



A REGIONAL APPROACH TO BIODIVERSITY-LED GREEN INFRASTRUCTURE

Dan Straker
May 13th, 2019
For Tsleil-Waututh BISS: Stormwater



ACT Adaptation to
Climate Change Team

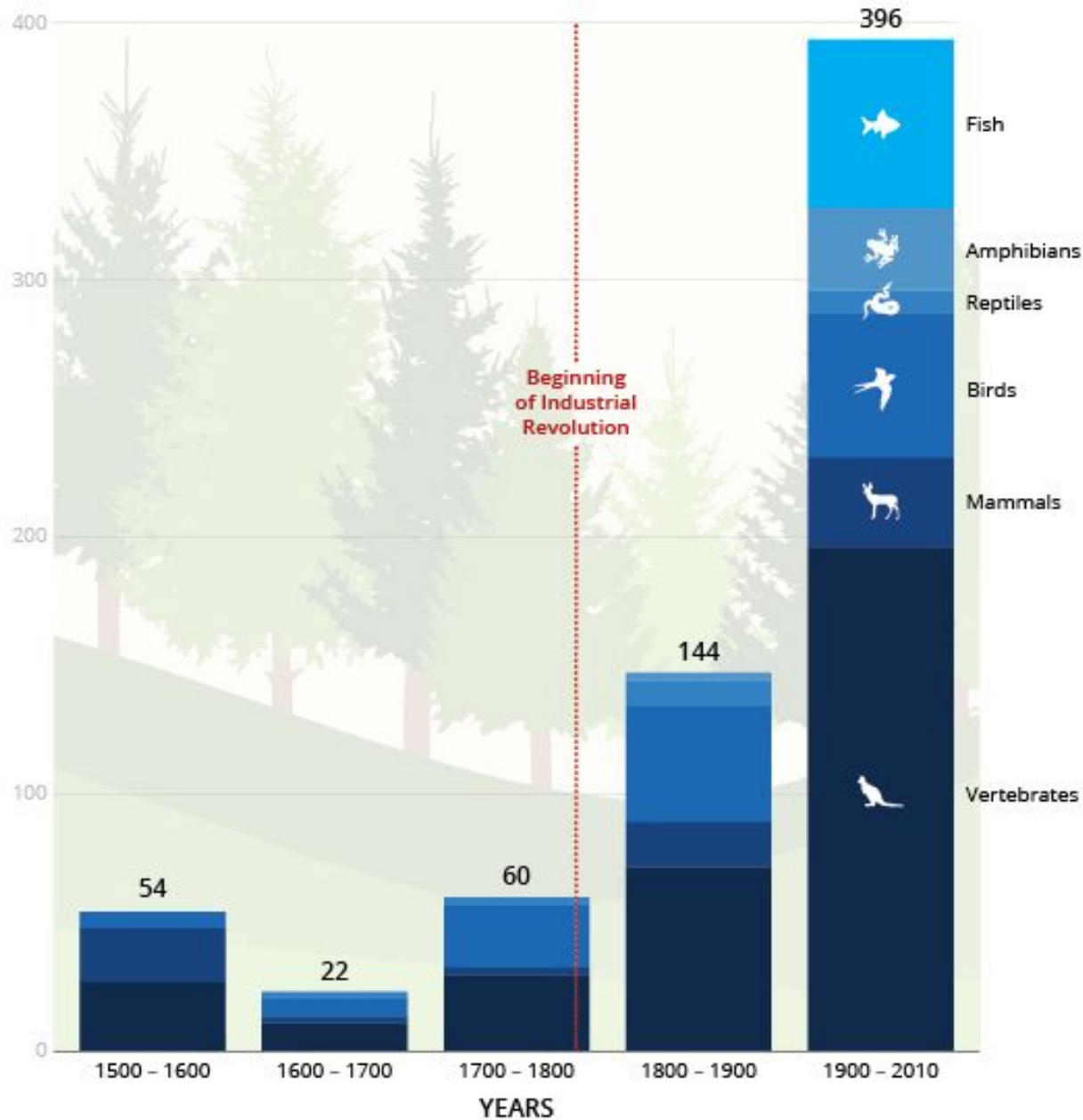
SFU ADAPTATION TO CLIMATE CHANGE TEAM



APRIL 5, 2019



NUMBER OF EXTINCT SPECIES OVER TIME



Source: International Union for Conservation of Nature

BIODIVERSITY LOSS – THE SIXTH MASS EXTINCTION

“We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide.”

-IPBES Chair, Robert Watson

“Better collaboration and integration of water resource management and landscape planning across scales”

MIGRATIONS IN MOTION

As climate change alters habitats and disrupts ecosystems, where will animals move to survive? And will human development prevent them from getting there?

