

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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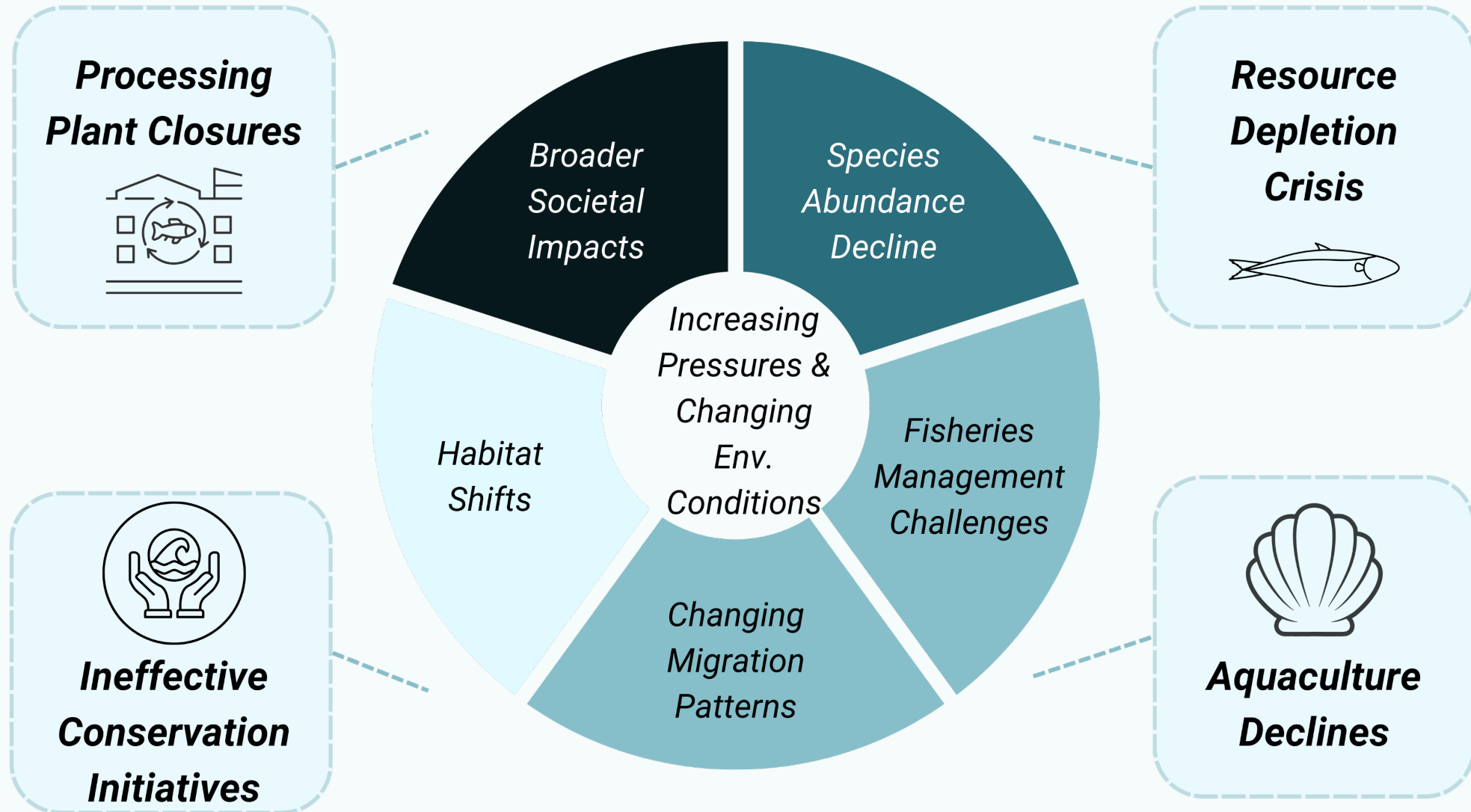


