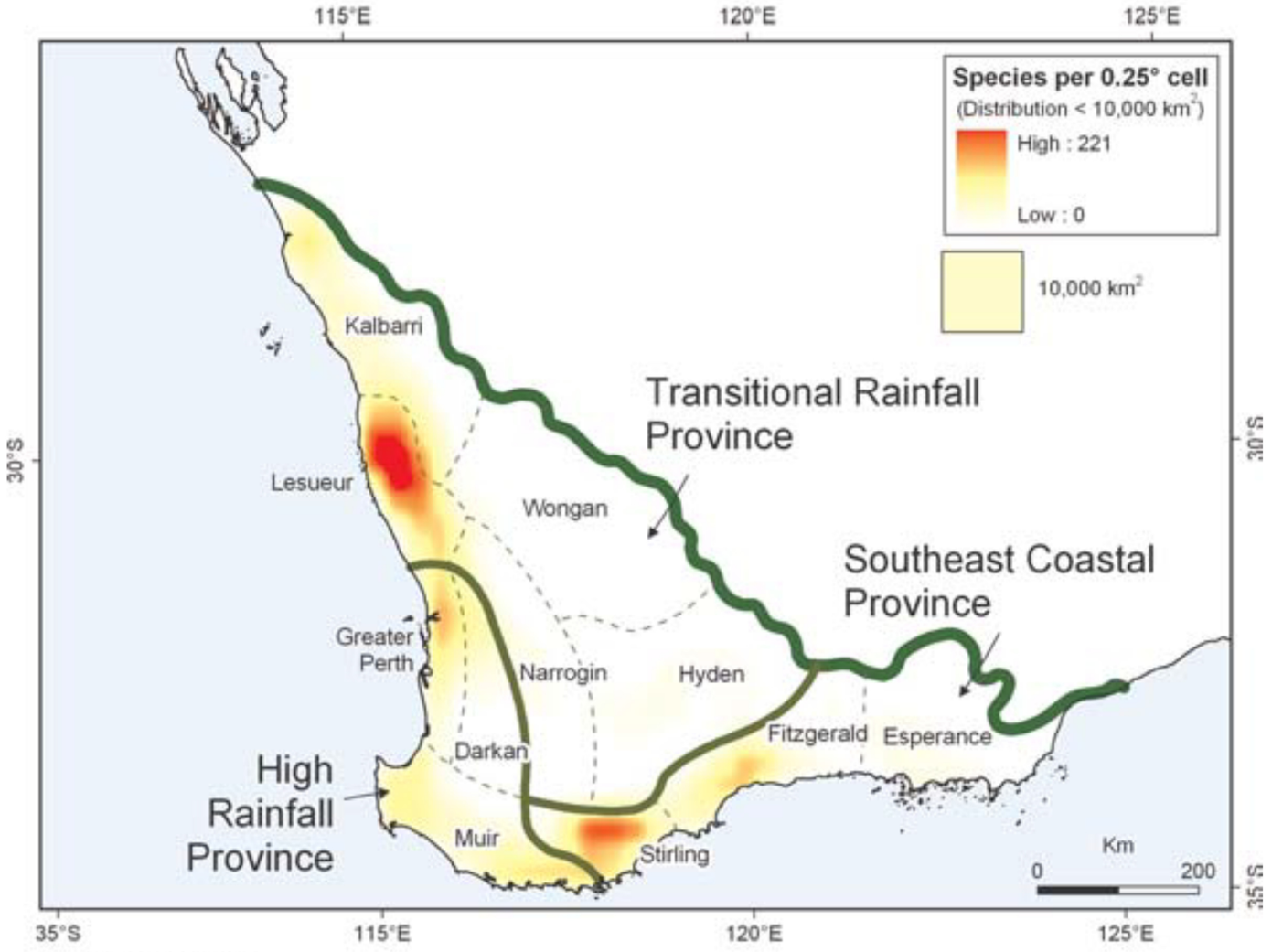
GBSW + MKSEA

Daniel Jan Martin

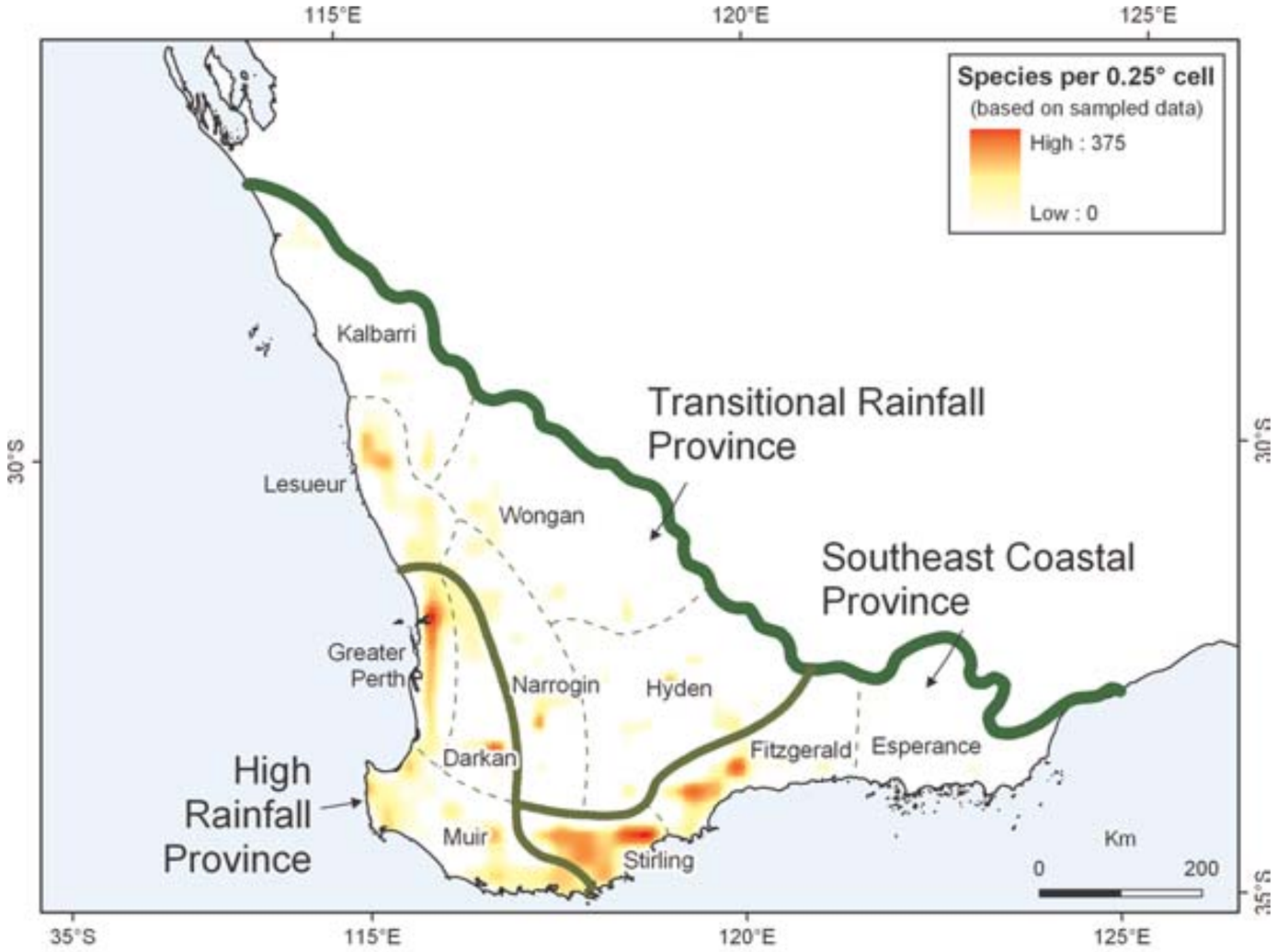


7,380 native floral species in Southwest Australia
49% of these are endemic
2,500 of conservation concern



