

BASIN-SCALE EVENTS & COASTAL IMPACTS PROJECT - BECI

NORTH PACIFIC OCEAN KNOWLEDGE NETWORK

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WCPFC NC MEETING, JULY 2025



A COLLABORATIVE INITIATIVE OF:



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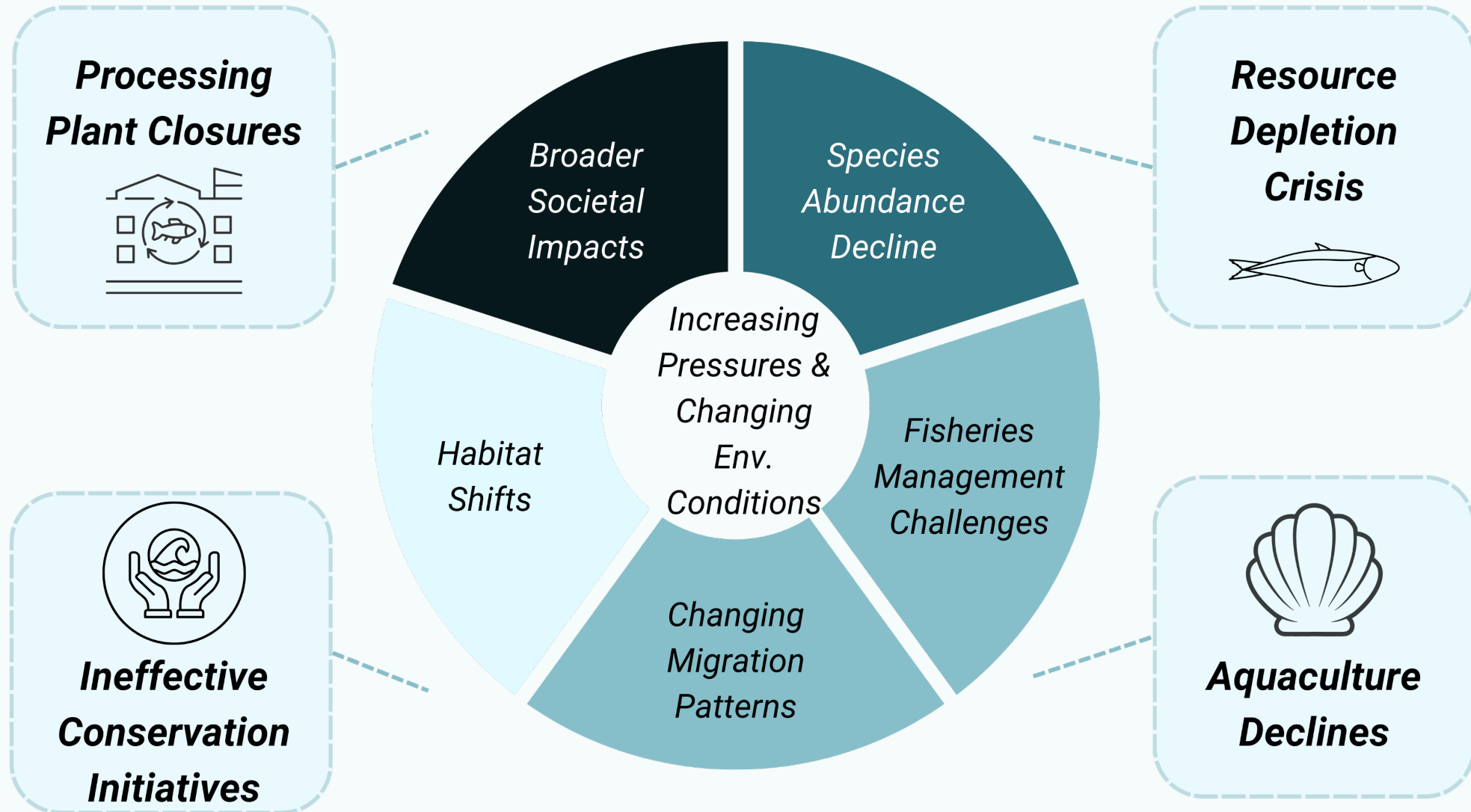