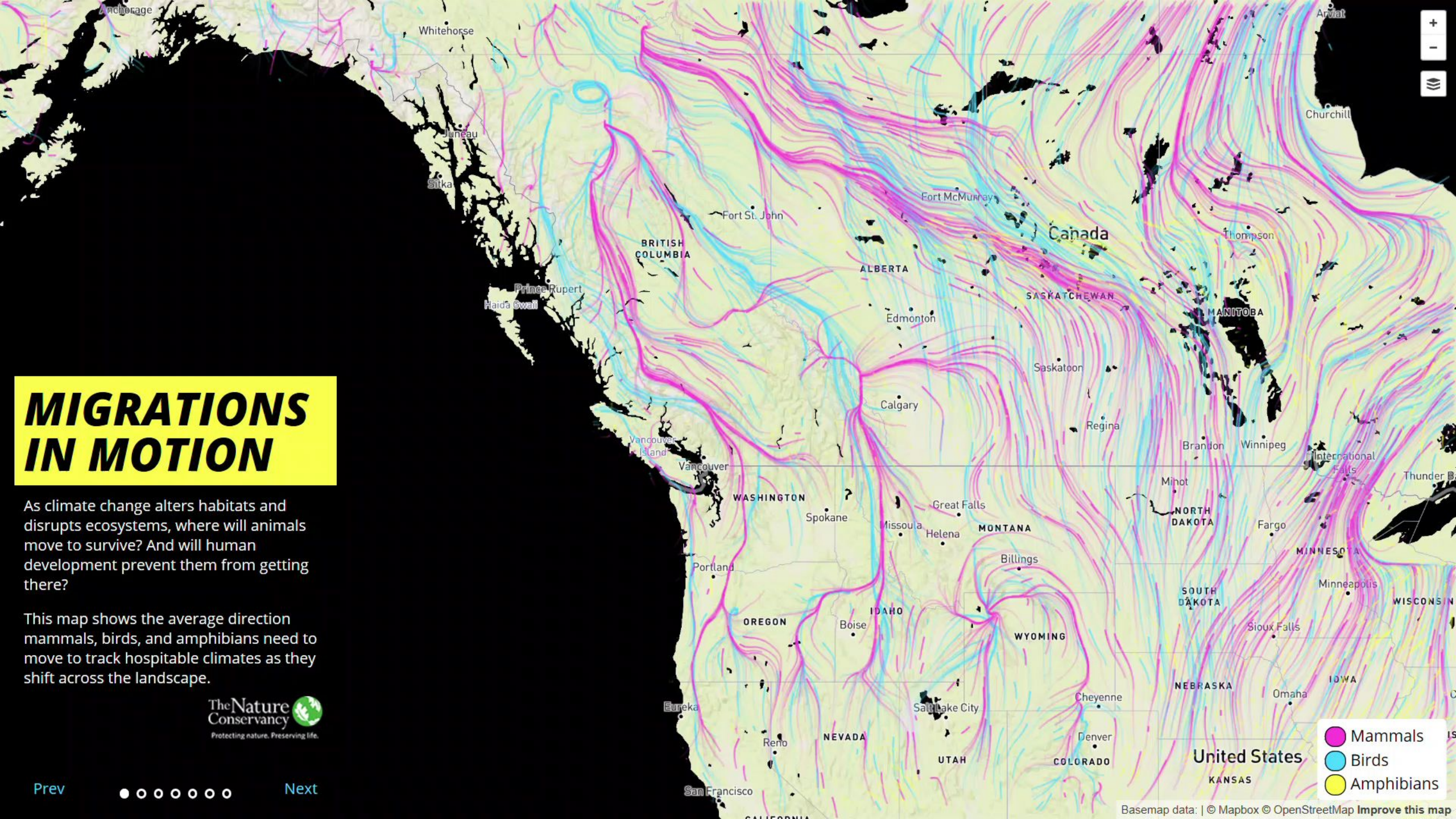
This map shows the average direction mammals, birds, and amphibians need to move to track hospitable climates as they shift across the landscape.