Floral species endemism

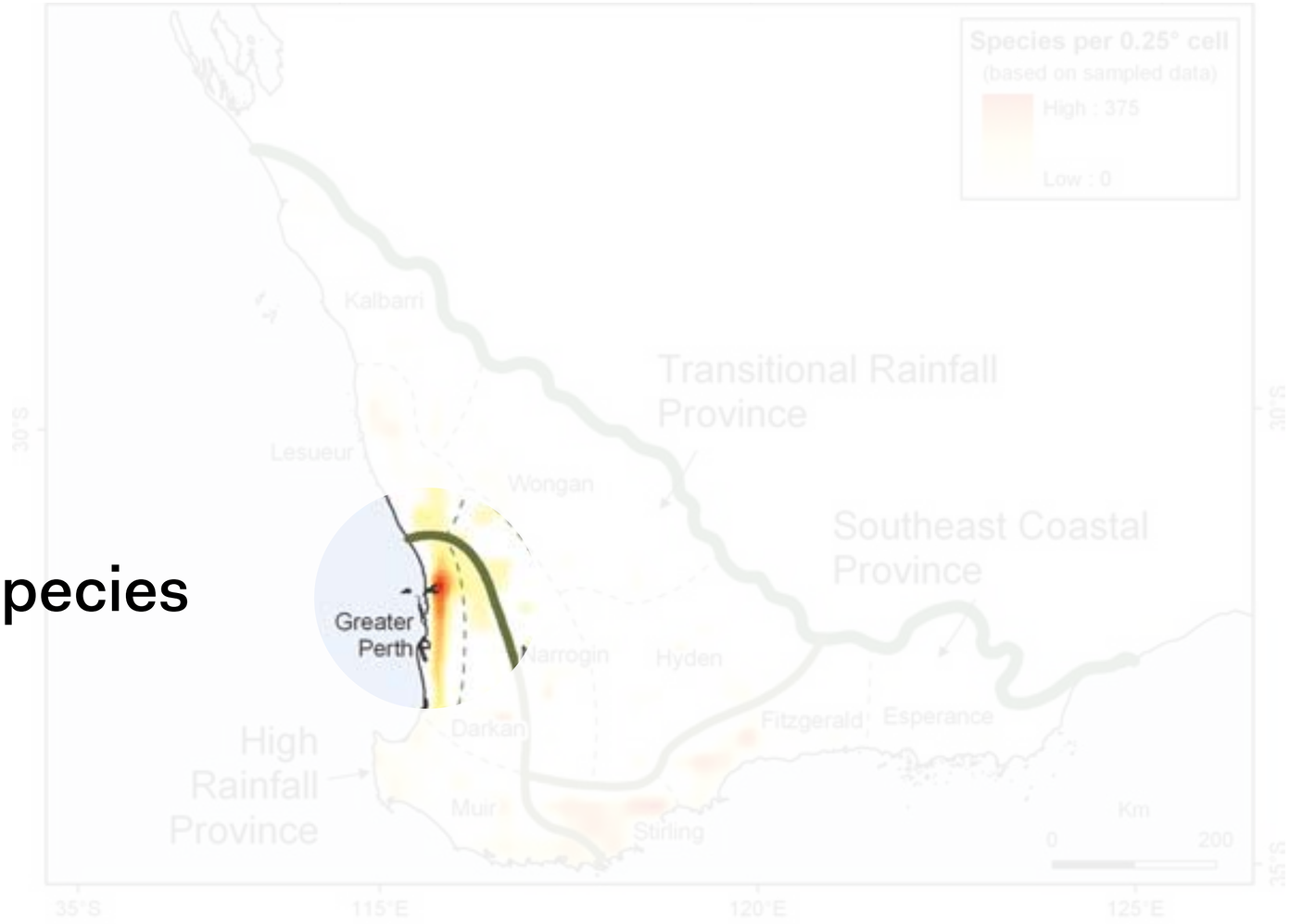
Paul Gioia and Stephen Hopper, 2017



Floral species richness

Paul Gioia and Stephen Hopper, 2017

1,826 floral species



1,826 floral species

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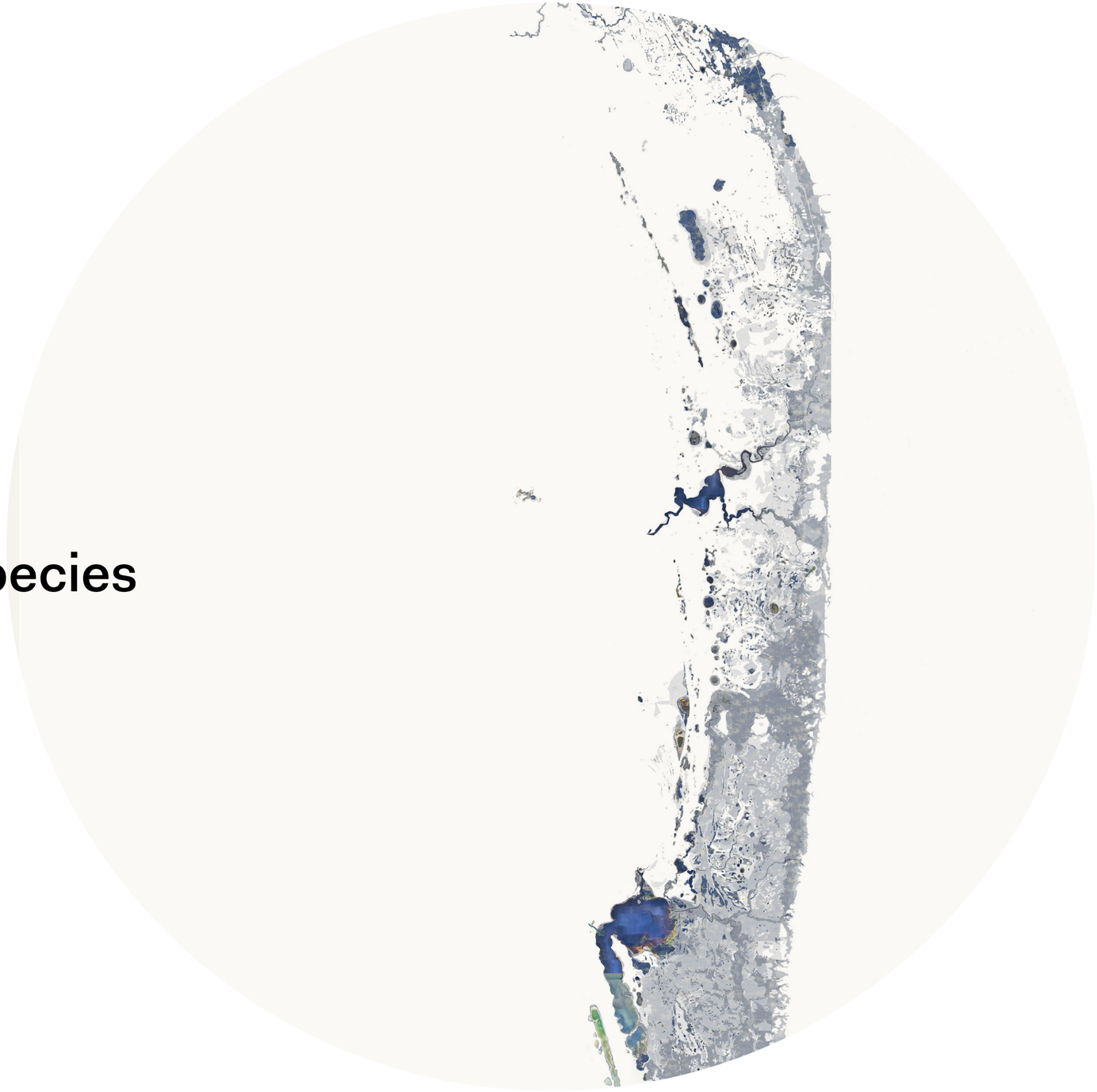
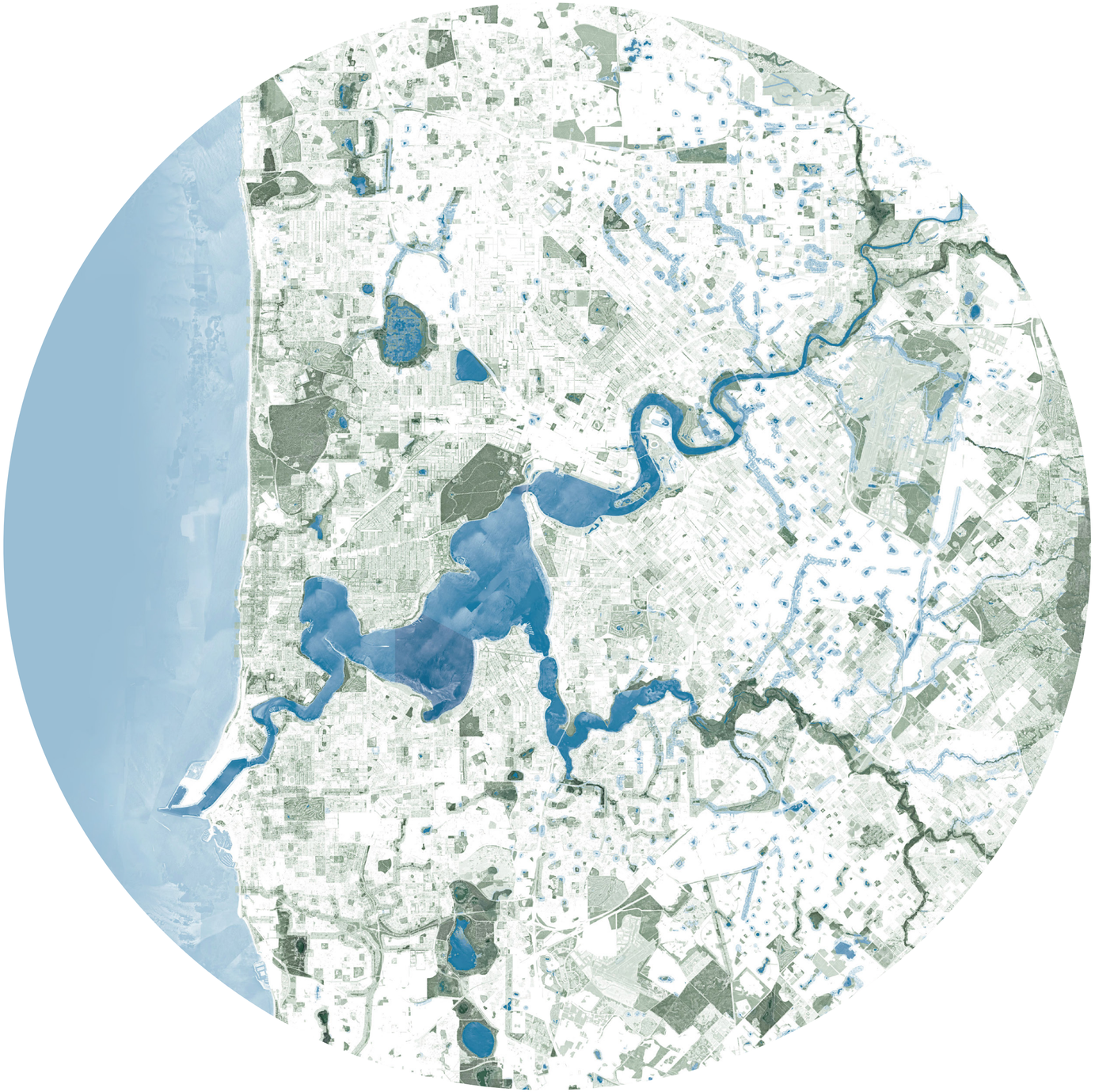
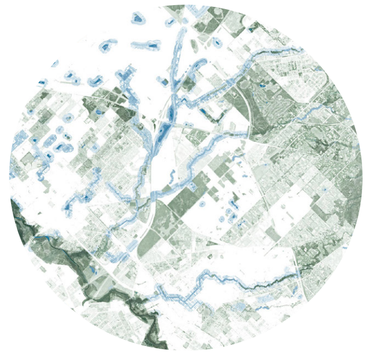
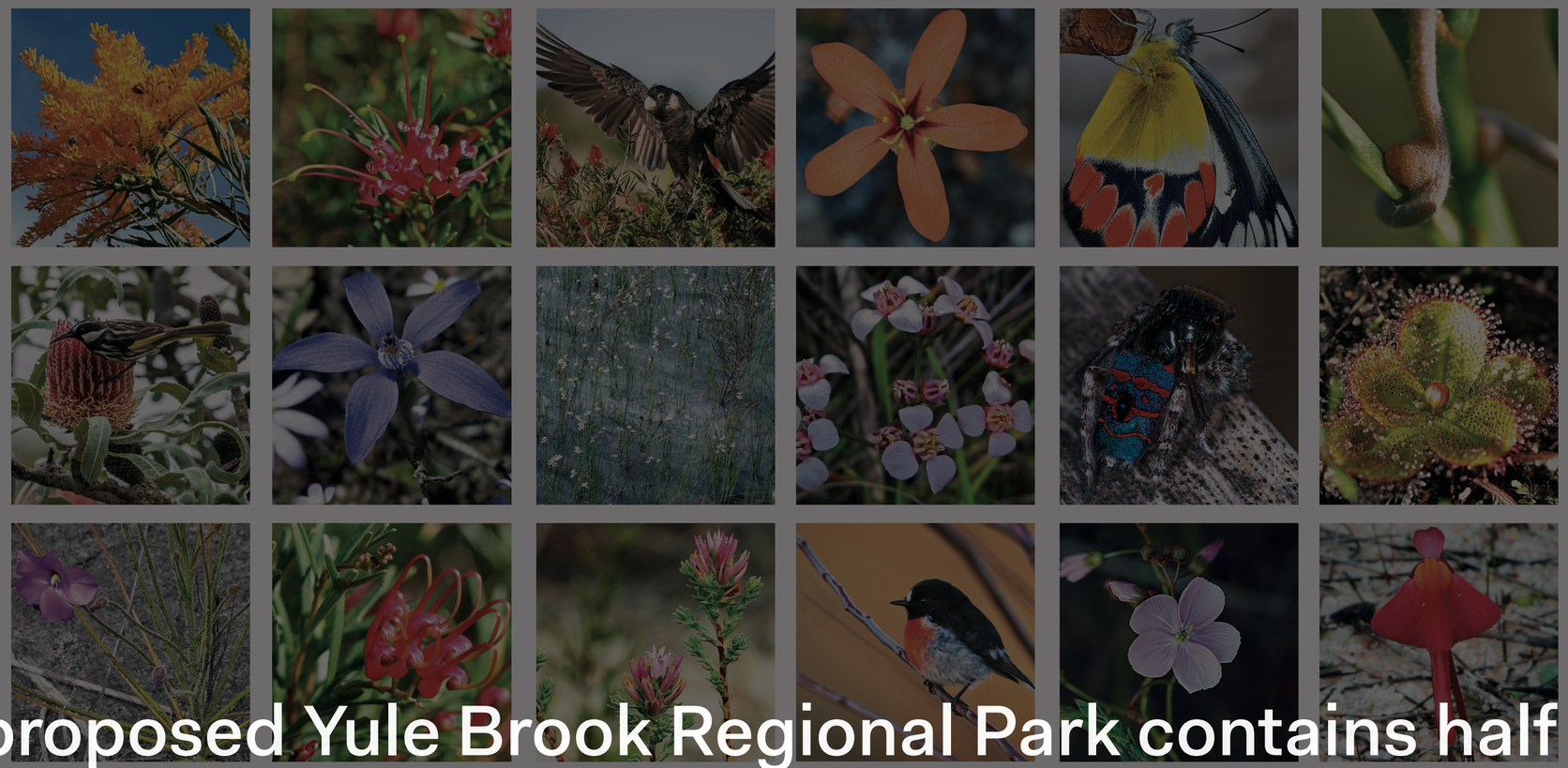