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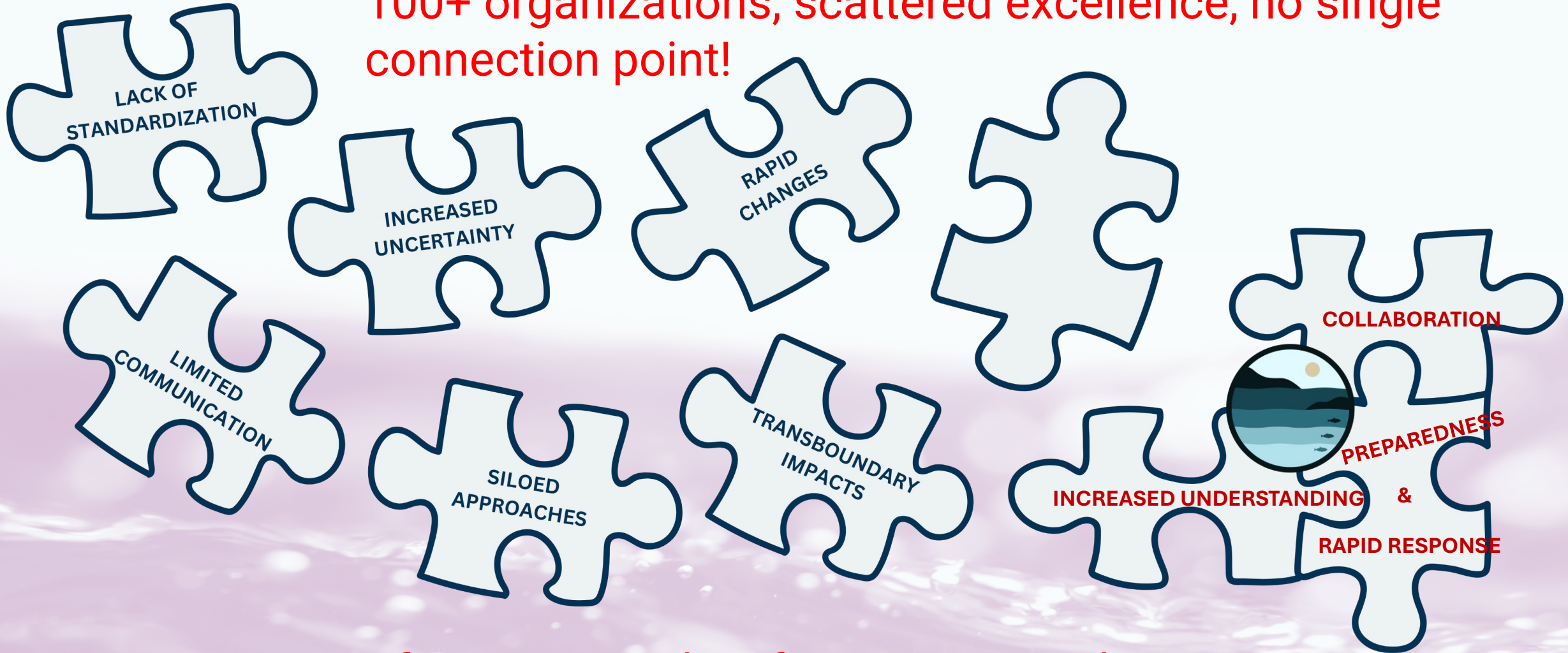
THE PACIFIC OCEAN: A SYSTEM UNDER PRESSURE



SCATTERED EXCELLENCE, FRAGMENTED RESPONSE



100+ organizations, scattered excellence, no single connection point!