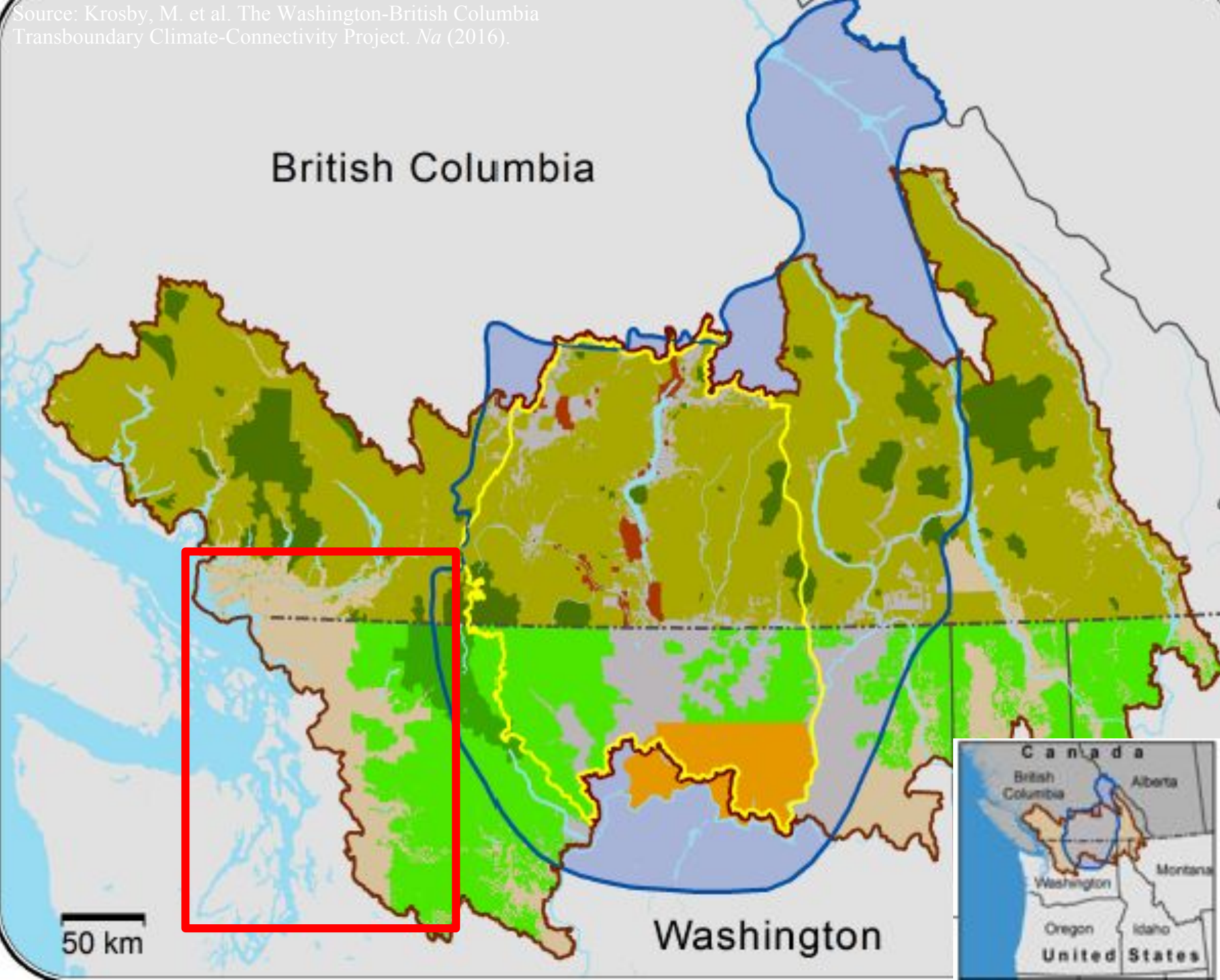


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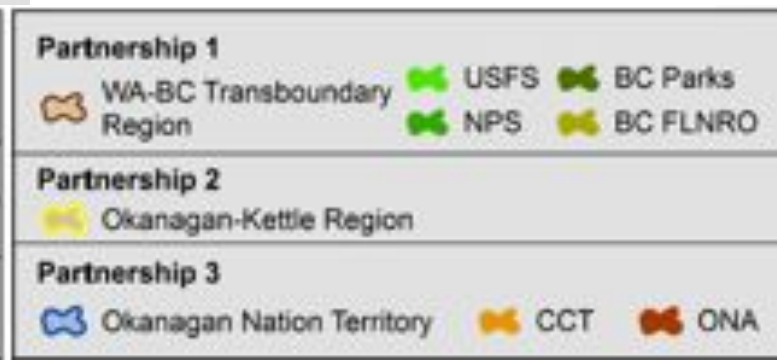


Next





LACK OF CONNECTIVITY PLANNING FOR URBAN AND DEVELOPED AREAS



GREEN INFRASTRUCTURE

Natural

Grasslands
Riparian areas
Forests
Fields
Wetlands

Human-made

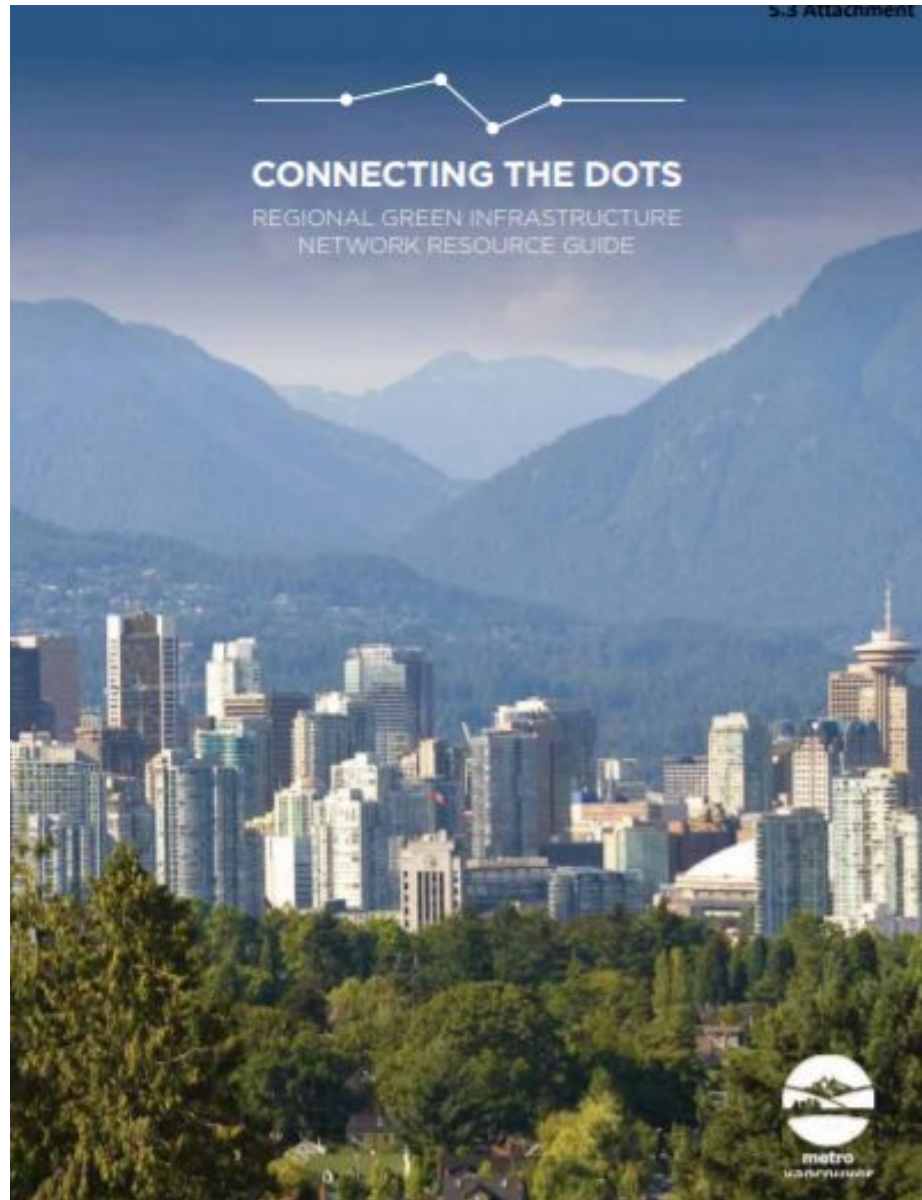
Street trees
Rain gardens
Green roofs
Porous pavement
Bioswales