847 floral species

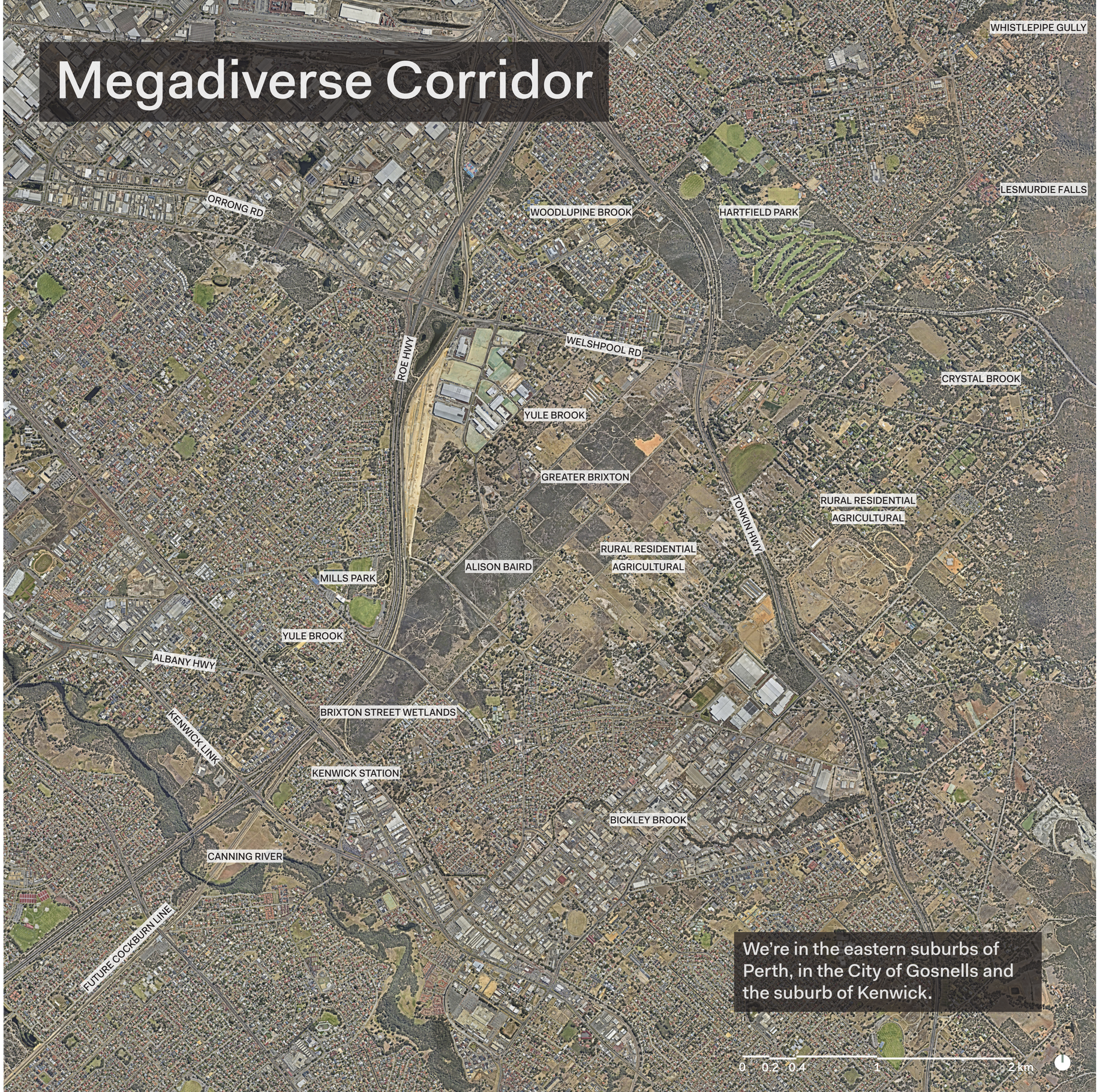


Thank you to a range of photographers credited in Hans Lambers (ed) *A Jewel in the Crown of a Global Biodiversity Hotspot* 2019

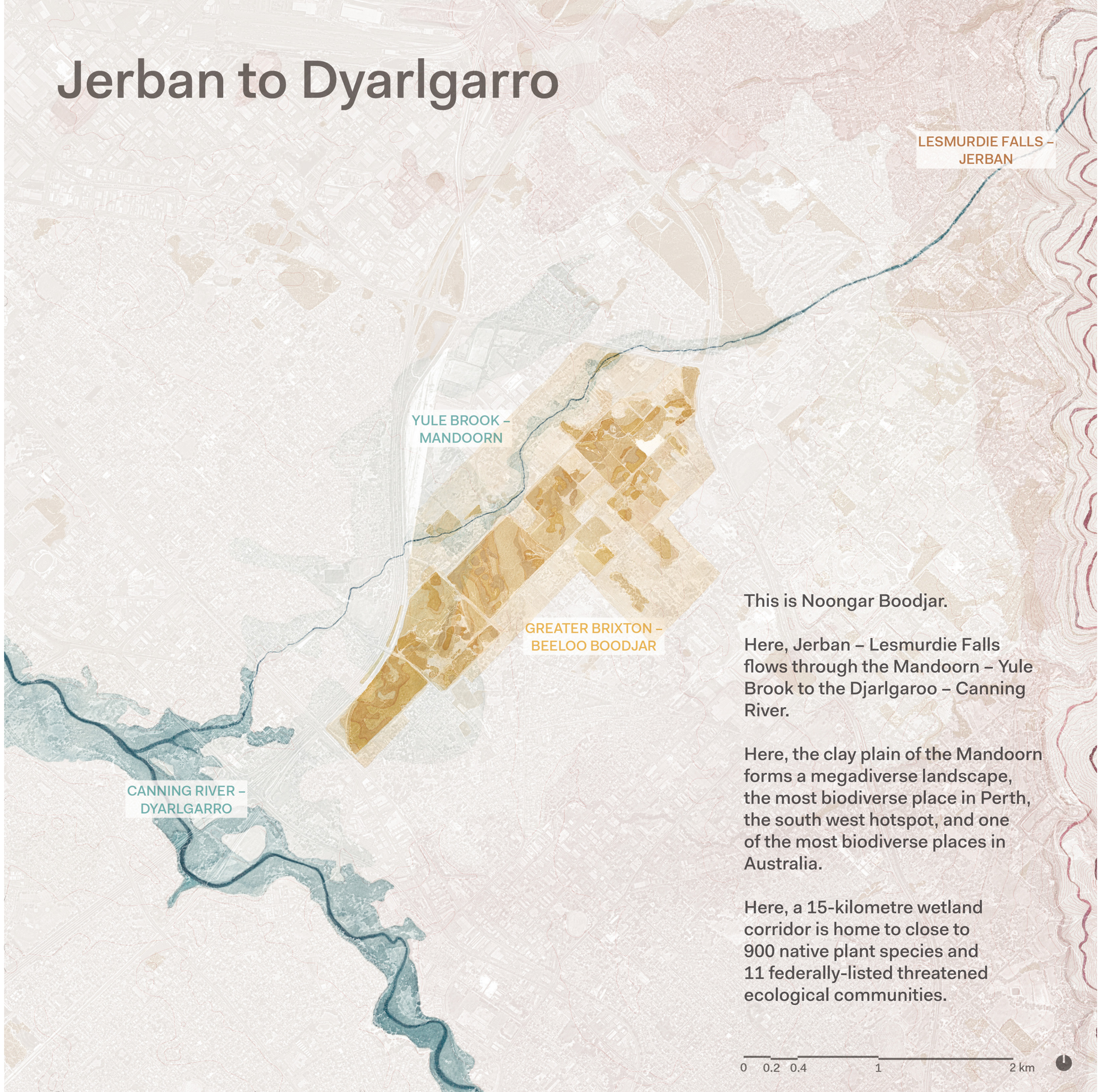


The proposed Yule Brook Regional Park contains half of the floral species present in Greater Perth, in only 1% of the area.

Megadiverse Corridor



Jerban to Dyarlgarro



This is Noongar Boodjar.

Here, Jerban – Lesmurdie Falls flows through the Mandoorn – Yule Brook to the Djarlgaroo – Canning River.

Here, the clay plain of the Mandoorn forms a megadiverse landscape, the most biodiverse place in Perth, the south west hotspot, and one of the most biodiverse places in Australia.

