

# Lake Winnipeg Basin Integrated Capacity Inventory

For use in an Adaptive Management Framework

LWRC, IISD, LWF

March 20<sup>th</sup>, 2019  
ECCC Lake Winnipeg Symposium

# Lake Winnipeg Basin Program

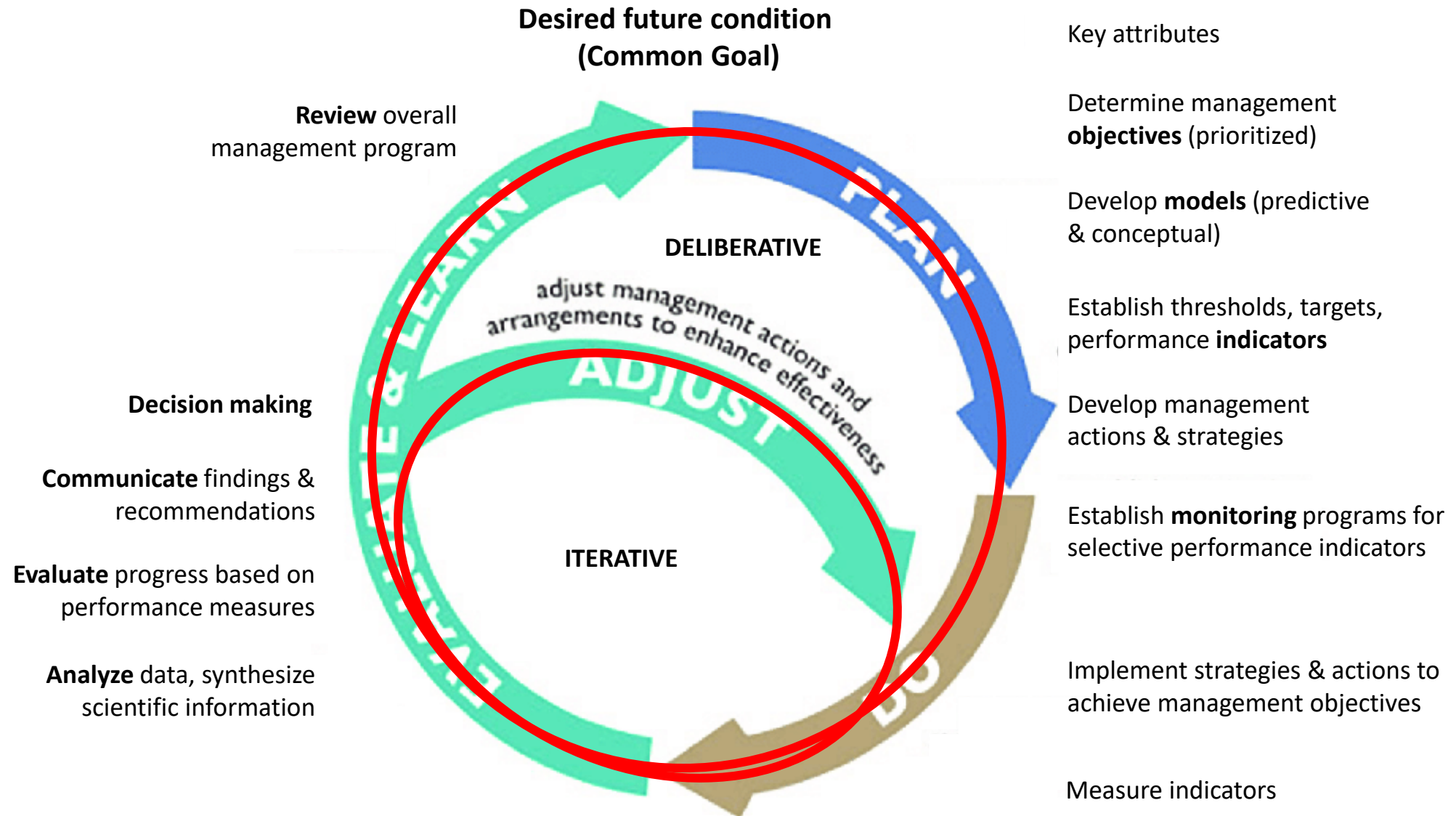
- Taking action to
  - Reduce nutrient loading to Lake Winnipeg
  - Enhance collaboration throughout the basin
  - Support engagement of Indigenous peoples on freshwater issues
- Represents
  - Important leadership
  - An investment in solutions
- Includes the development of an **ADAPTIVE MANAGEMENT PLAN**

