

BASIN-SCALE EVENTS & COASTAL IMPACTS PROJECT - BECI NORTH PACIFIC OCEAN KNOWLEDGE NETWORK

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A COLLABORATIVE INITIATIVE OF:



ENDORSED BY:



FUNDED BY:



Fisheries and Oceans
Canada

Pêches et Océans
Canada



BASIN-SCALE EVENTS & COASTAL IMPACTS (BECI)

Building the North Pacific Ocean Knowledge Network

WELCOME & INTRODUCTIONS
PRESENTATION
PLATFORM DEMONSTRATION
DISCUSSION

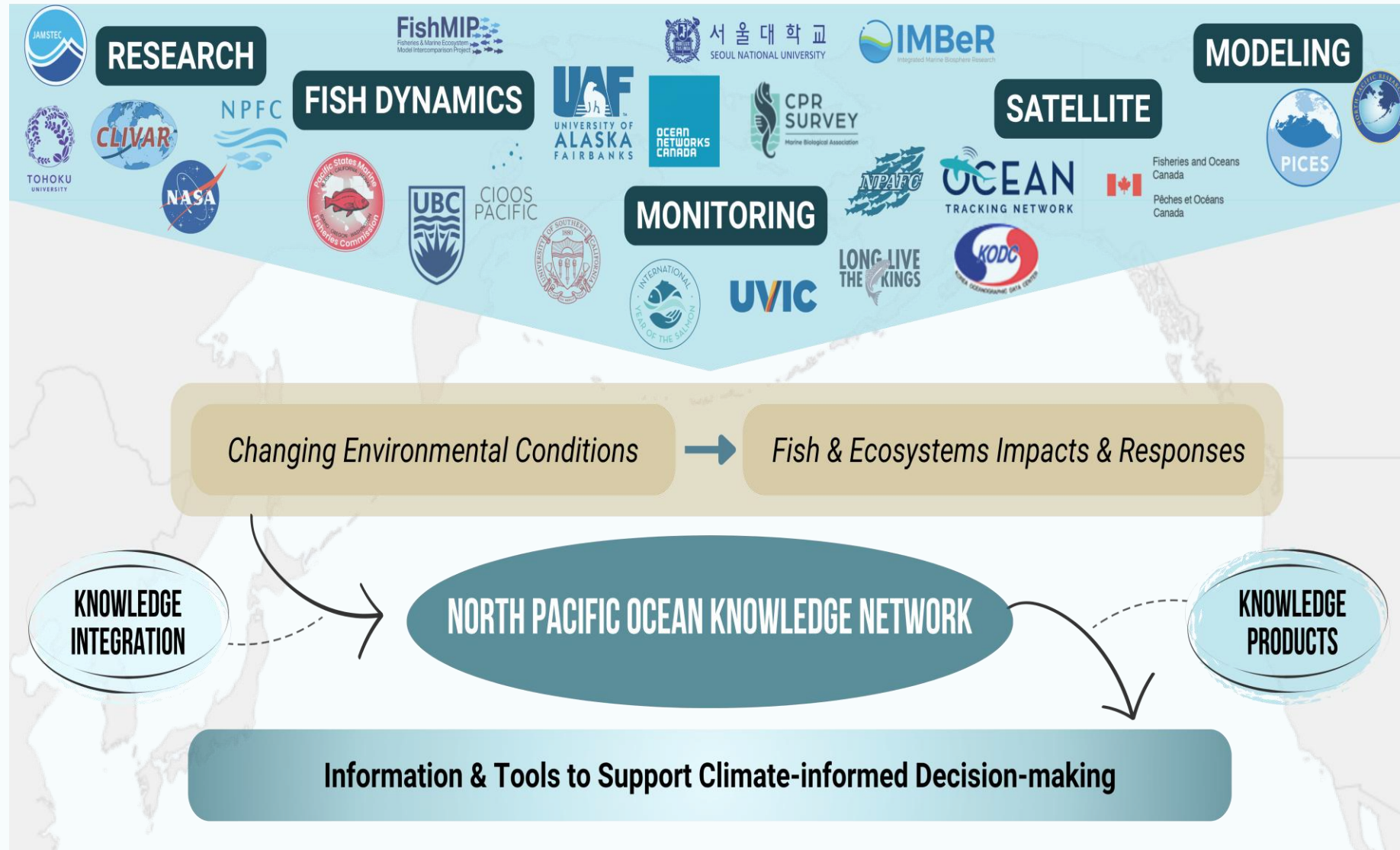
Fish don't have borders and neither does BECI