Here, a 15-kilometre wetland corridor is home to close to 900 native plant species and 11 federally-listed threatened ecological communities.

0 0.2 0.4 1 2 km

Deep

RIDGELAND TEC

RIDGELAND TEC

BANKSIA TEC

BASSENDEAN SANDS

MUNDJIT

BANKSIA TEC

ESCARPMENT

GRANITIC

KARTAMOARNDA

PALUSPLAIN

CLAY PLAIN

MOORN

MUCHEA LIMESTONE

BANKSIA TEC

MUCHEA LIMESTONE

DJIDONG

LIMESTONE SHRUBLANDS TEC

LIMESTONE SHRUBLANDS TEC

FLOW

BANKSIA TEC

GROUNDWATER FLOW

BANKSIA TEC

RIVERINE

BILYA

CLAYFLAT TEC

CLAYPAN TEC

CLAYPAN TEC

MARRI/KINGIA/JARRAH TECS

FLOW

RIVERINE

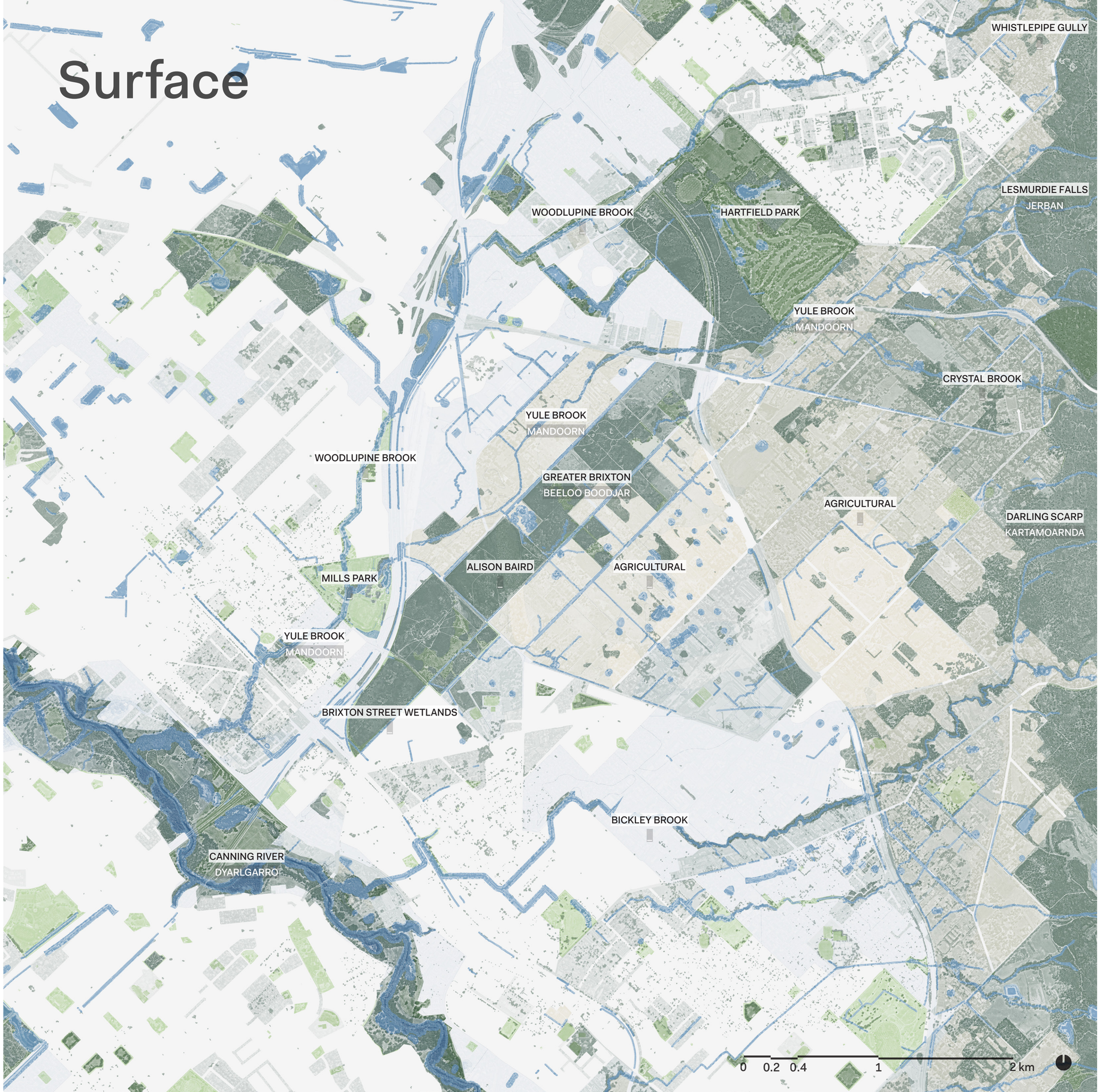
BILYA

BASSENDEAN SANDS

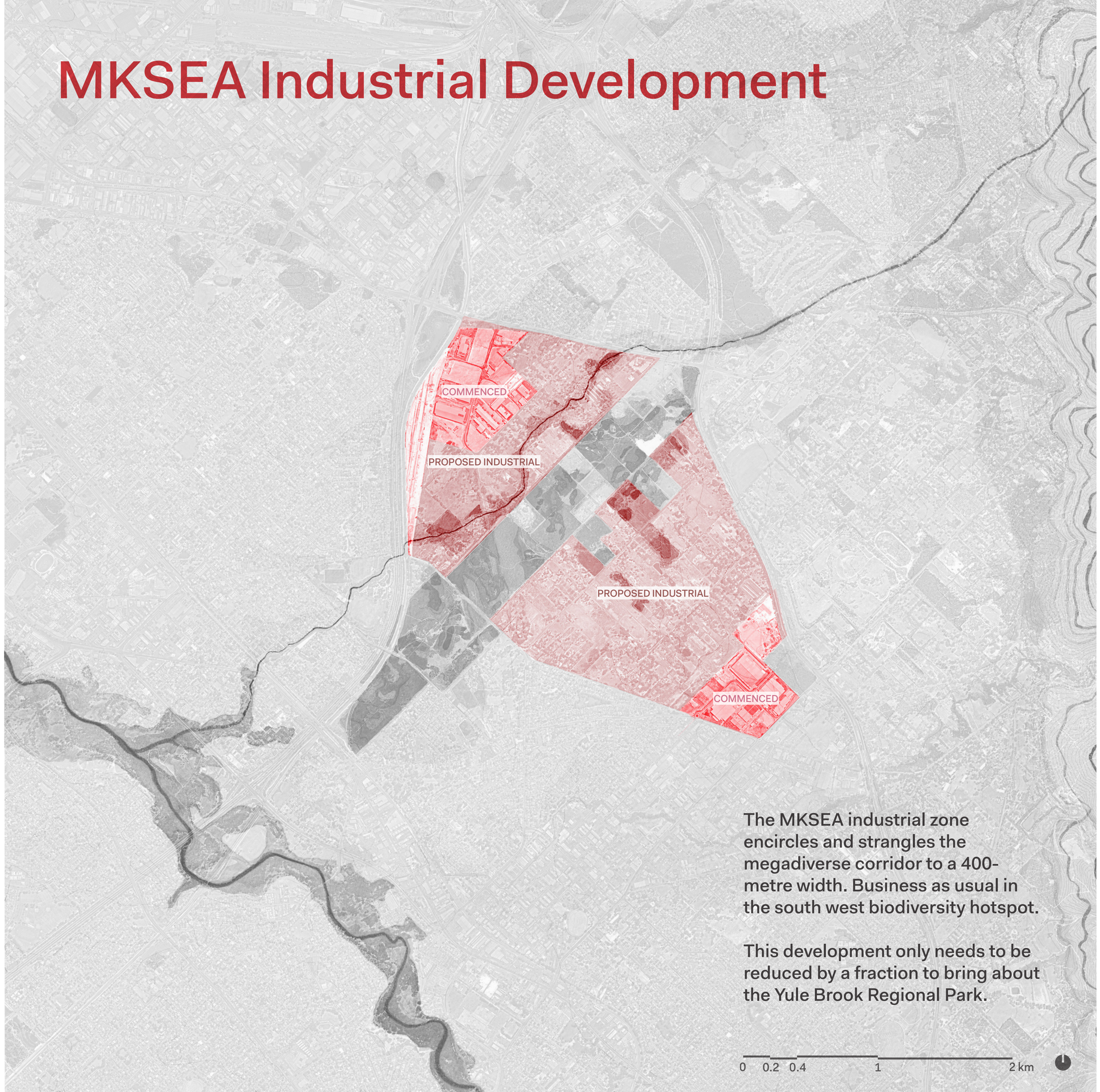
MUNDJIT

0 0.2 0.4 1 2 km

Surface


WHISTLEPIPE GULLY
LESMURDIE FALLS
JERBAN
WOODLUPINE BROOK
HARTFIELD PARK
YULE BROOK
MANDOORN
CRYSTAL BROOK
YULE BROOK
MANDOORN
WOODLUPINE BROOK
GREATER BRIXTON
BEELOO BOODJAR
AGRICULTURAL
DARLING SCARP
KARTAMOARNDA
ALISON BAIRD
AGRICULTURAL
MILLS PARK
YULE BROOK
MANDOORN
BRIXTON STREET WETLANDS
BICKLEY BROOK
CANNING RIVER
DYARLGARRO
0
0.2
0.4
1
2 km

MKSEA Industrial Development



The MKSEA industrial zone encircles and strangles the megadiverse corridor to a 400-metre width. Business as usual in the south west biodiversity hotspot.

This development only needs to be reduced by a fraction to bring about the Yule Brook Regional Park.