Gap: A Pacific Ocean -wide information coordination system

NORTH PACIFIC OCEAN KNOWLEDGE NETWORK



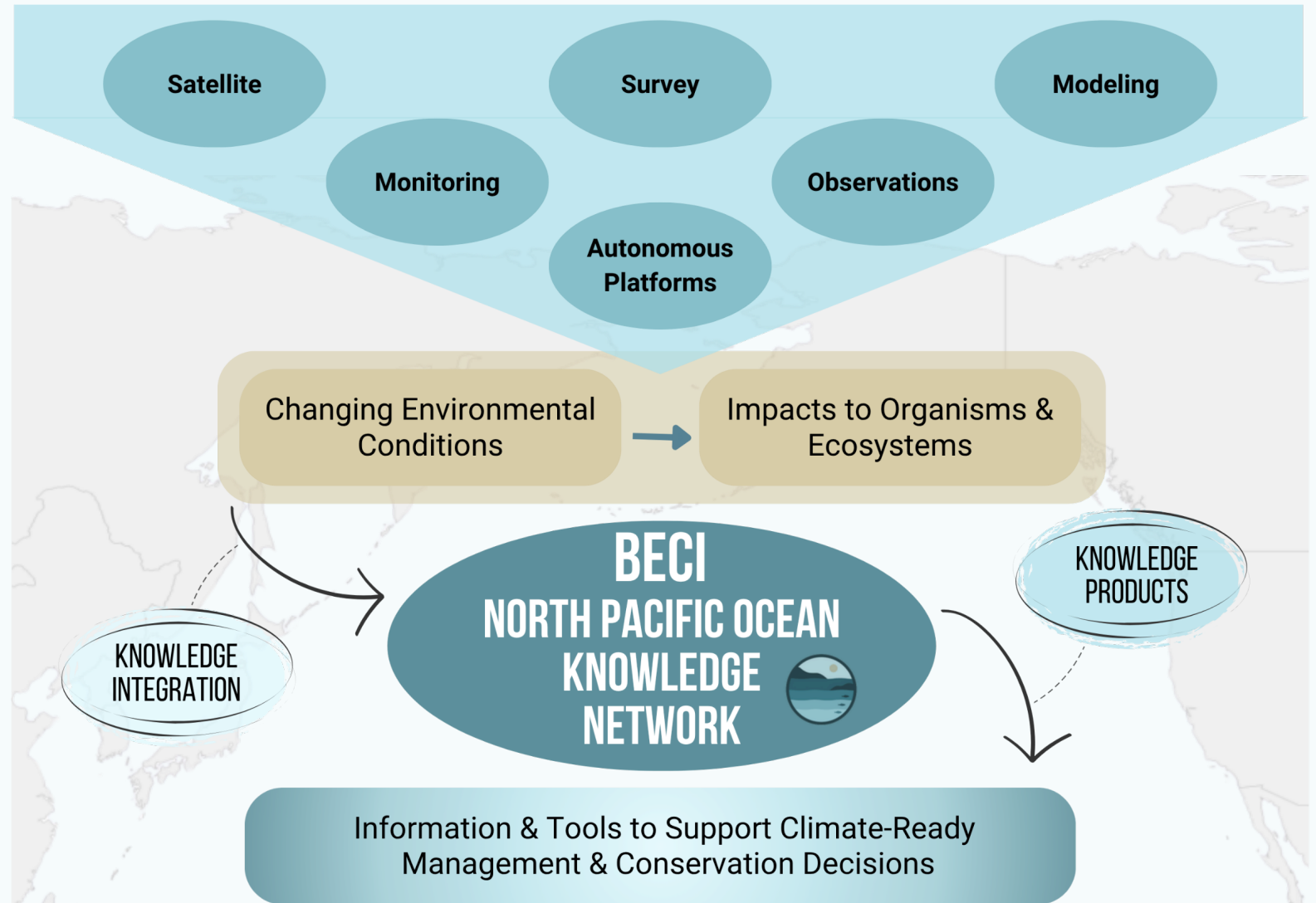
BECI is developing a **comprehensive knowledge network** to become the

One-Stop Solution:

 **The Discovery & Access Solution**

 **The Integration Solution**

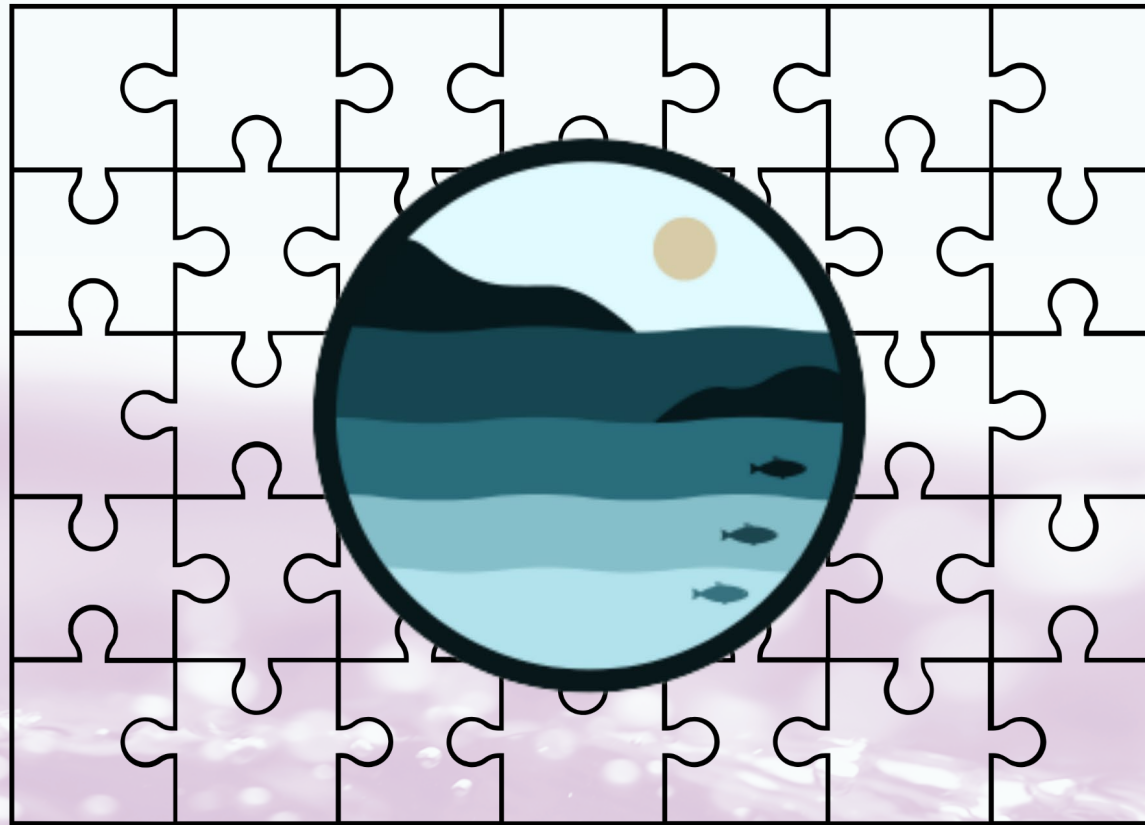
 **The Collaboration Solution**



THE NORTH PACIFIC OCEAN KNOWLEDGE NETWORK

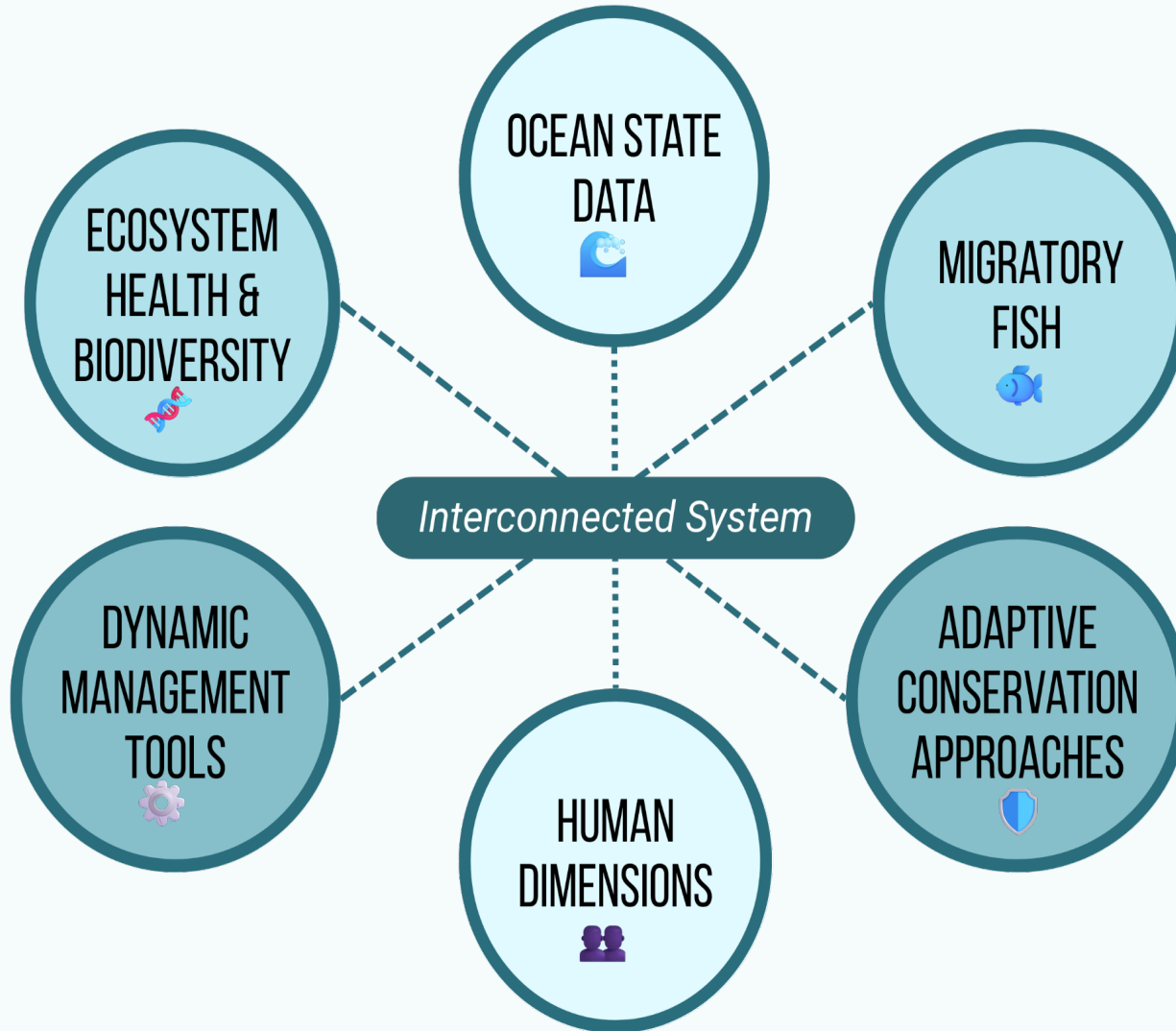


SCATTERED EXCELLENCE ➔ **ACTIONABLE INFORMATION**



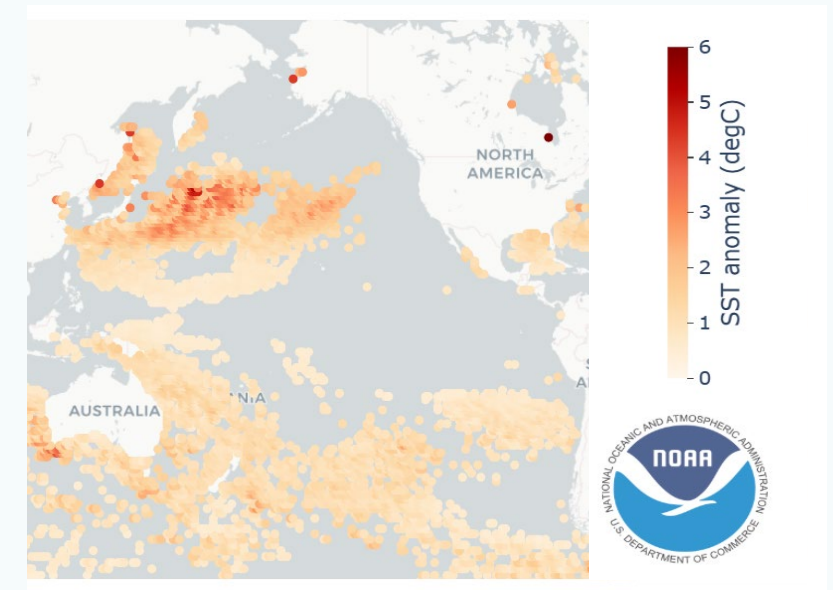
BECI CONNECTS THE PIECES

BECI INFORMATION THEMES



Initial focus:

changing environmental conditions including climate change and extreme events



Observed Marine Heatwave (MHW)

BECI: HOW WE WILL DO IT



Our approach is simple: show people where information is and bring key information together.