INTERCONNECTED
NATURAL SYSTEMS AND
ECOLOGICAL PROCESSES

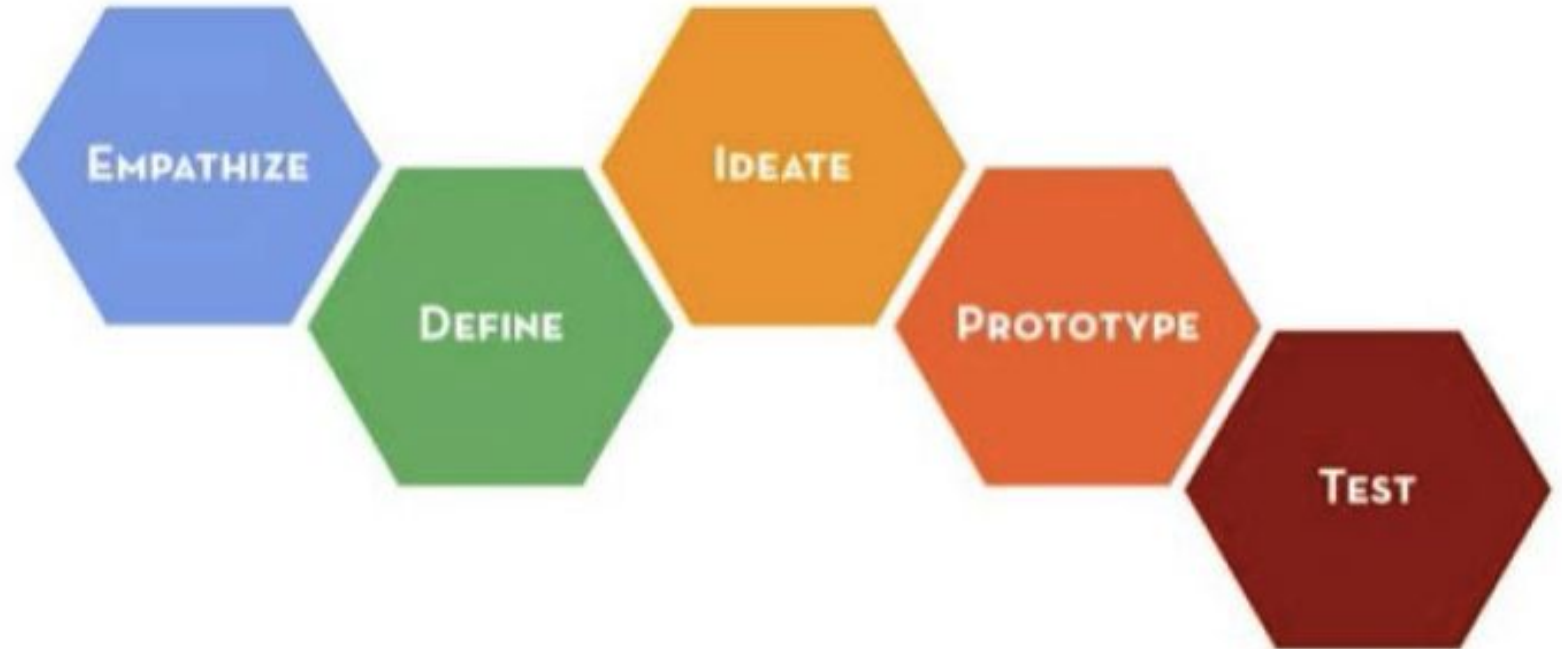
Clean water, clean air,
wildlife habitat and higher quality of life

Metro Vancouver. (2015).
Connecting the Dots:
Regional Green
Infrastructure Network
Resource Guide.