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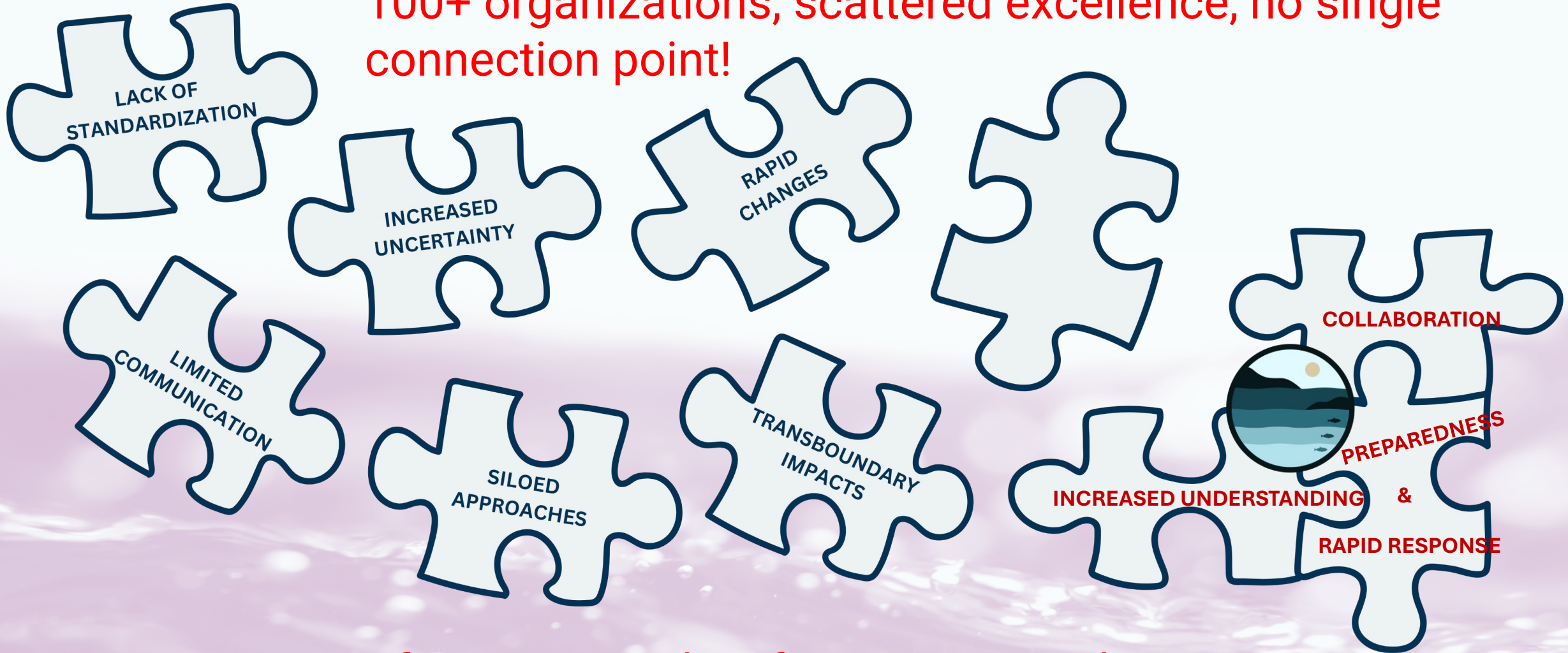
THE PACIFIC OCEAN: A SYSTEM UNDER PRESSURE