# Adaptive Management

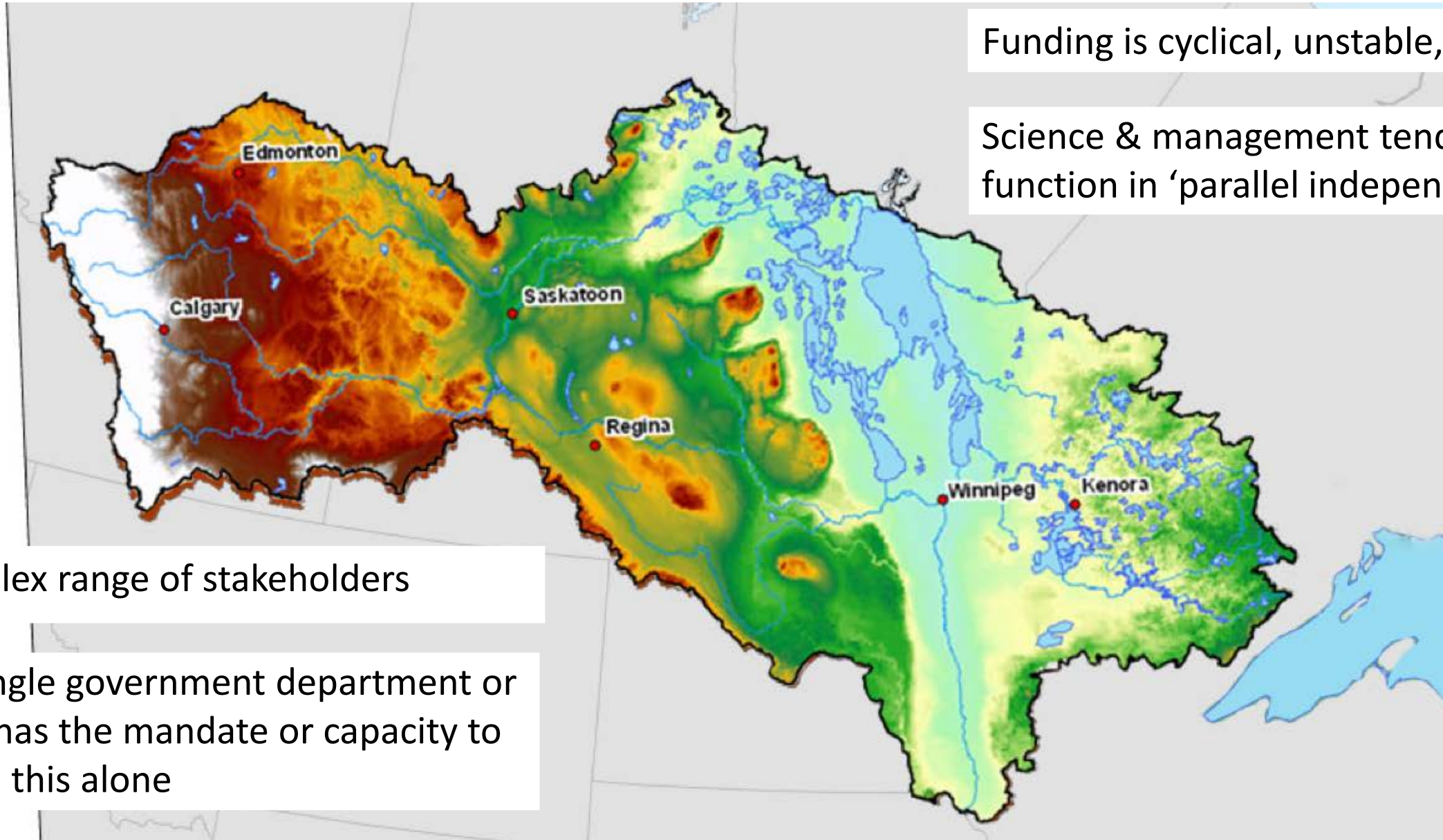
- Structured decision-making process
- Learning by doing , and adapting based on what's learned (Walters & Holling 1990)
- Actions are pursuant to desired outcomes
- More transparent

A structured decision **process** that promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood (U.S. NRC 2004/DOI)

# Adaptive Management Cycle



# Adaptive Management – Lake Winnipeg Basin



Funding is cyclical, unstable, political...