BECI's approach combines two complementary strategies:

Strategy 1: Federated Discovery 🔍

BECI will map and link to existing databases and research across the Pacific, creating a comprehensive directory that connects you to relevant information sources. Data stays with original providers - we point you to the sources while respecting data ownership.

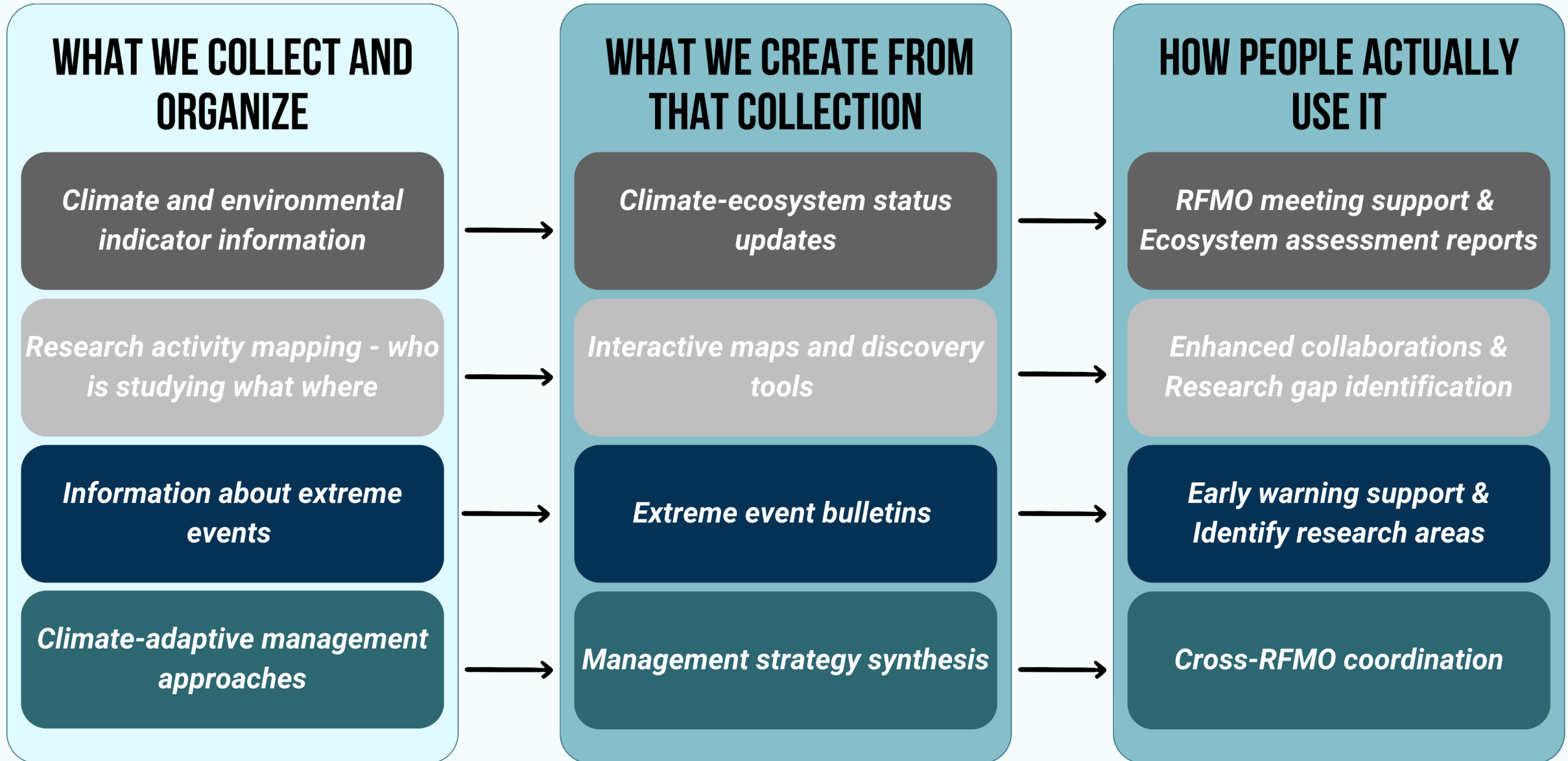
Strategy 2: Strategic Repositories 📁

For the most critical information needed for decisions and assessments, BECI will build centralized, organized collections that synthesize and standardize key data into accessible formats.