NORTH PACIFIC OCEAN KNOWLEDGE NETWORK



One-Stop Solution:

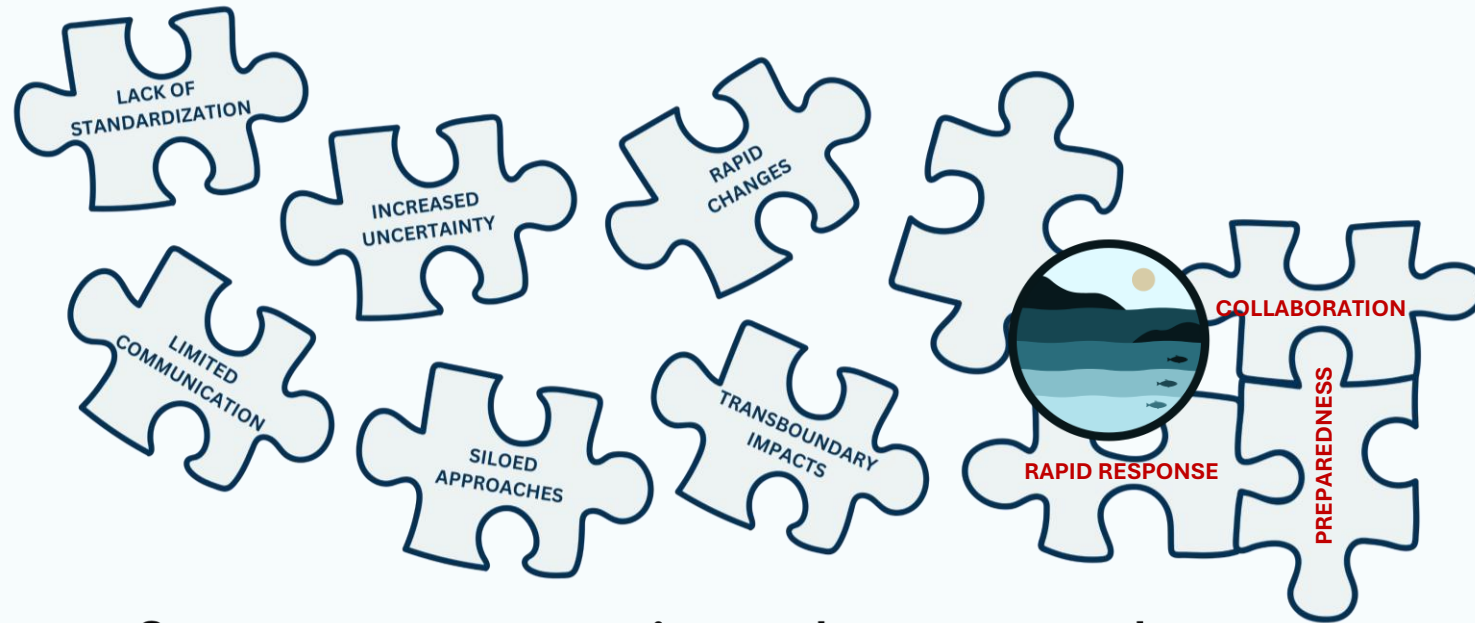
- Discovery & Access
- Integration
- Synthesis
- Collaboration



WHY IS A NPO KNOWLEDGE NETWORK NEEDED?



SCATTERED EXCELLENCE = REDUCED PREPAREDNESS & FRAGMENTED RESPONSE



Knowledge fragmentation has real consequences

Fish populations shift across borders **faster** than management systems can **respond**

Early warning signals for emerging threats go **undetected**

Industries and livelihoods **suffer** as fish populations decline and **shift unpredictably**

HOW IS THE NETWORK DESIGNED?



The network is being designed as a **hybrid knowledge system**:

FEDERATED DISCOVERY

BEI connects you to existing resources through a comprehensive directory.

Resources remain with original providers.

EXPERT GUIDED CURATION

Experts contribute to network content.