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



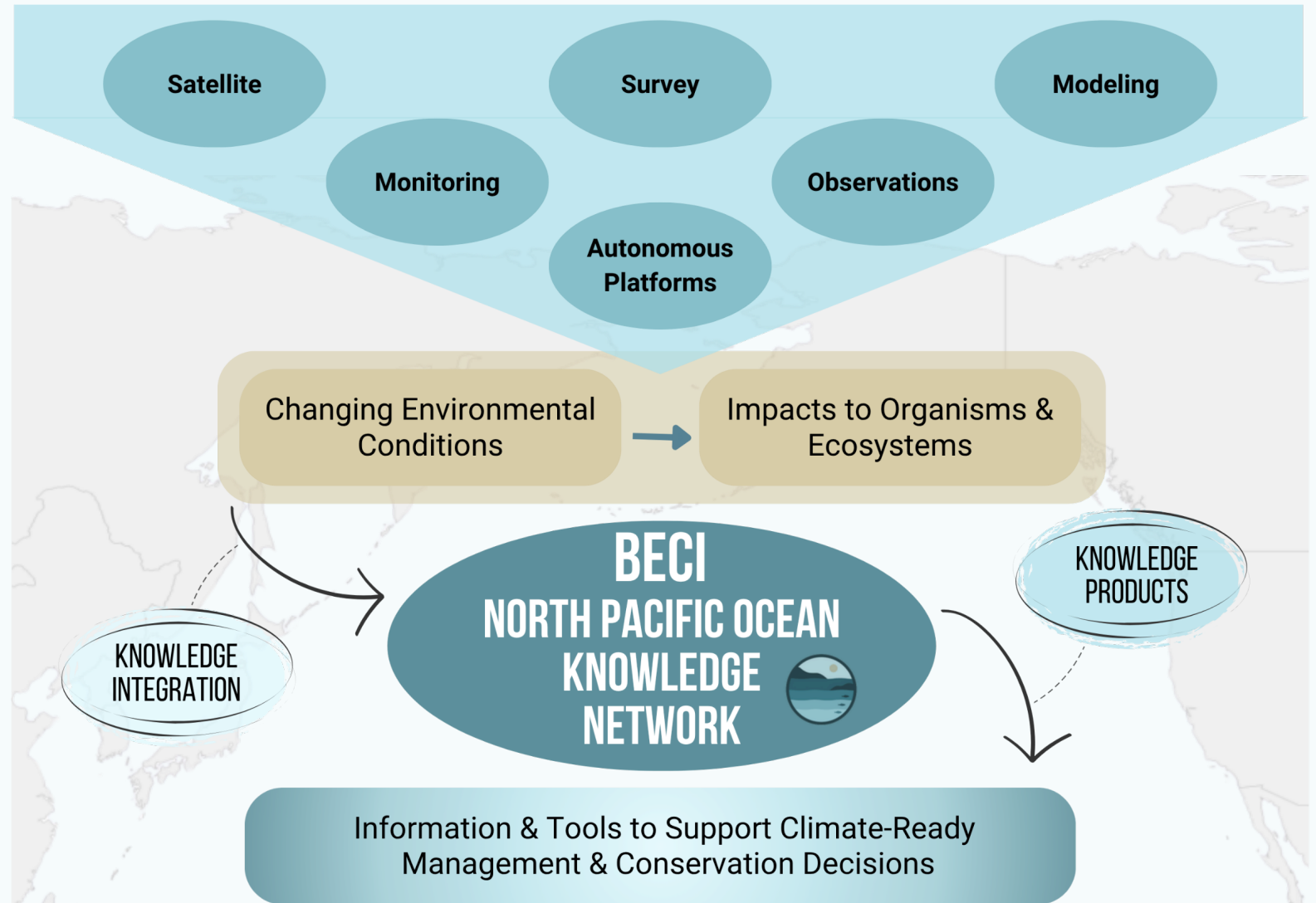
BECI is developing a **comprehensive knowledge network** to become the

One-Stop Solution:

 **The Discovery & Access Solution**

 **The Integration Solution**

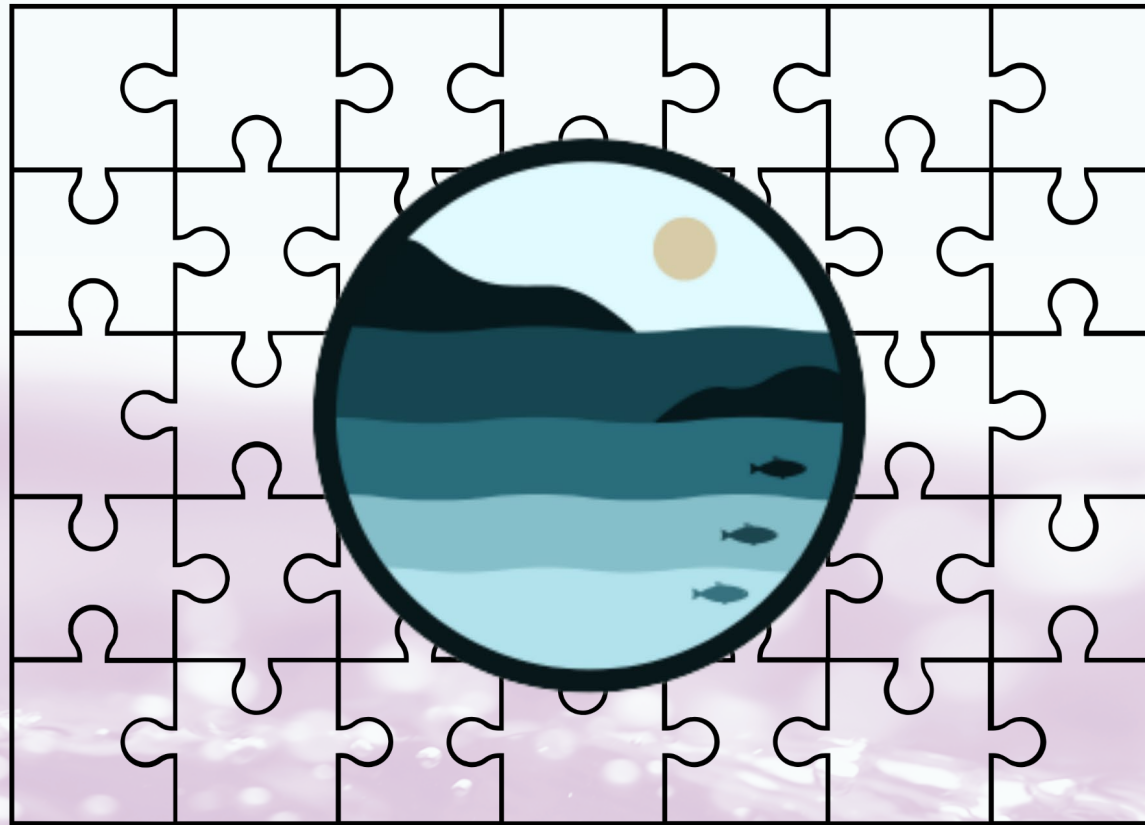
 **The Collaboration Solution**



THE NORTH PACIFIC OCEAN KNOWLEDGE NETWORK