Science & management tend to function in 'parallel independence'

Complex range of stakeholders

No single government department or NGO has the mandate or capacity to tackle this alone

# Partnerships are imperative

Partnerships of managers, scientists, and other stakeholders who learn and adapt together toward a desired future condition (common goal)

- Strategically leverage key stakeholder expertise & experience
- More strategic allocation of resources
- Targeted action towards measurable outcomes is sustained beyond the five-year term of the current LWBP

# Integrated Capacity Inventory

## Overview

# Goal

Enable more effective long-term coordination of existing efforts to improve water quality (in particular nutrient reduction) that are currently underway

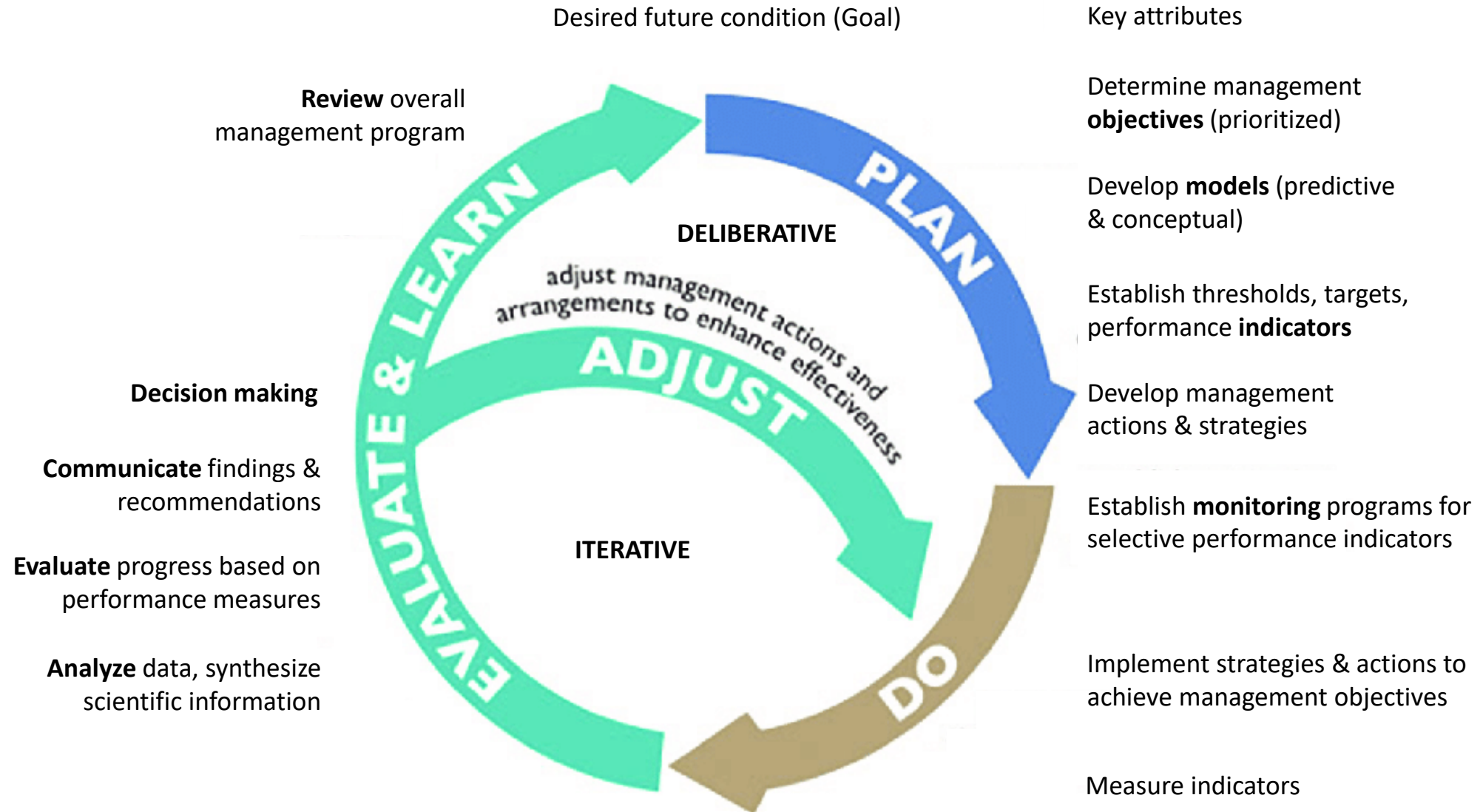
- Who is doing **what**, where, when, why and **how**?
- How / can it be used within an adaptive management framework?