GREEN INFRASTRUCTURE & BIODIVERSITY IN METRO VANCOUVER

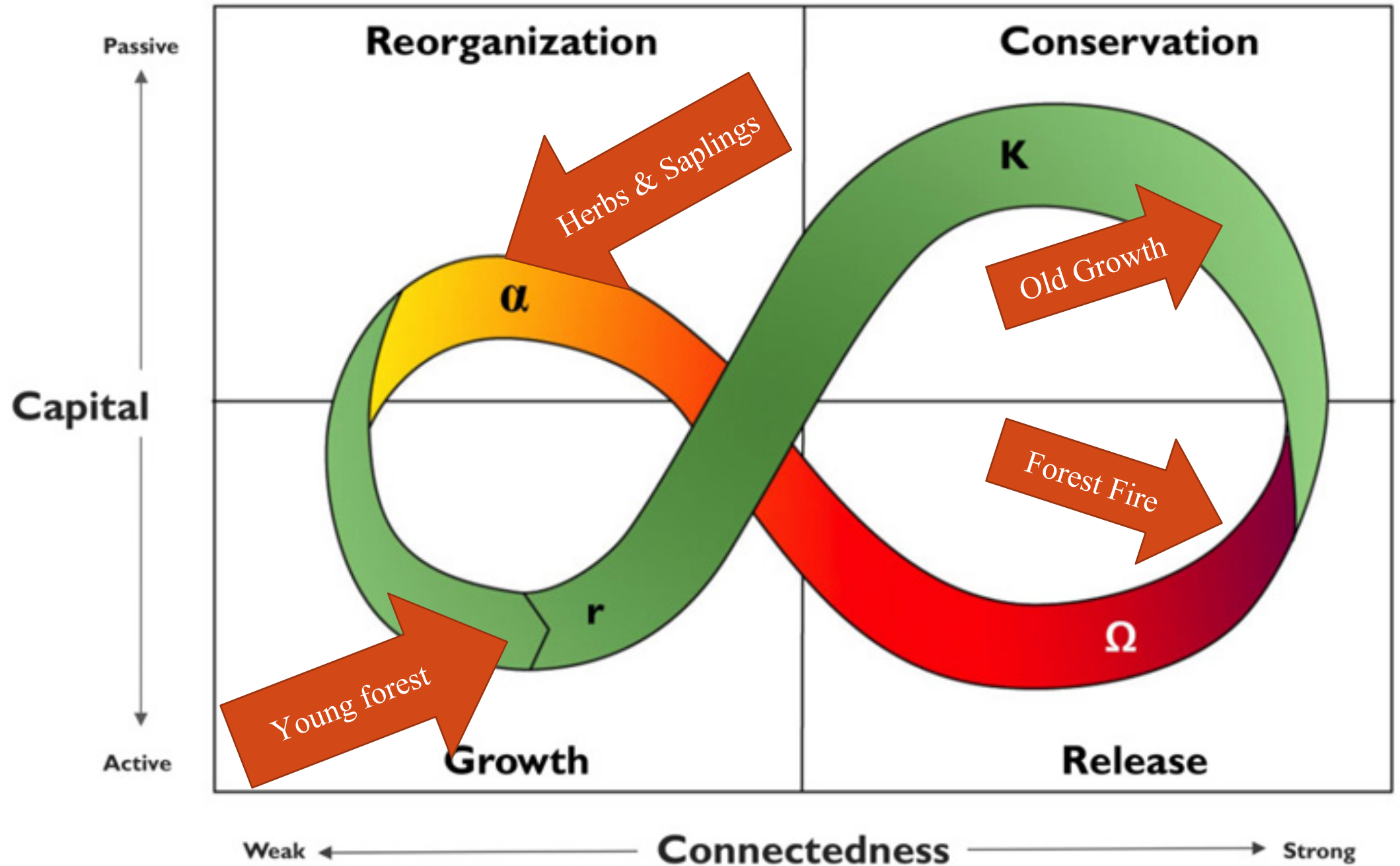


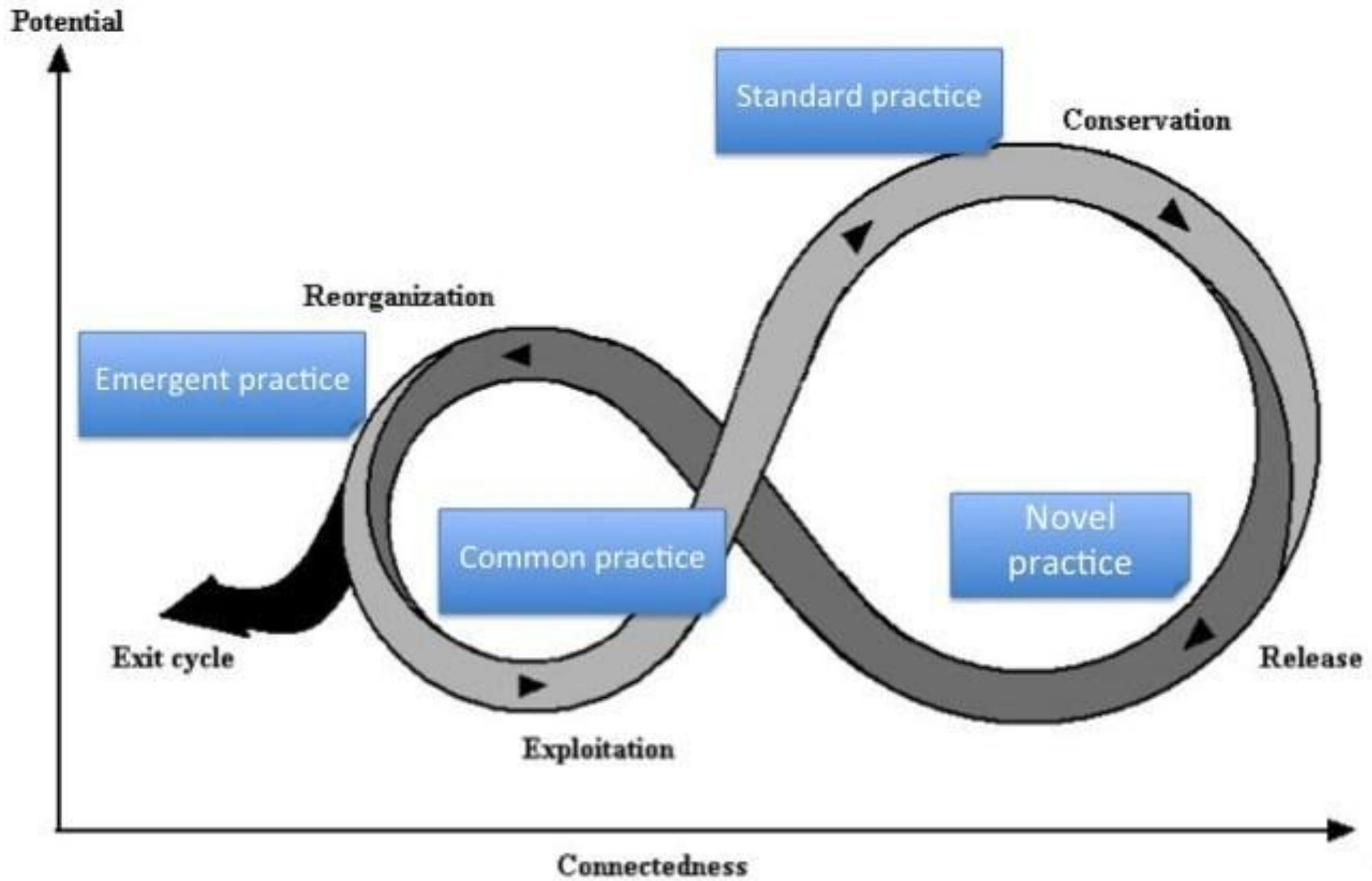
SOCIAL INNOVATION APPROACH

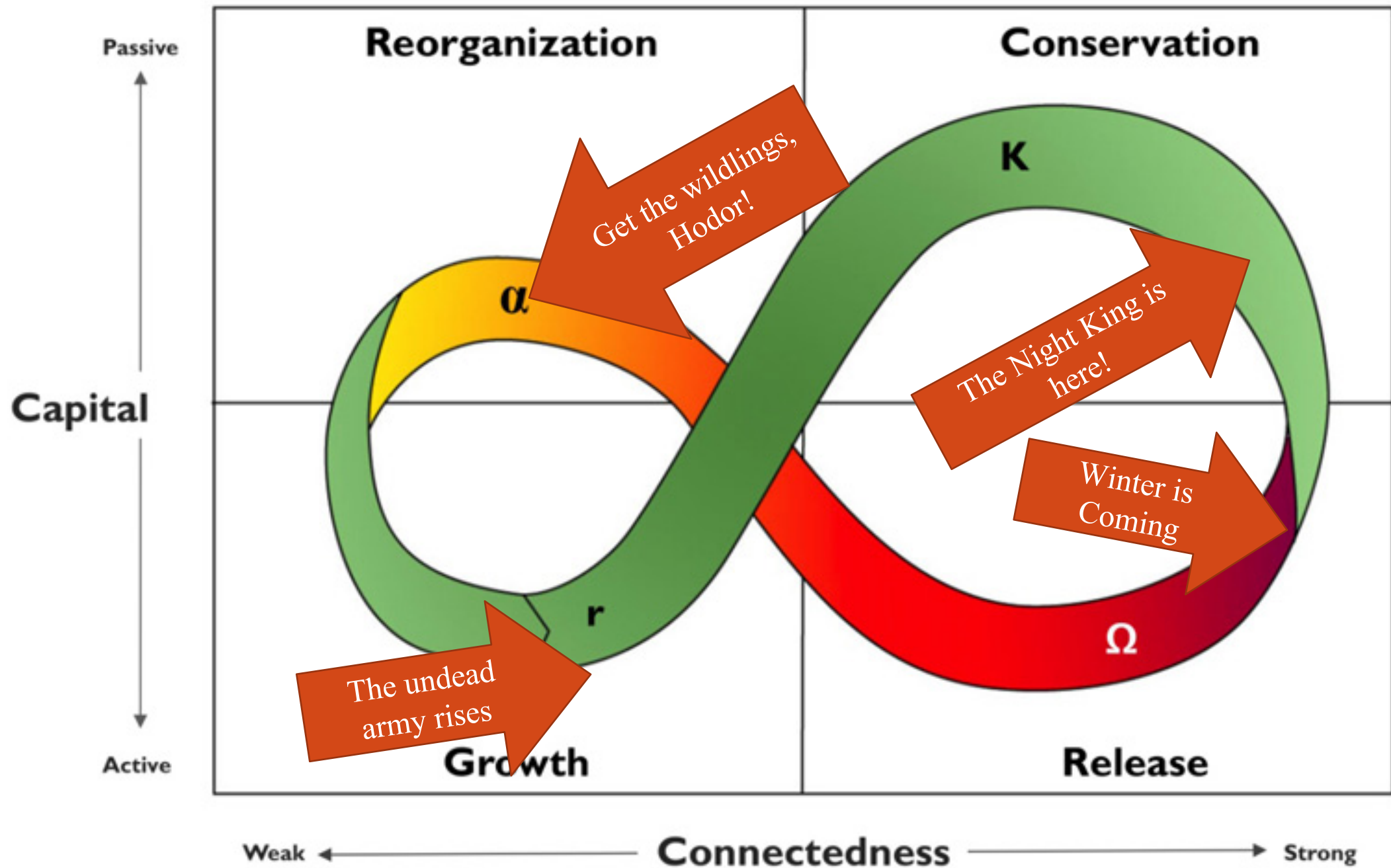


“Any initiative, product, process, program or design that challenges and, over time, changes, the defining *routines, resource