Enhanced by AI 🤖

Machine learning will support both strategies by automating content discovery and keeping information current.

WHAT BECI ACTUALLY DELIVERS



BECI IN ACTION: KNOWLEDGE NETWORK INTERFACE



BECI Knowledge Network

+

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https://www.beci.info

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BECI KNOWLEDGE NETWORK

Understanding Ocean Change Across the North Pacific

Overview

Ocean Conditions

Ecosystem Indicators

Knowledge Hub

Research Activity

Research Activity Map

Quick Links

Research Catalog

Data Resources

Knowledge Base

Knowledge Exchange

RFMO Climate Coordination (3)

Cross-Regional Analysis (5)

Ecosystem Status Reports (7)

Partner Directory

Research Groups
15 organizations

Management Bodies
8 agencies

Monitoring Programs
12 networks

Latest Activity

Ecosystem Indicators Update -
NOAA, DFO, JAMSTEC

Climate Impact
Assessment - WCPFC
Scientific Committee

Network Engagement

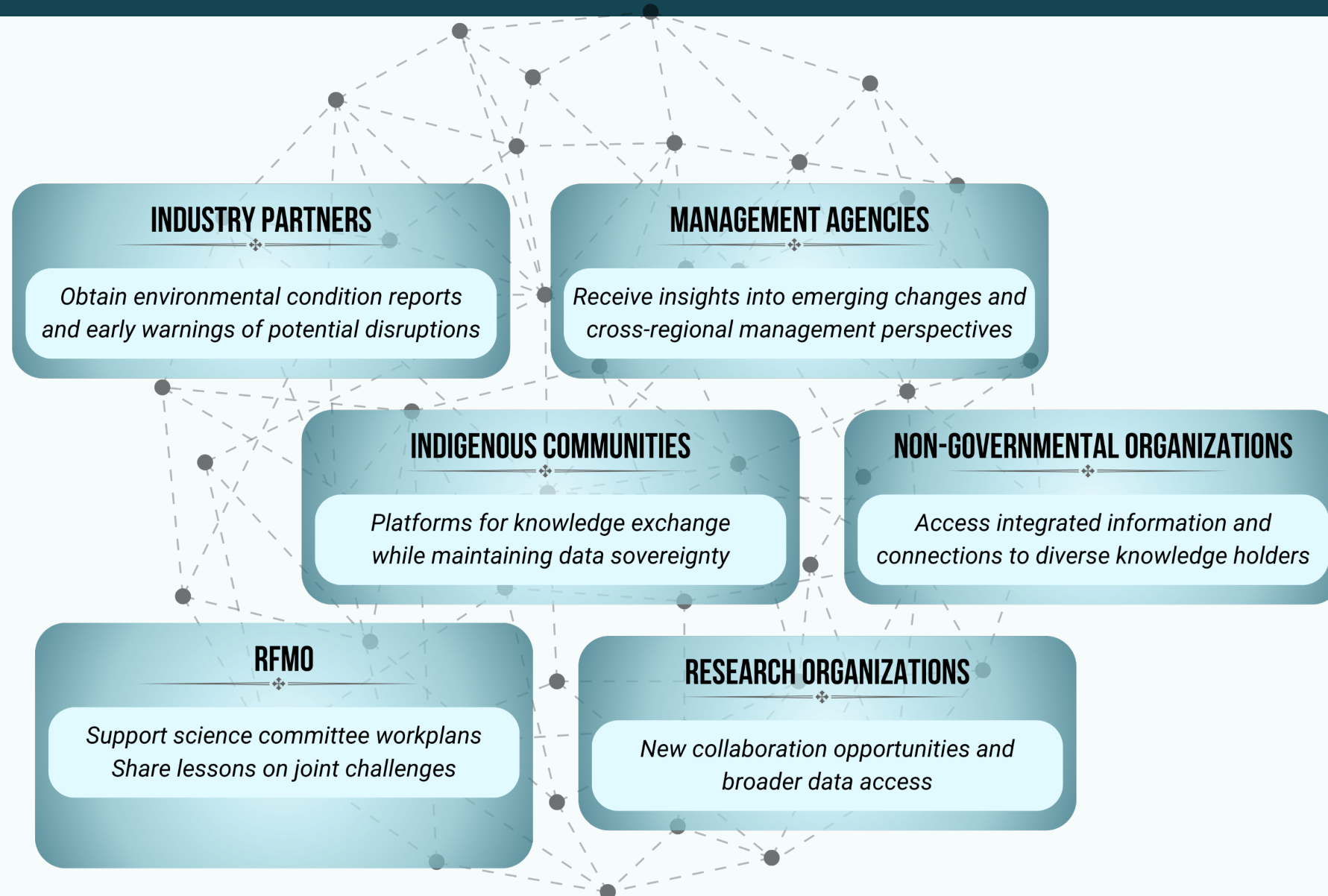
Climate Working Groups
8 RFMOs, 45 experts