# Objectives

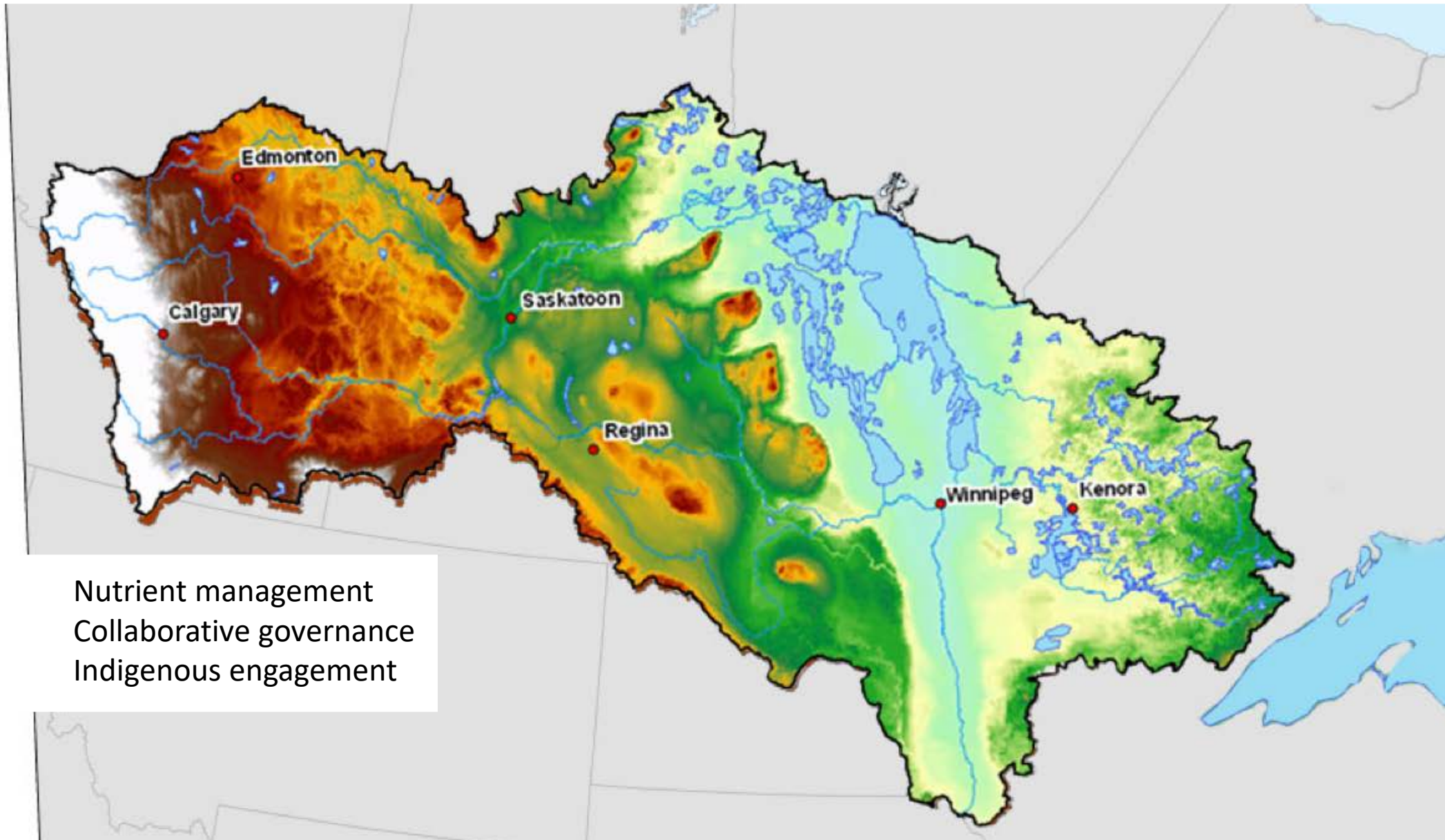
- Compile an inventory of organizational roles and outputs (institutional capacity)
  - Government
  - Research and monitoring
  - Indigenous
  - Grassroots
- Identify elements that could be relevant within a general adaptive management framework
  - Patterns
  - Outputs
  - Gaps
  - Redundancies
  - Best practices