0 0.2 0.4 1 2 km

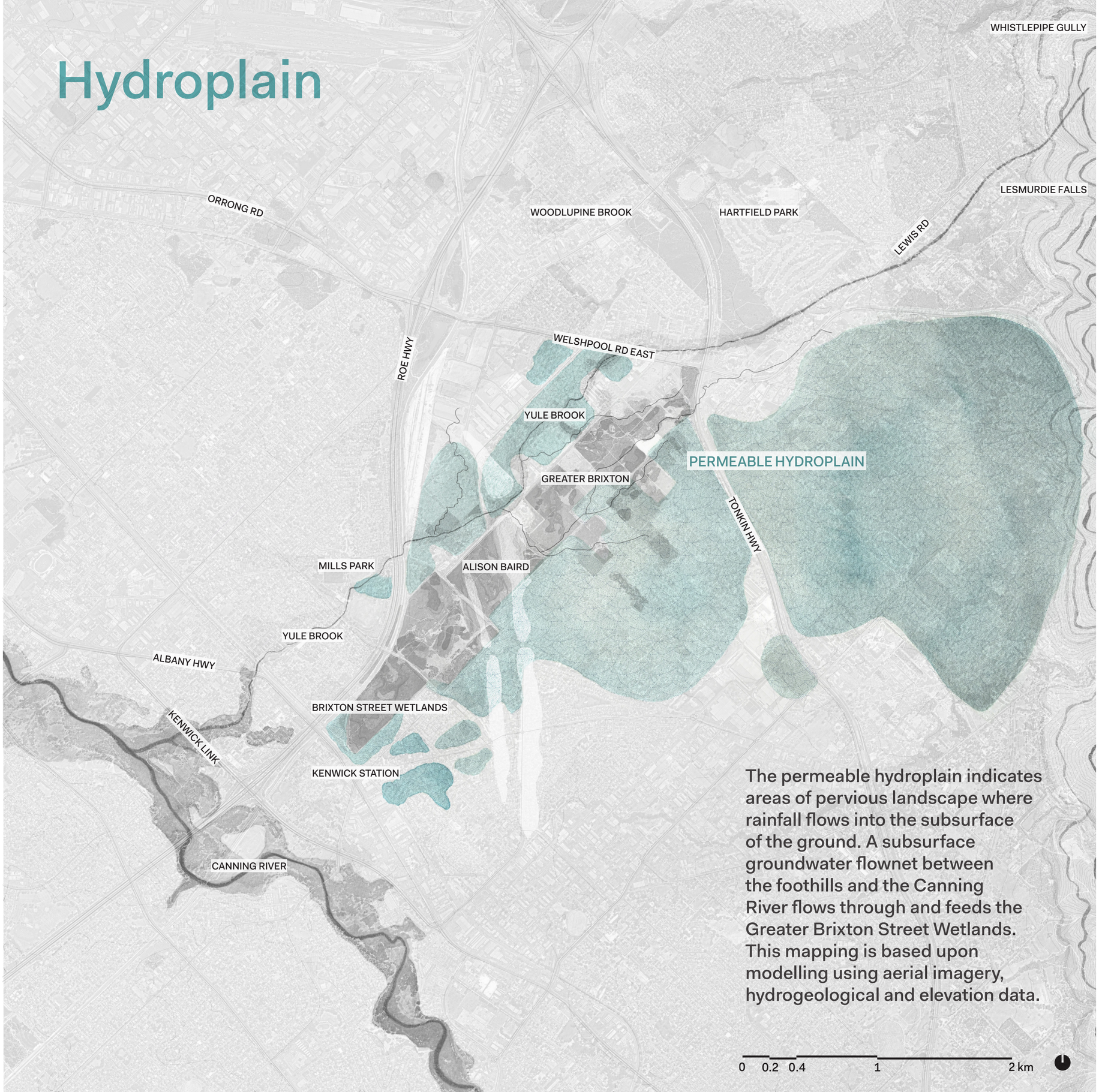
New Yule Brook Regional Park

The community, along with scientists and The Beeliar Group of professors have long been advocating for a new Yule Brook Regional Park, to protect this biodiversity for future generations.

An active buffer of ecosystems, parks, and a restored landscapes, to ensure this wetland corridor will continue to breathe.

0 0.2 0.4 1 2 km

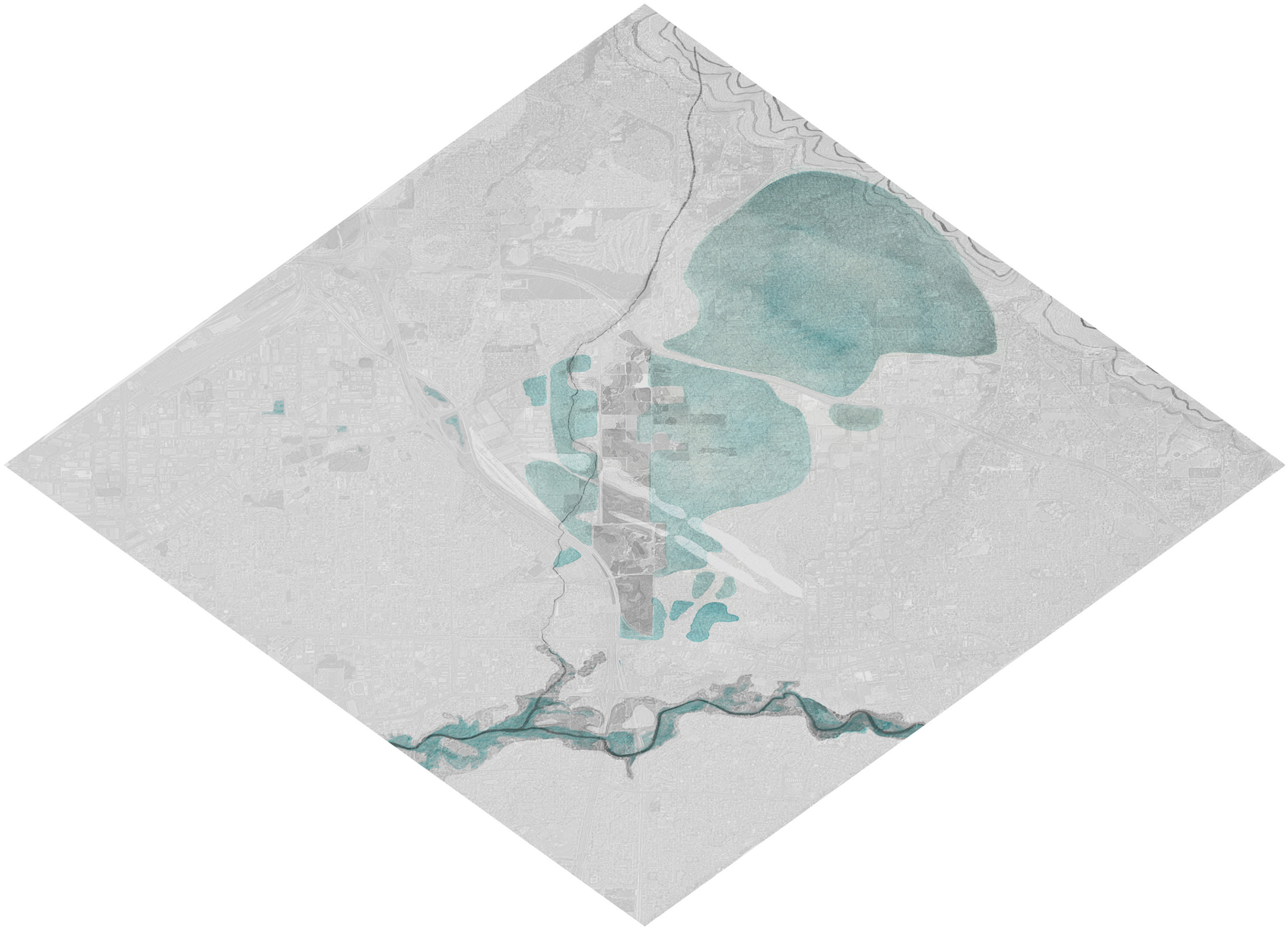
Hydroplain



The permeable hydroplain indicates areas of pervious landscape where rainfall flows into the subsurface of the ground. A subsurface groundwater flownet between the foothills and the Canning River flows through and feeds the Greater Brixton Street Wetlands. This mapping is based upon modelling using aerial imagery, hydrogeological and elevation data.