Indicator Updates
12 new updates this week

Extreme Events

>>

BENEFITS TO USER GROUPS



ALIGNMENT WITH WCPFC



1

ENHANCED ENV. INFORMATION ACCESS

Organized climate and oceanographic information from across the North Pacific to support WCPFC's ecosystem and climate indicator development

2

CROSS-RFMO COORDINATION

Facilitating information sharing between WCPFC, IATTC, NPFC and other Pacific RFMOs on shared climate challenges

3

TRANSBOUNDARY SPECIES INTELLIGENCE

Comprehensive environmental context for highly migratory tuna and other species that move across WCPFC member jurisdictions

4

CLIMATE WORKPLAN IMPLEMENTATION SUPPORT

Supporting WCPFC members with organized environmental intelligence needed for climate-resilient fisheries management

THE BOTTOM LINE



BECI IS THE MISSING LINK

BECI transforms the North Pacific's scattered excellence into coordinated action. We're not creating new research or management tools - we're connecting what already exists so it can be used more effectively.

The North Pacific has the knowledge and capabilities to lead global climate-ready ocean management. BECI provides the integration platform that makes this possible.

We're not building another database - we're building the solution that makes existing databases useful for supporting timely responses to climate challenges, supporting climate-informed decision making, building collaborations, saving resources, enhancing ocean resilience.

WHO WE WORK WITH – JOIN OUR GROWING NETWORK



NOAA

MARTIN
CONSERVATION
DECISIONS LAB



THE UNIVERSITY OF BRITISH COLUMBIA
Faculty of Forestry



Fisheries and Oceans
Canada

Pêches et Océans
Canada



**BLUE FOOD
FUTURES**



**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development

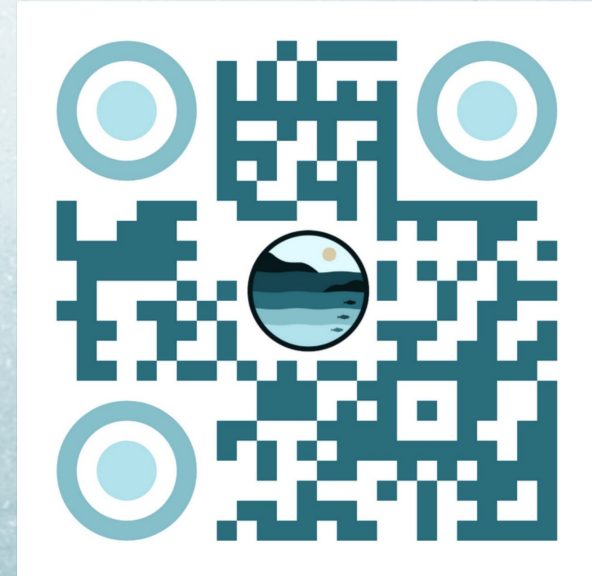


BUILDING A RESILIENT FUTURE TOGETHER



Join the Knowledge
Network

Share your expertise
or resources



Together we can ensure a sustainable ocean future