# Adaptive Management Cycle



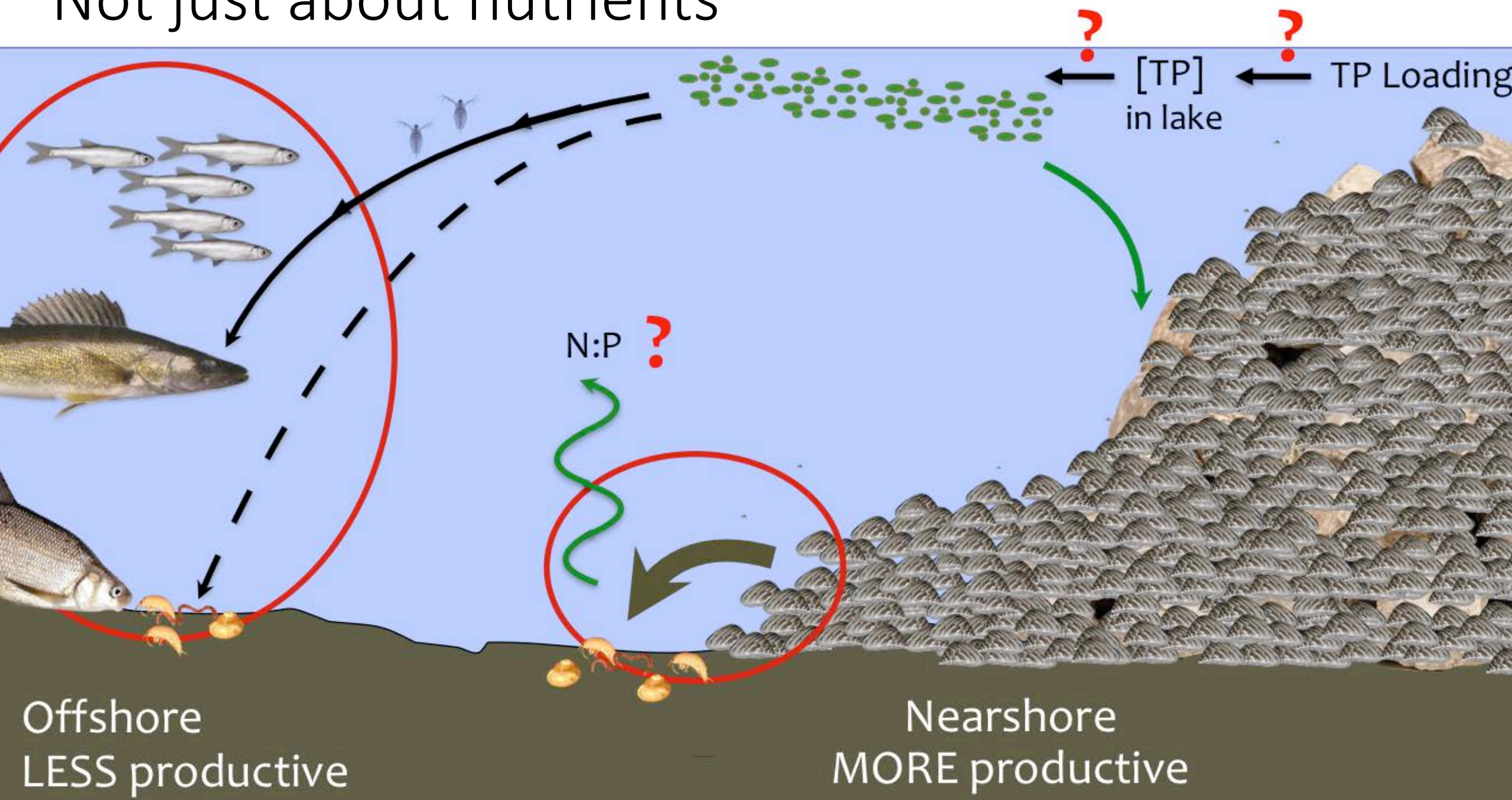
Early successes  
Early challenges  
Limitations

# ICI stayed within context of LWBP priorities





# Not just about nutrients

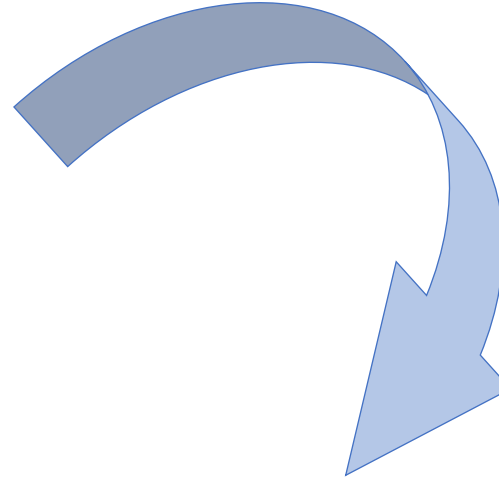


Where do we go from here?

# Next Steps

## Inventory

- Key players
- Contributions
- Gaps, redundancies, best practices
- Within generic AM framework



ECCC Adaptive Management  
Framework  
(Strategic partnerships)

Gratitude to the Lake Winnipeg  
Basin Program for funding support

Thank you



# Integrating Lake Science and Management