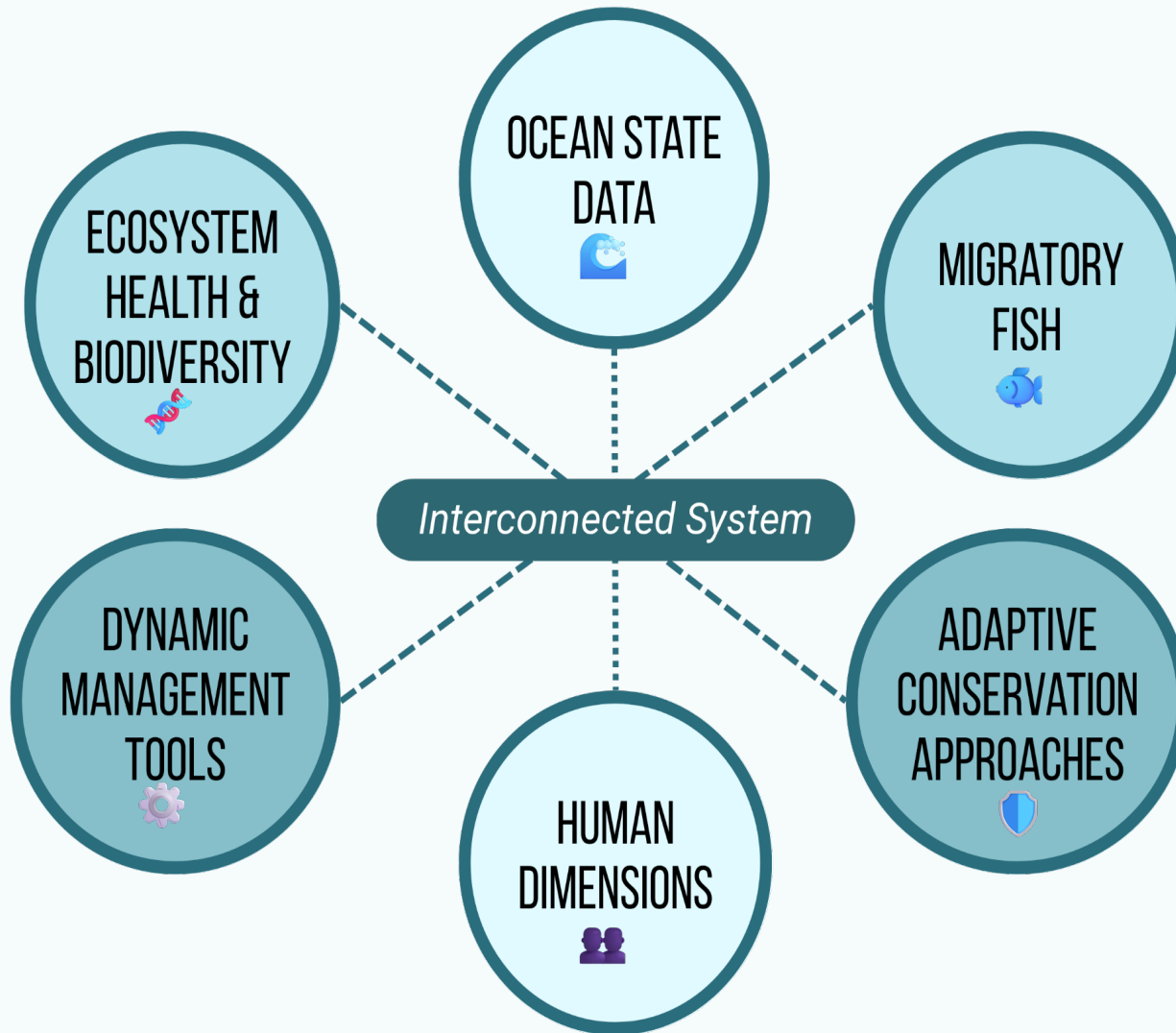


SCATTERED EXCELLENCE ➔ **ACTIONABLE INFORMATION**



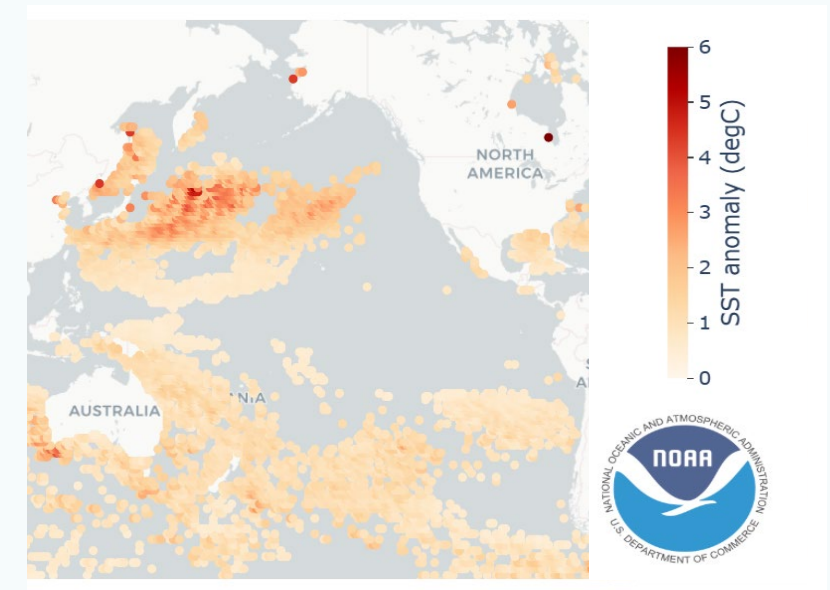
BECI CONNECTS THE PIECES

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.