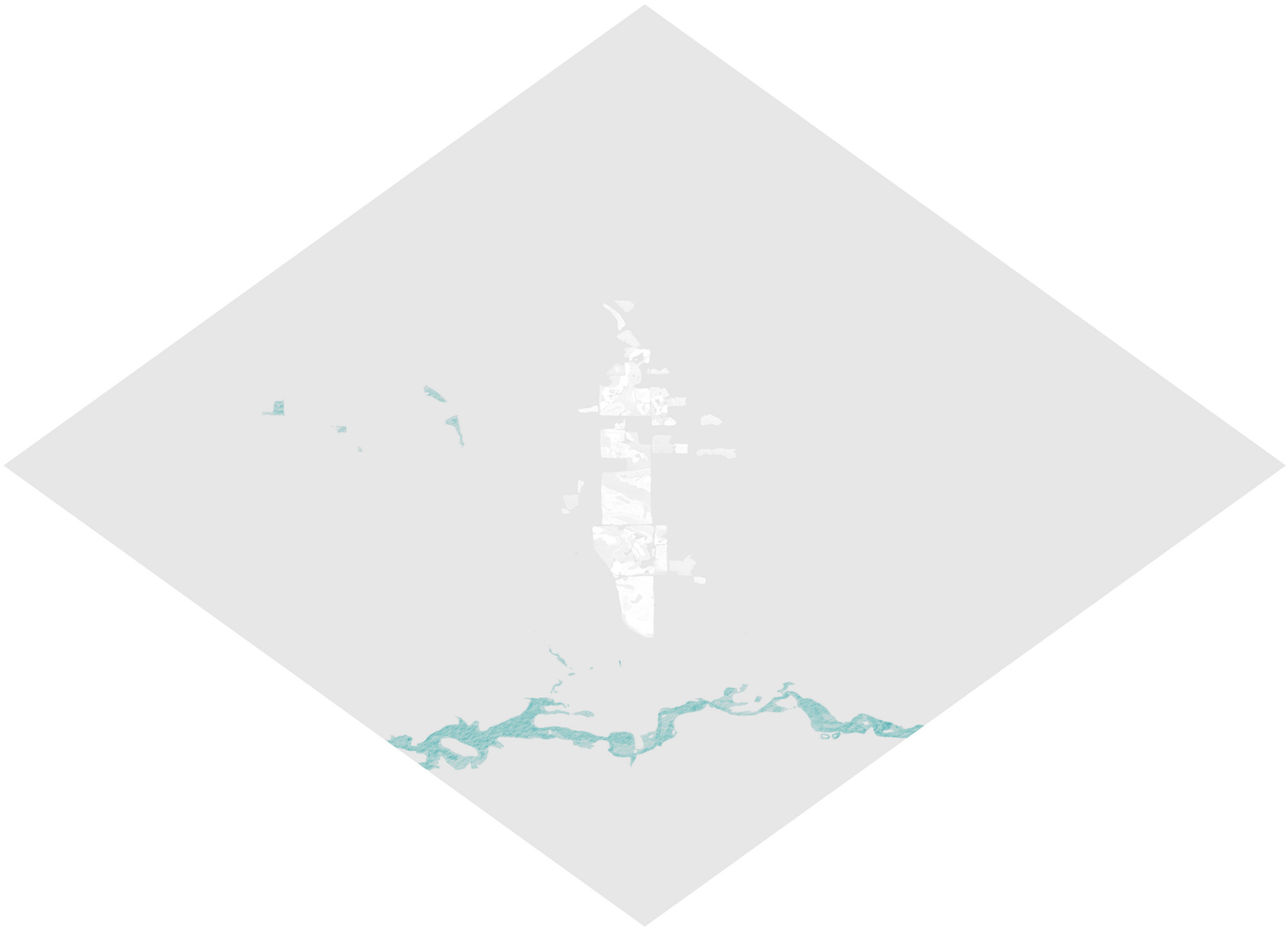
0 0.2 0.4 1 2 km

Hydroplain

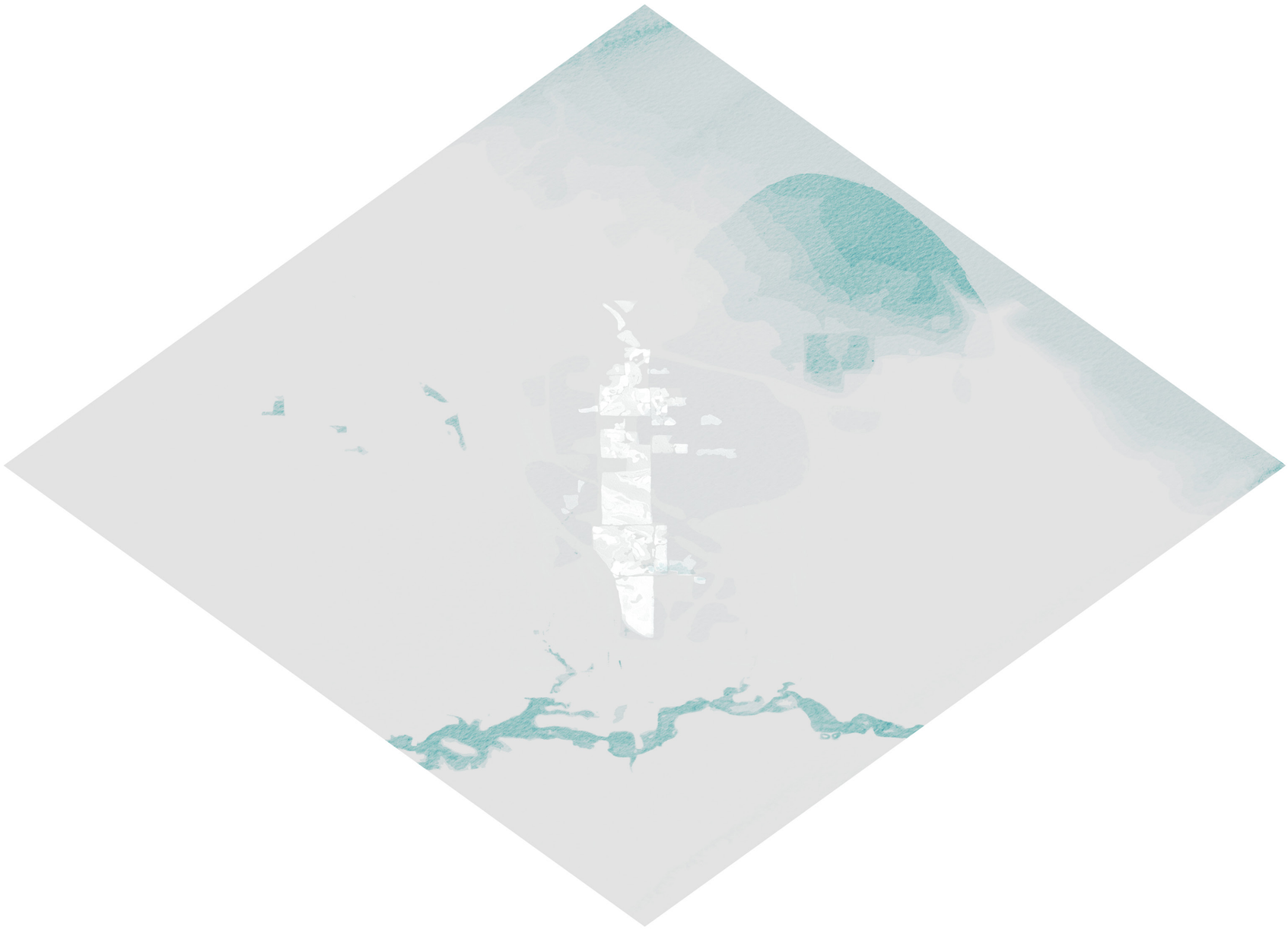


Hydroplain

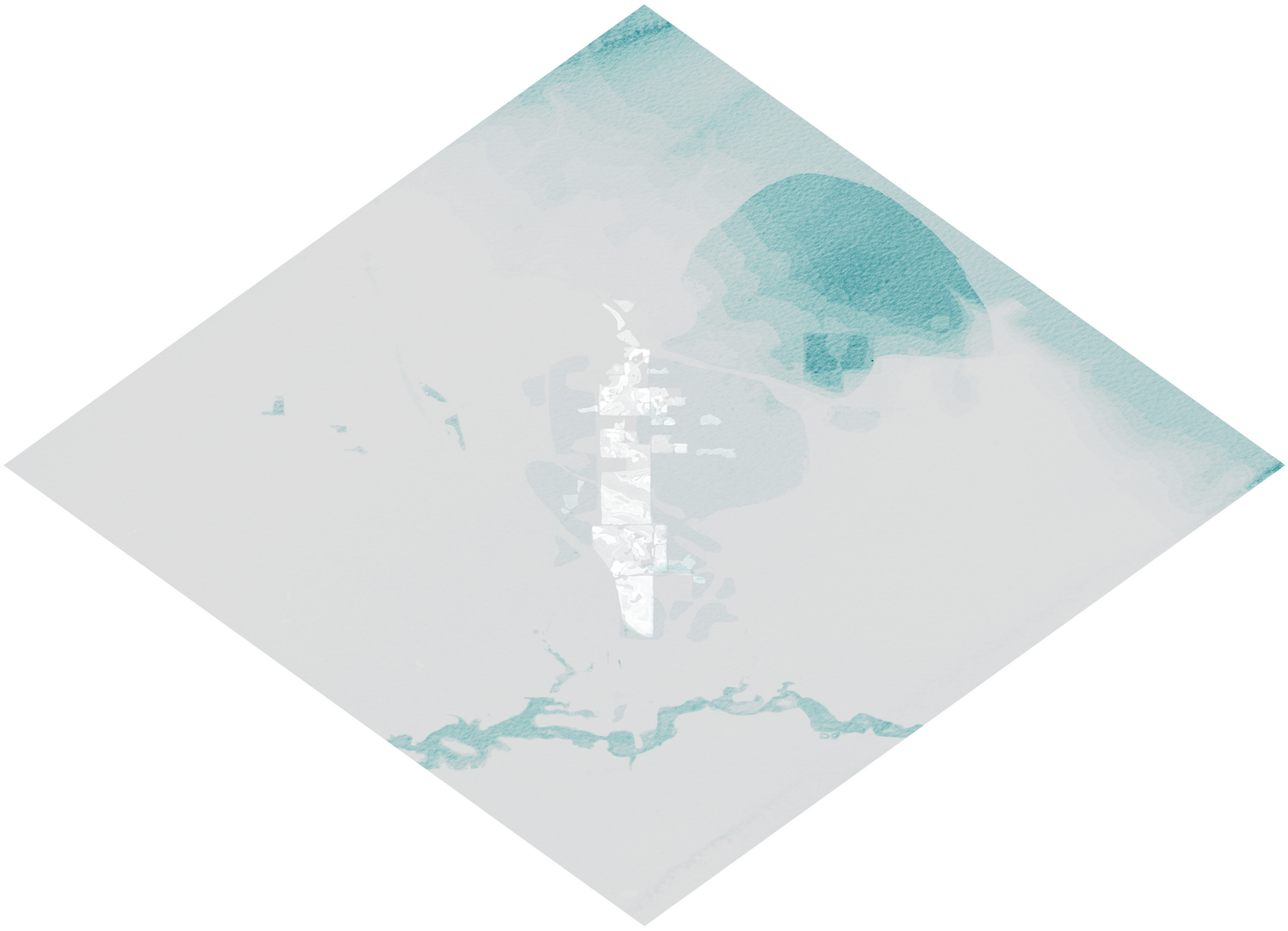
Simulated groundwater level increase in 0.2 metre increments, from a typical summer minimum to a winter maximum, over the permeable hydroplain area.