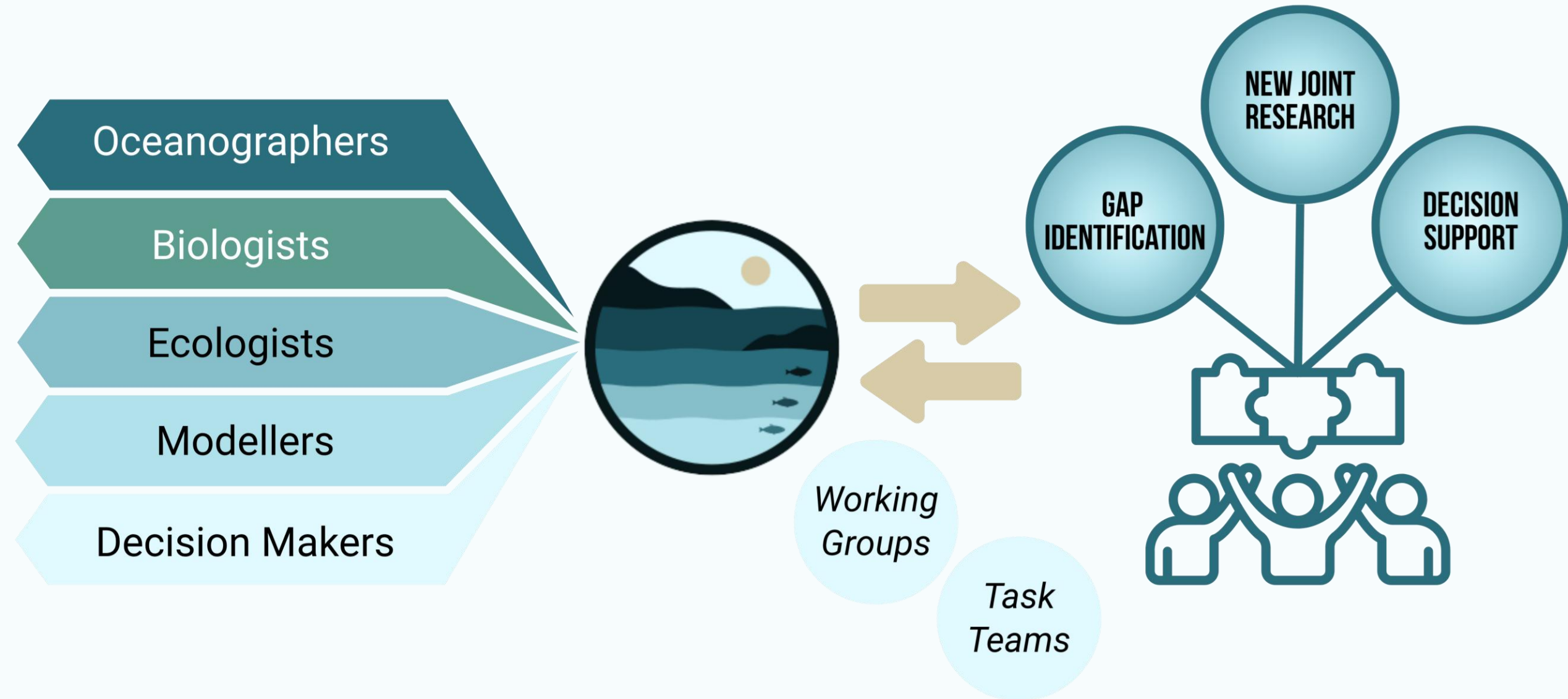
STRATEGIC SYNTHESIS

BEI creates synthesis products to answer specific questions.

INTEROPERABLE & AI-ENHANCED

Using international data standards and machine learning to support the knowledge network and its experts by automating content discovery and keeping information current.