and authority flows or beliefs* of the broader system in which it is introduced.”

–Dr. Frances Westley, Waterloo Institute of Social Innovation and Resilience







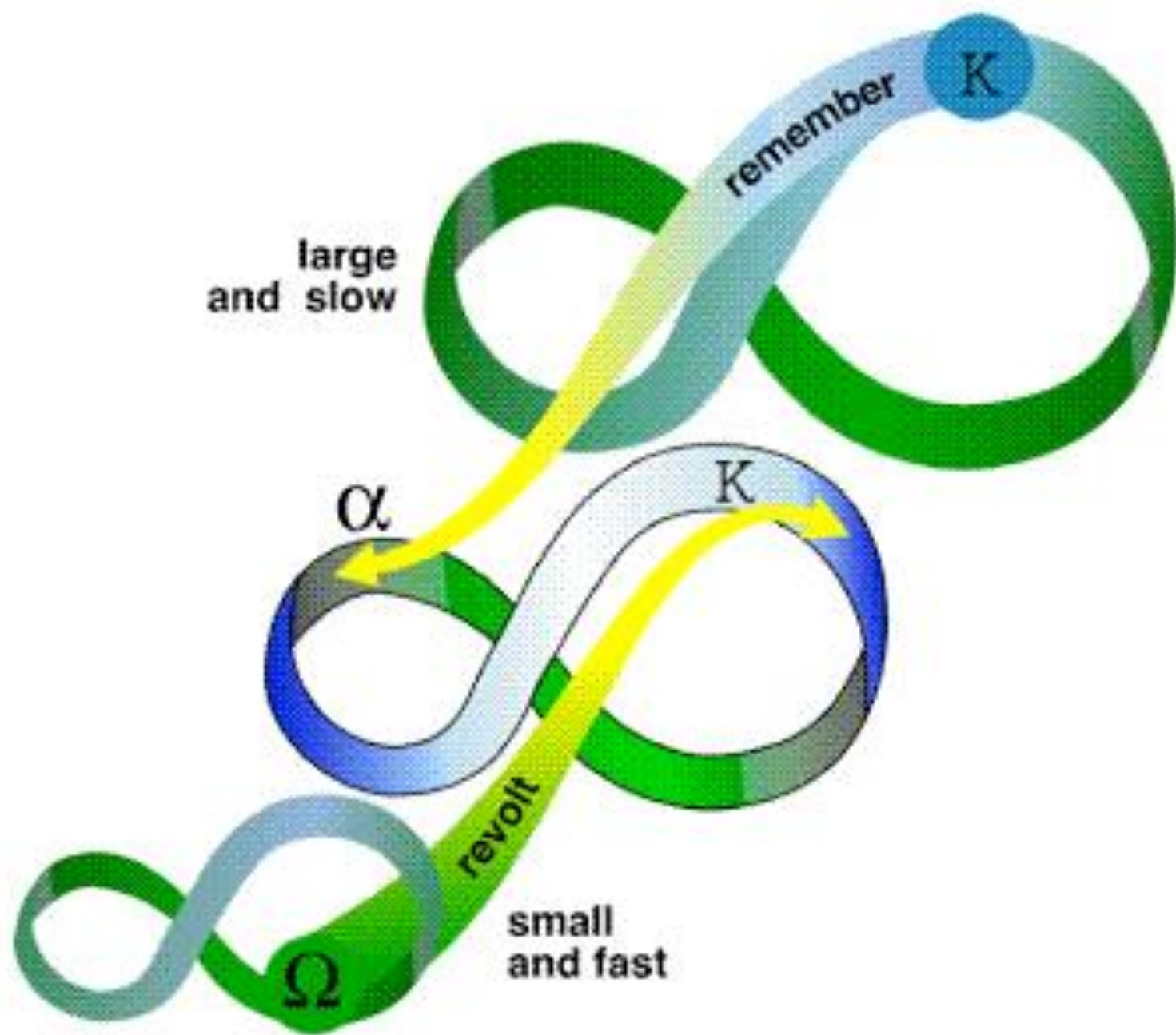
"Loss, suppression and ultimate rediscovery of voice are themes that run through this courageous and revelatory memoir."