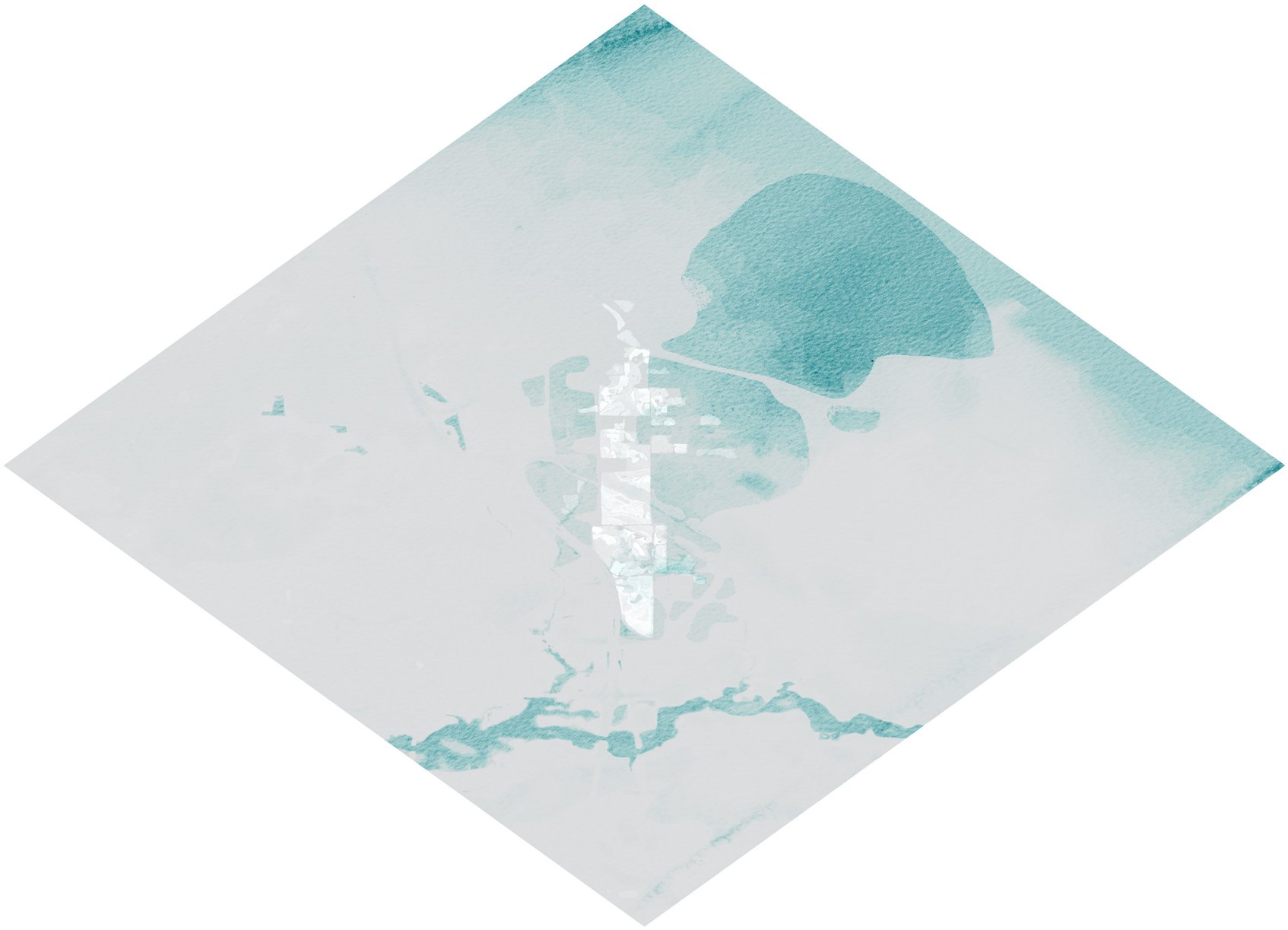
Hydroplain



Hydroplain



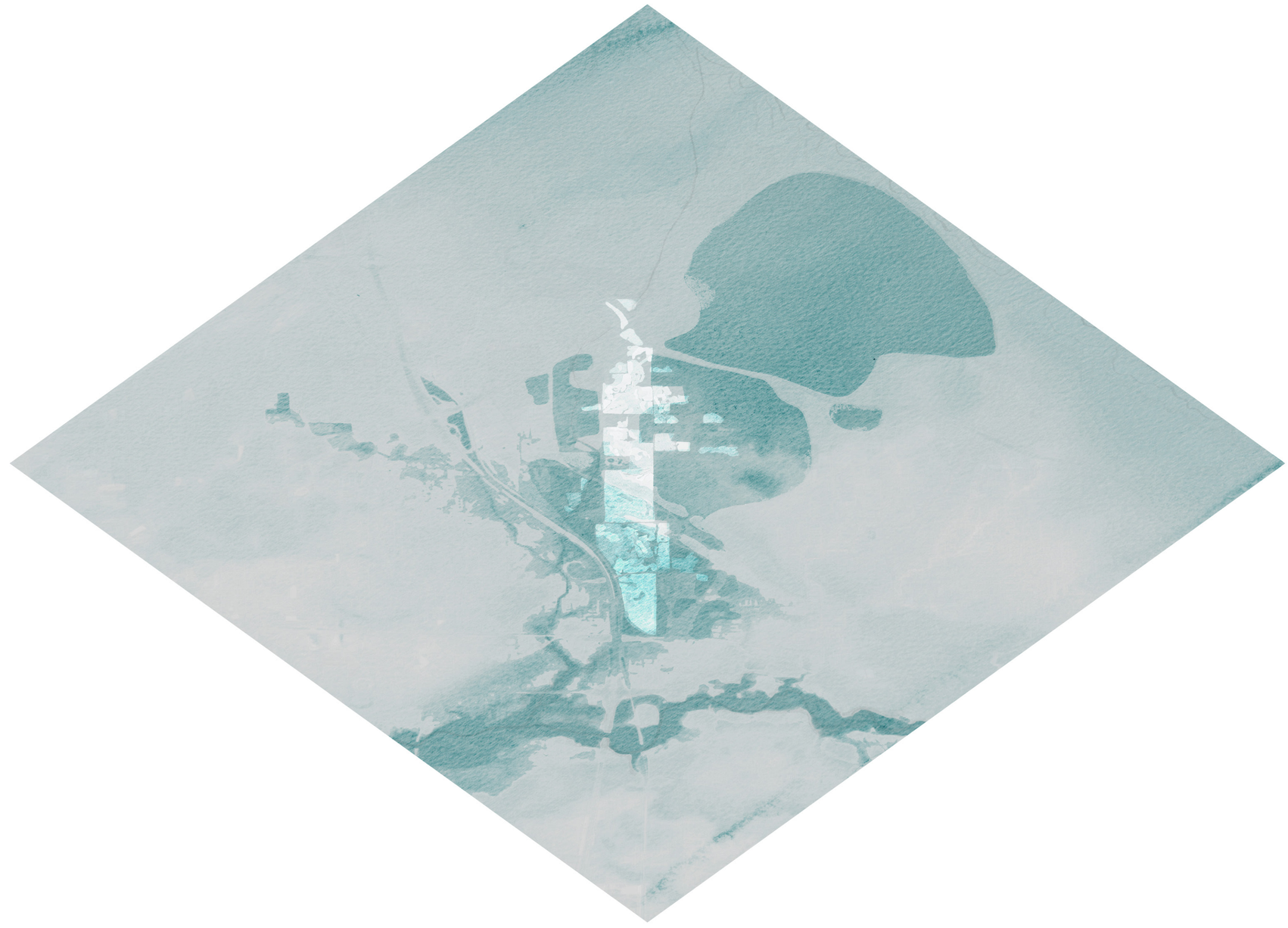
Hydroplain



Hydroplain

Hydroplain

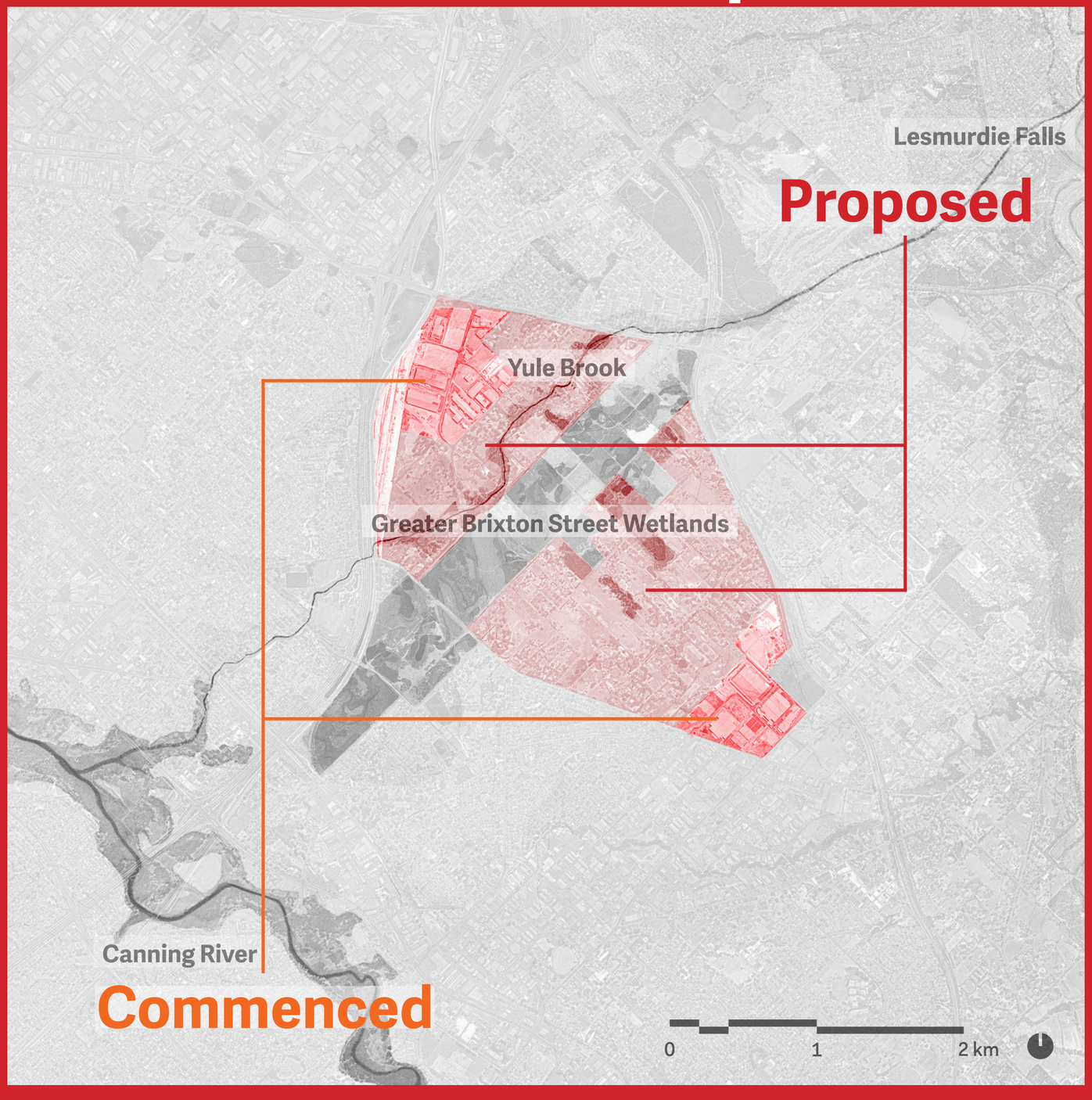
Hydroplain



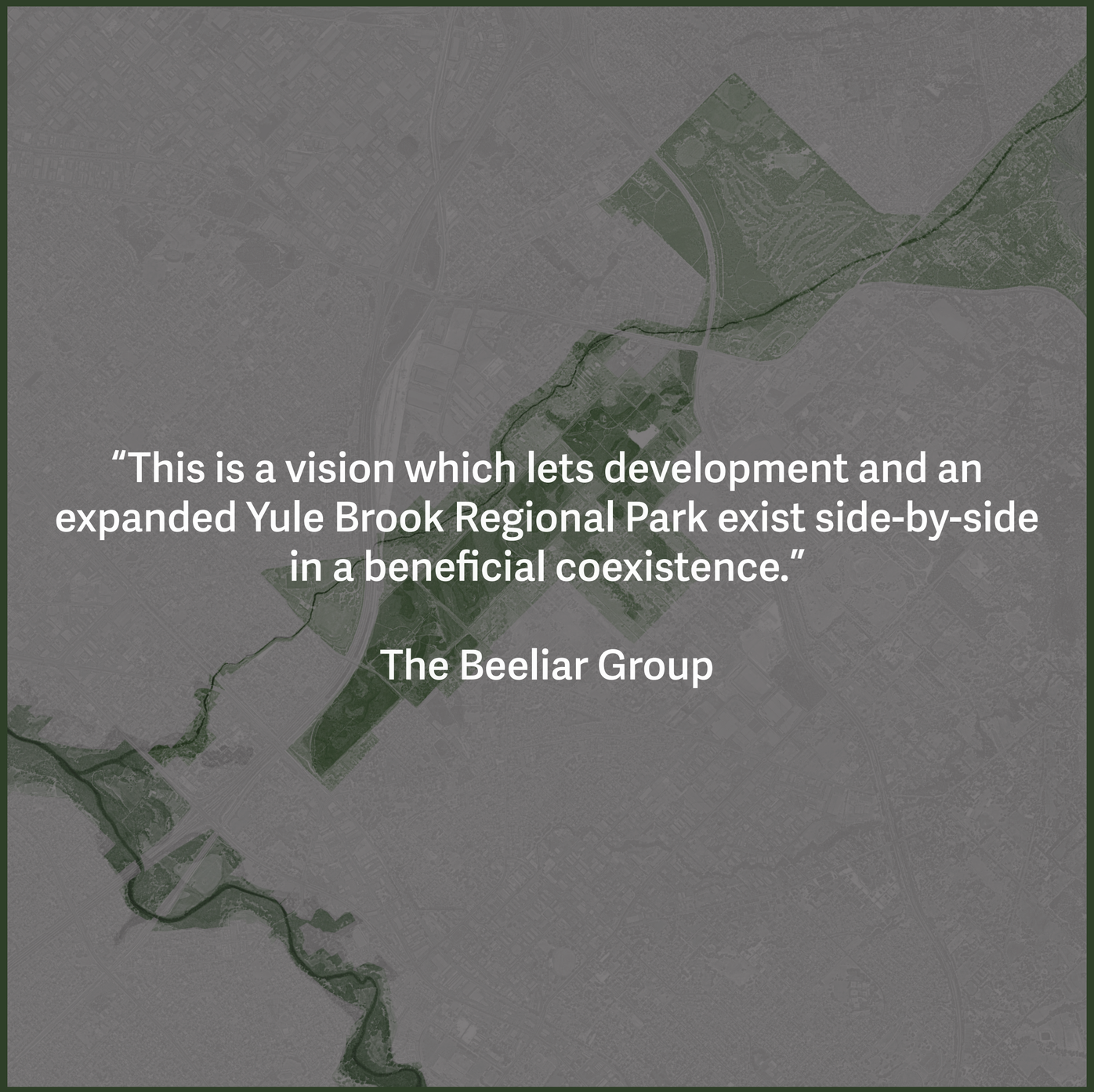
Hydroplain

Hydroplain

Industrial development



A New Yule Brook Regional Park



“This is a vision which lets development and an expanded Yule Brook Regional Park exist side-by-side in a beneficial coexistence.”

The Beeliar Group

LEGEND

- Structure Plan Extent

LOCAL PLANNING SCHEME
Reserves