COMMUNITY IS KEY



NETWORK TOOLS & KNOWLEDGE PRODUCTS



Explore changing conditions through **interactive maps**



Access synthesized insights through **comparative reports**



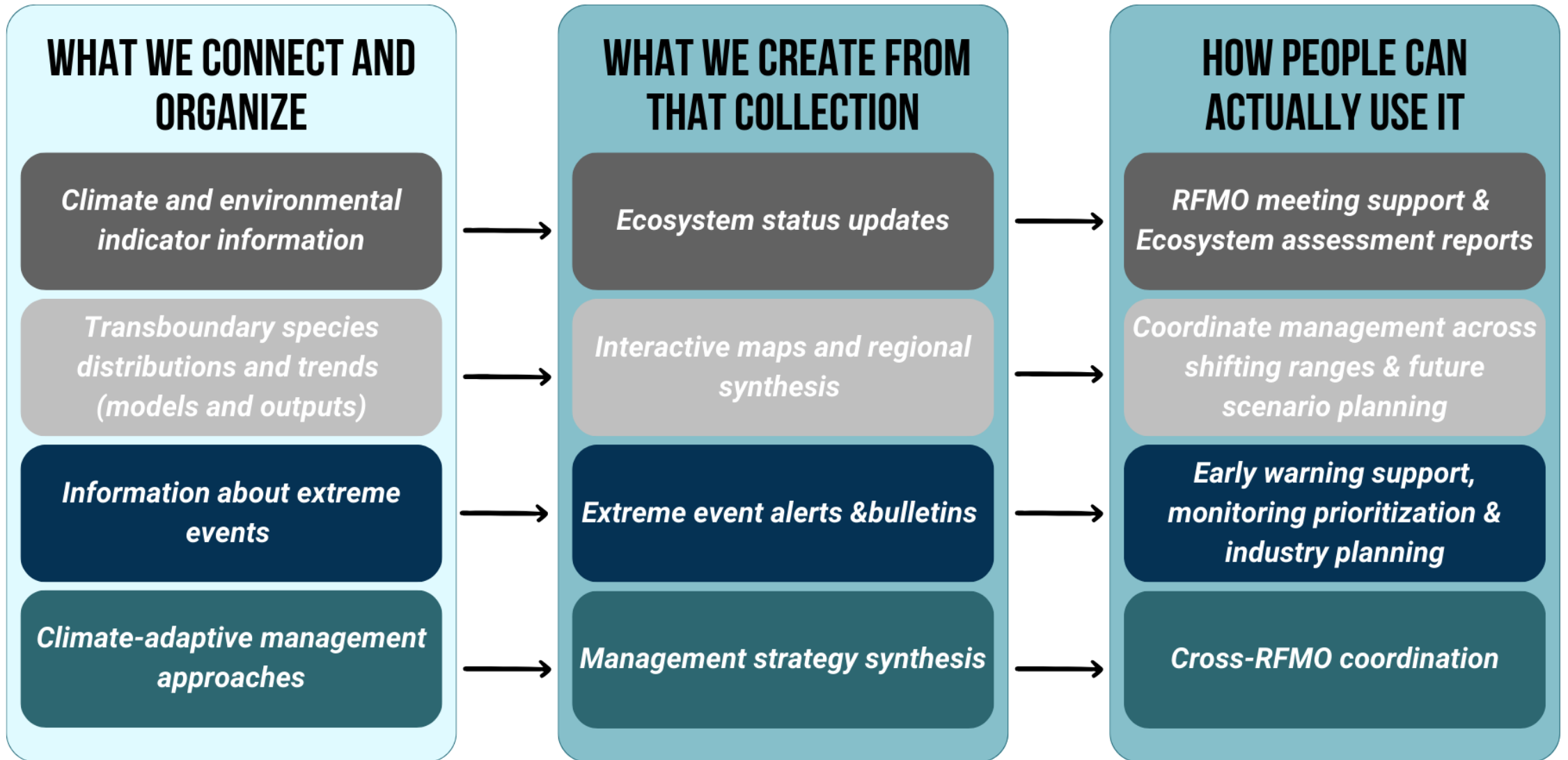
Compare trends across regions with **dynamic dashboards**

Discover tools and research via **searchable catalogues**



Connect with experts via **collaboration platforms**

WHAT DOES BECI ACTUALLY DELIVER?



ALIGNMENT WITH NPFC



1

ENHANCED ENV. INFORMATION ACCESS

Organized climate and oceanographic information from across the North Pacific

2

CROSS-RFMO COORDINATION

Facilitating information sharing between NPFC and other Pacific RFMOs on shared climate challenges - can we learn from each other?