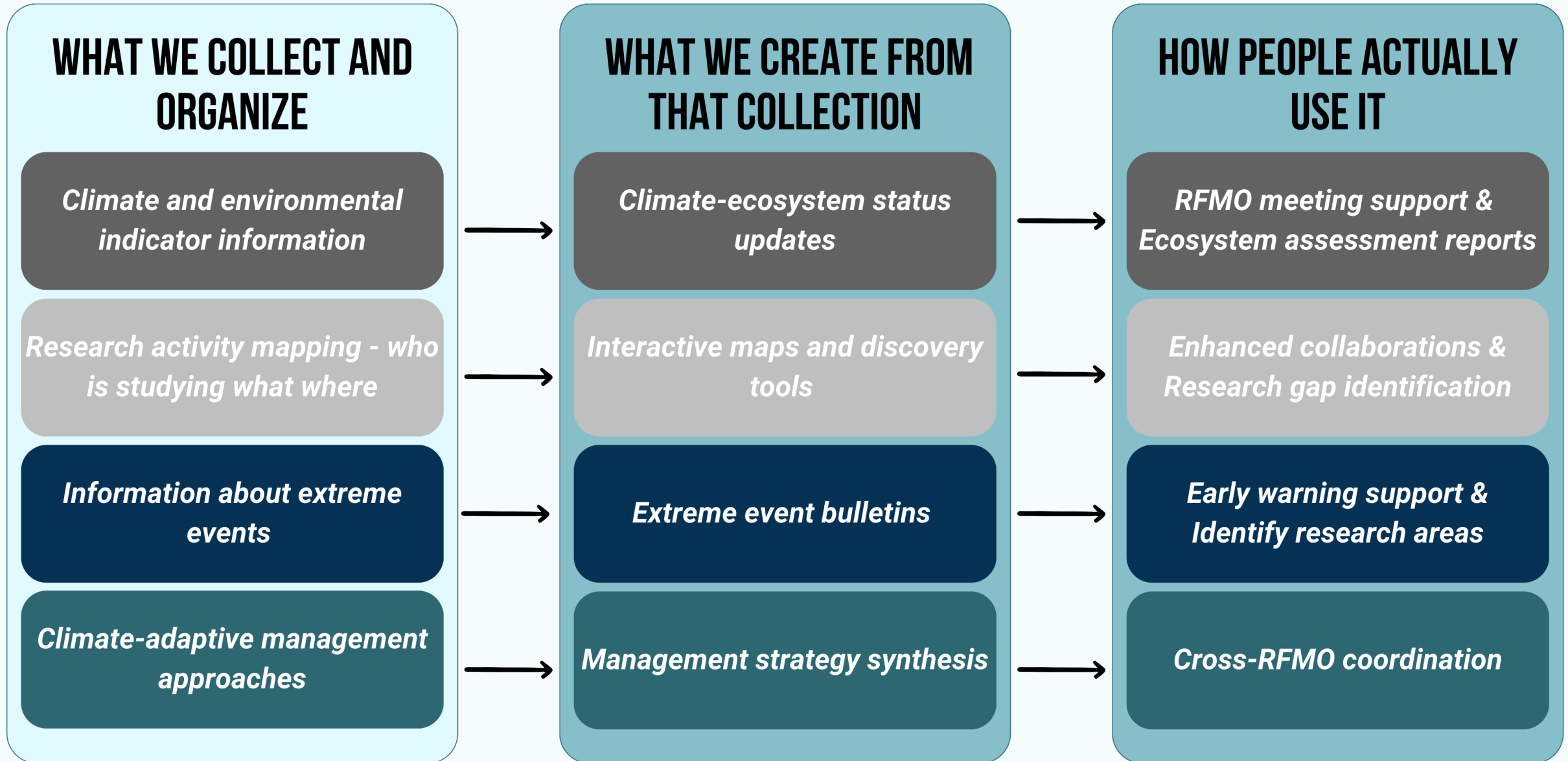
Strategy 2: Strategic Repositories 📁

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

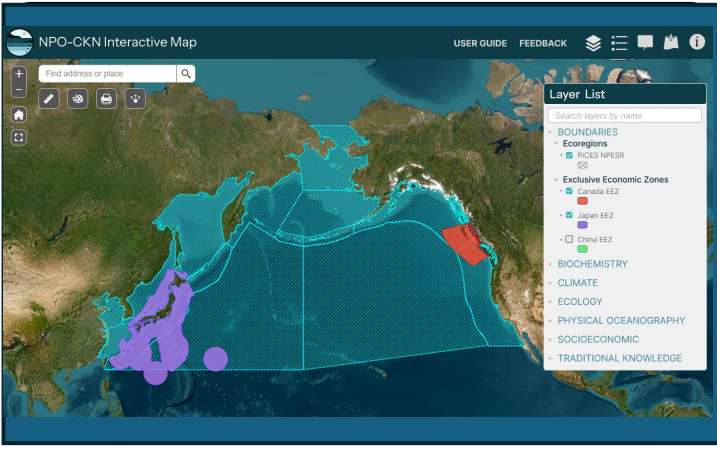
 Ocean Conditions

 Ecosystem Indicators

 Knowledge Hub

 Research Activity

Research Activity Map