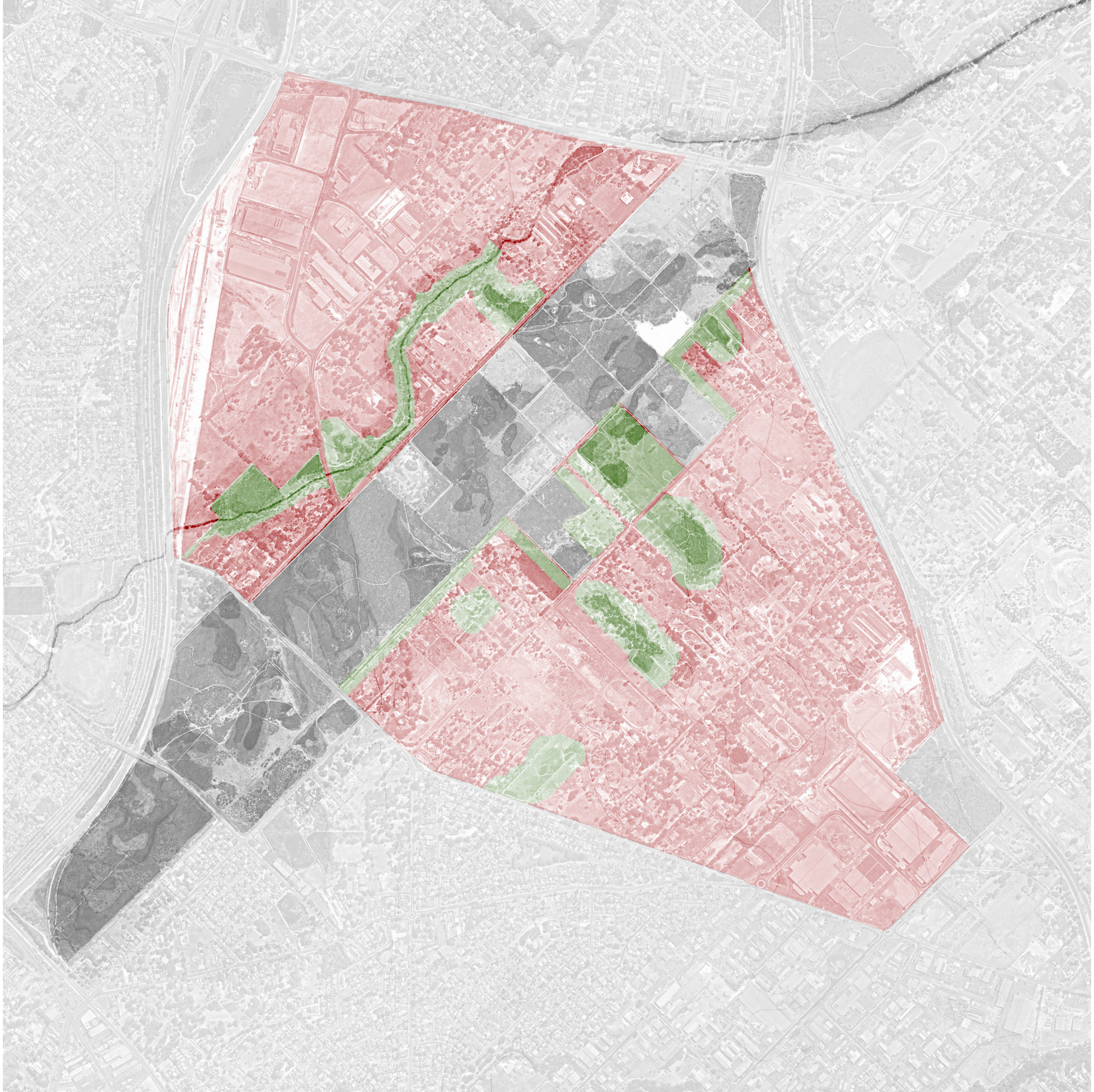
- Conservation Public Open Space
- Bush Forever

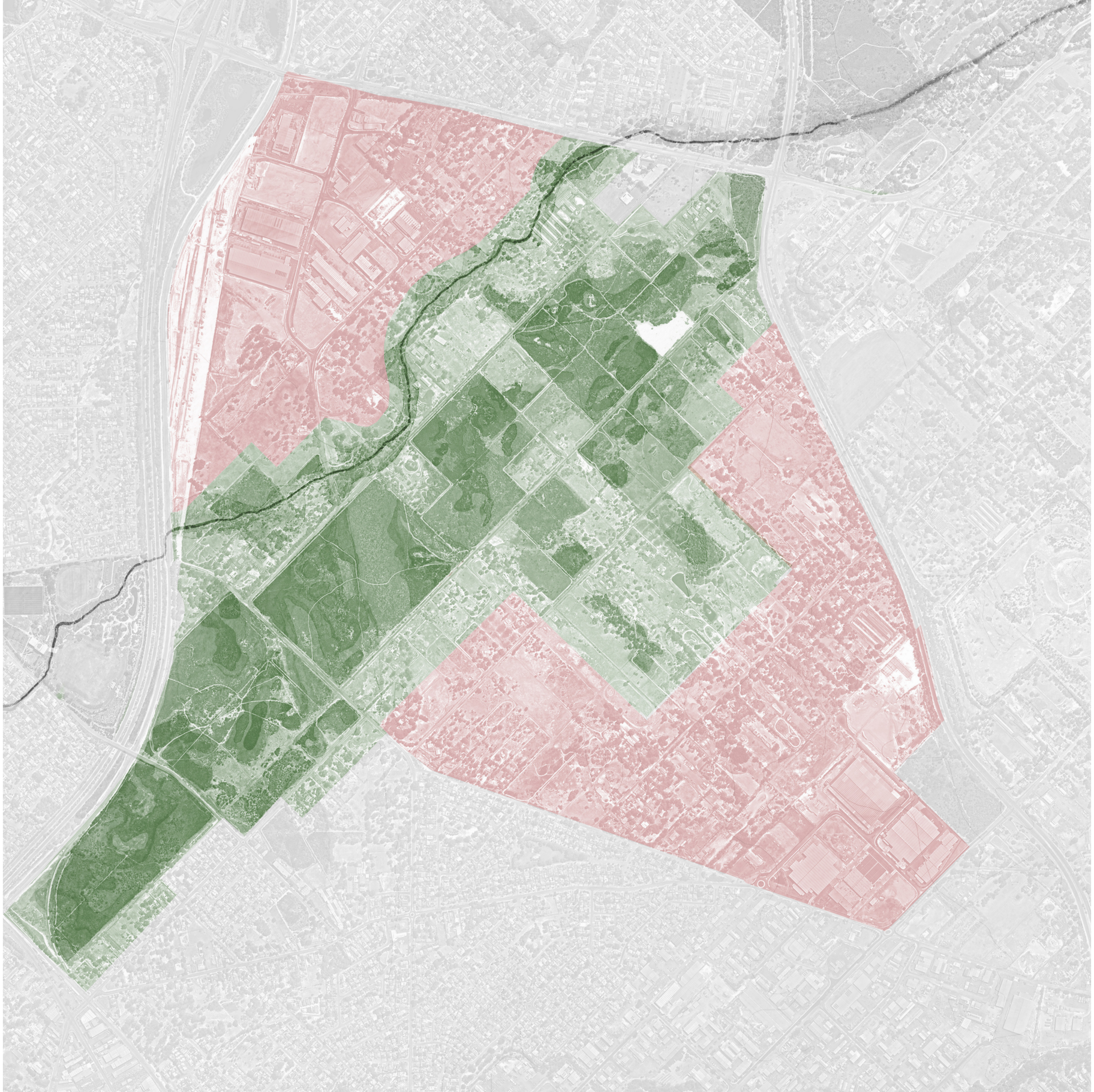
Zones

- General Industry
- Light Industry
- Rural

Other

- CCW — Conservation Category Wetland
- Yule Brook
- Multi Use Corridor
- Nominal Drainage Basin
- Road Reserve
- Setback Area for Dampier-Bunbury Gas Pipeline
- Aboriginal Heritage Site





x 2

– 27%

Broad and connected buffers must be specified to ensure this future Regional Park is protected. Buffers will limit the industrial area by just 27%.