3

TRANSBOUNDARY SPECIES INTELLIGENCE

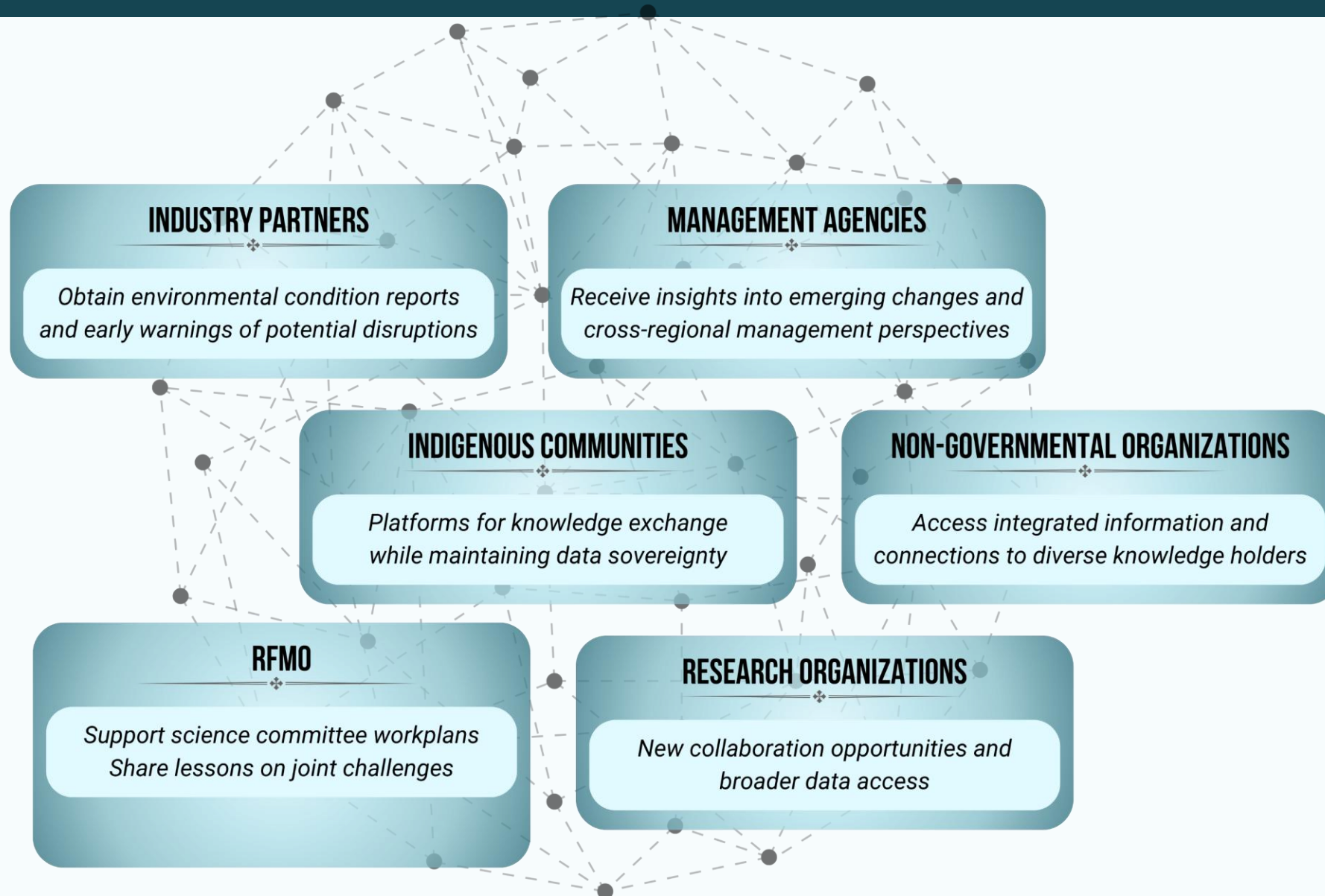
Comprehensive environmental context for migratory species that move across multiple jurisdictions

4

CLIMATE WORKPLAN IMPLEMENTATION SUPPORT

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

BENEFITS TO USER GROUPS



WHY BECI MATTERS?



THE PROBLEM WE SOLVE

Climate impacts and fishes cross borders, but information about those impacts stays within them. When a marine heatwave affects the entire North Pacific, managers respond separately using different information and responses. Critical insights remain isolated by jurisdiction and ecosystem context is lost.

WHAT MAKES US DIFFERENT

We don't compete with data / resource systems - we connect them. We don't generate data - we synthesize it. We don't replace experts - we amplify their work across borders.

WHO NEEDS US MOST

Managers coordinating transboundary stocks across jurisdictions; Scientists seeking cross-regional patterns and collaboration; Monitoring programs needing basin-wide context; Industry requiring distribution shift forecasts

OUR 10-YEAR GOAL

Transform reactive crisis management into proactive, climate-informed coordination across the North Pacific. Show the importance of ecosystem-based understanding and approaches. Become the global model for international marine knowledge synthesis that involves community.

BECI IN ACTION: KNOWLEDGE NETWORK DEMONSTRATION



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

NPO-CKN Interactive Map

USER GUIDE FEEDBACK

Find address or place

Layer List

Search layers by name

BOUNDARIES

Ecological Regions

ICES NPESR

GP

Exclusive Economic Zones

Canada EEZ

Japan EEZ

China EEZ

BIOCHEMISTRY

CLIMATE

ECOLOGY

PHYSICAL OCEANOGRAPHY

SOCIOECONOMIC

TRADITIONAL KNOWLEDGE

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

CALL TO ACTION



We're looking for partners and funders. Organizations that see value in this synthesis. Funders who recognize that connecting existing information is as important as generating new data. We're looking for partners who want to contribute their data, their expertise, and their needs.

If you're working on North Pacific fisheries or conservation, we want to talk to you about how BECI can support your work and how your work can strengthen BECI.

If you're interested in being part of building the full Knowledge Network - let's talk.