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

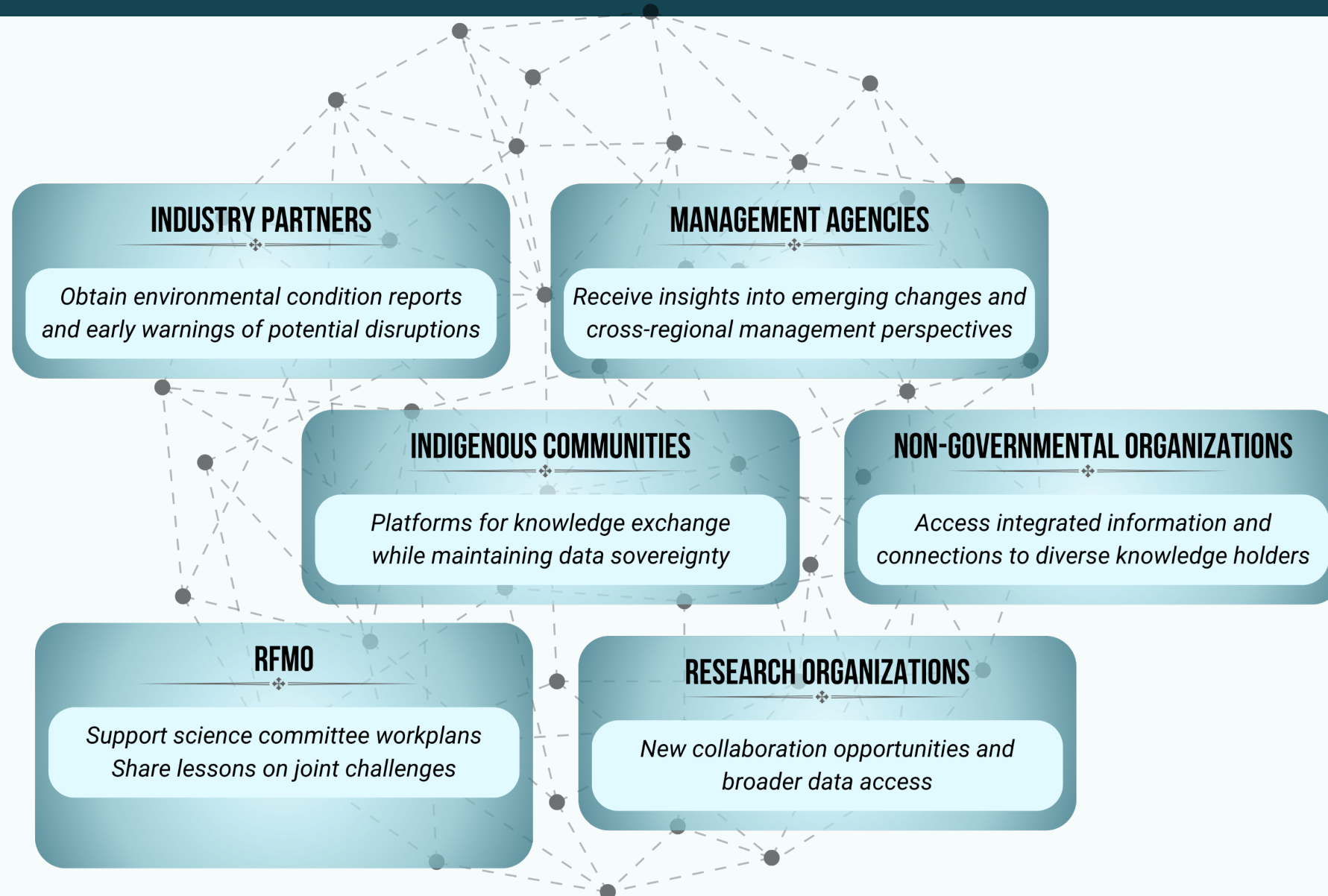
Quick Links

Research Catalog

Data Resources

Knowledge Base

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



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



THE UNIVERSITY OF BRITISH COLUMBIA