NAOMI KLEIN,
THE GLOBE AND MAIL

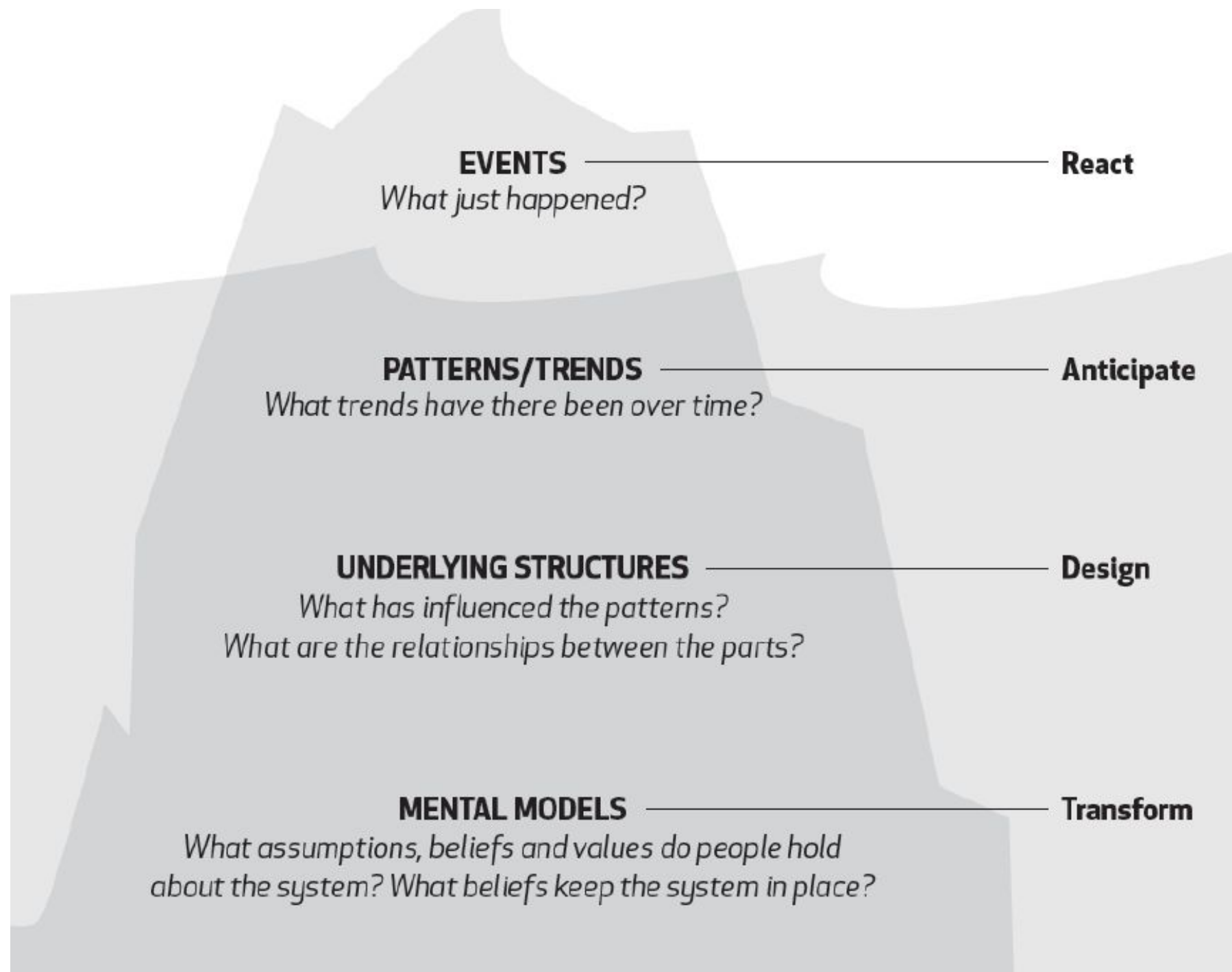


SHEILA WATT- CLOUTIER THE RIGHT TO BE COLD

ONE WOMAN'S STORY OF
PROTECTING HER CULTURE,
THE ARCTIC AND THE
WHOLE PLANET



INVESTIGATE MORE THAN JUST THE TIP OF THE ICEBERG



METRO VANCOUVER 2050: A MECCA OF BIODIVERSITY-LED GREEN INFRASTRUCTURE

- 50 Environment Staff, Planners, First Nations, Stewardship Groups
- What would it look like, how would it feel?
- How did we get there – transforming policy, institutions, law, society, culture, economy



HOW DOES IT LOOK AND FEEL?

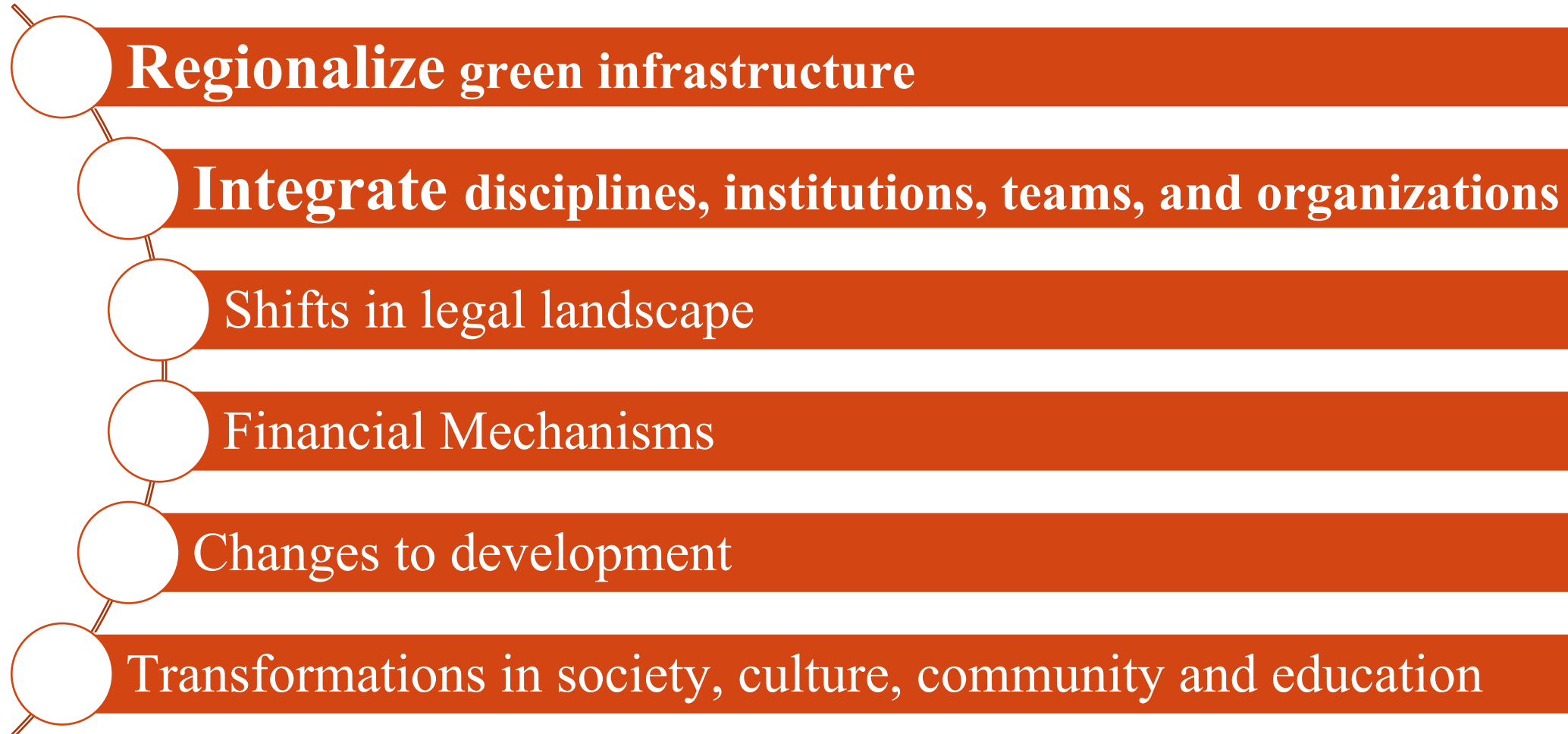
“Nature isn’t something you get out into on weekends, you experience it every day in the city”

- Less Cars = roads converted to green corridors
- 50% of water is captured / treated / reused on site



► Green infrastructure key part of MV economy

HOW WE GOT THERE?



A REGIONAL APPROACH TO GREEN INFRASTRUCTURE

- A Regional Planning Process
- Enable strategic prioritization and collective advantages
- Information sharing and collaboration
- Bigger features = bigger wins (eg. Tree vs Forest)
- Align provincial and federal supports and regulation to meet municipal needs



FOCUS GROUP: CREATING INTERDISCIPLINARY GREEN INFRASTRUCTURE

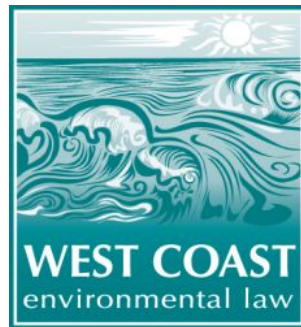
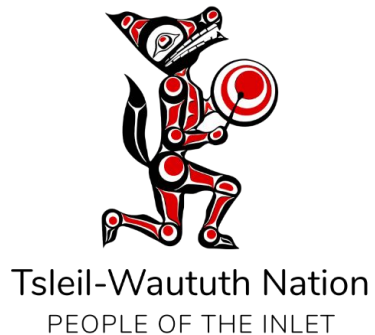
- **Shift structure and make-up of organizations / teams**
- **Involve disciplines throughout process** from design to completion
- **Start with needs-based objectives** co-created across disciplines (not grey or green)
- **Encourage professional development** in collaboration



NEXT STEPS

- Advocate for a Regional Green Infrastructure Planning Process in the Regional Growth Strategy Update
- Convene / support a regional green infrastructure community of practice

PROJECT ADVISORS AND FUNDERS



Advisors

Funders

QUESTIONS/LI

The logo for Simon Fraser University (SFU), consisting of a red square with the white letters "SFU" inside.

ACT Adaptation to
Climate Change Team

Interested in being part of a community of practice?

Email adapt@sfu.ca

Read our November workshop report:

[Metro Vancouver 2050: A mecca of biodiversity-led Green Infrastructure Workshop Report](#)

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FOUNDATION

real estate
foundation
BRITISH COLUMBIA