Faculty of Forestry



Fisheries and Oceans
Canada

Pêches et Océans
Canada

**BLUE FOOD
FUTURES**

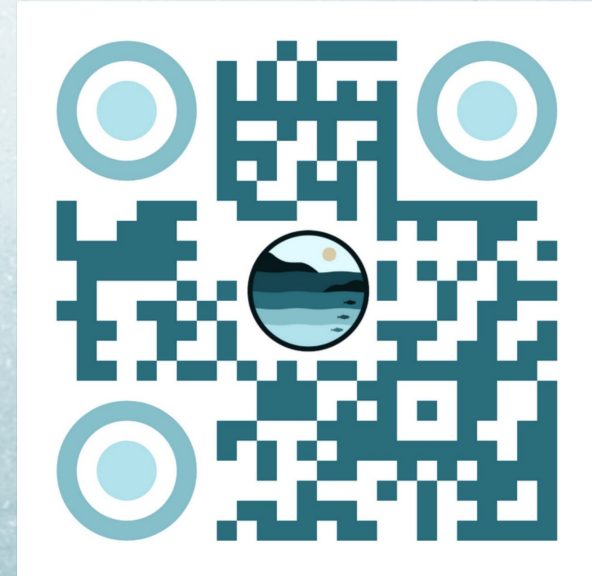


BUILDING A RESILIENT FUTURE TOGETHER



Join the Knowledge
Network

Share your expertise
or resources



Together we can ensure a sustainable ocean future