



**W** SCHOOL OF AQUATIC AND FISHERY SCIENCES  
UNIVERSITY of WASHINGTON  
College of the Environment

Report  
November 2016

SUPPORTING SCIENCE  
AND COMMUNICATING  
RESULTS.



# BUILDING EFFECTIVE FISHERY ECOSYSTEM PLANS

A REPORT FROM THE LENFEST FISHERY  
ECOSYSTEM TASK FORCE

@lenfestocean



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# Project Management Team



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# Main Findings and Recommendations

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**Operationalizing Ecosystem-Based Management requires a structured planning process that leads to action**

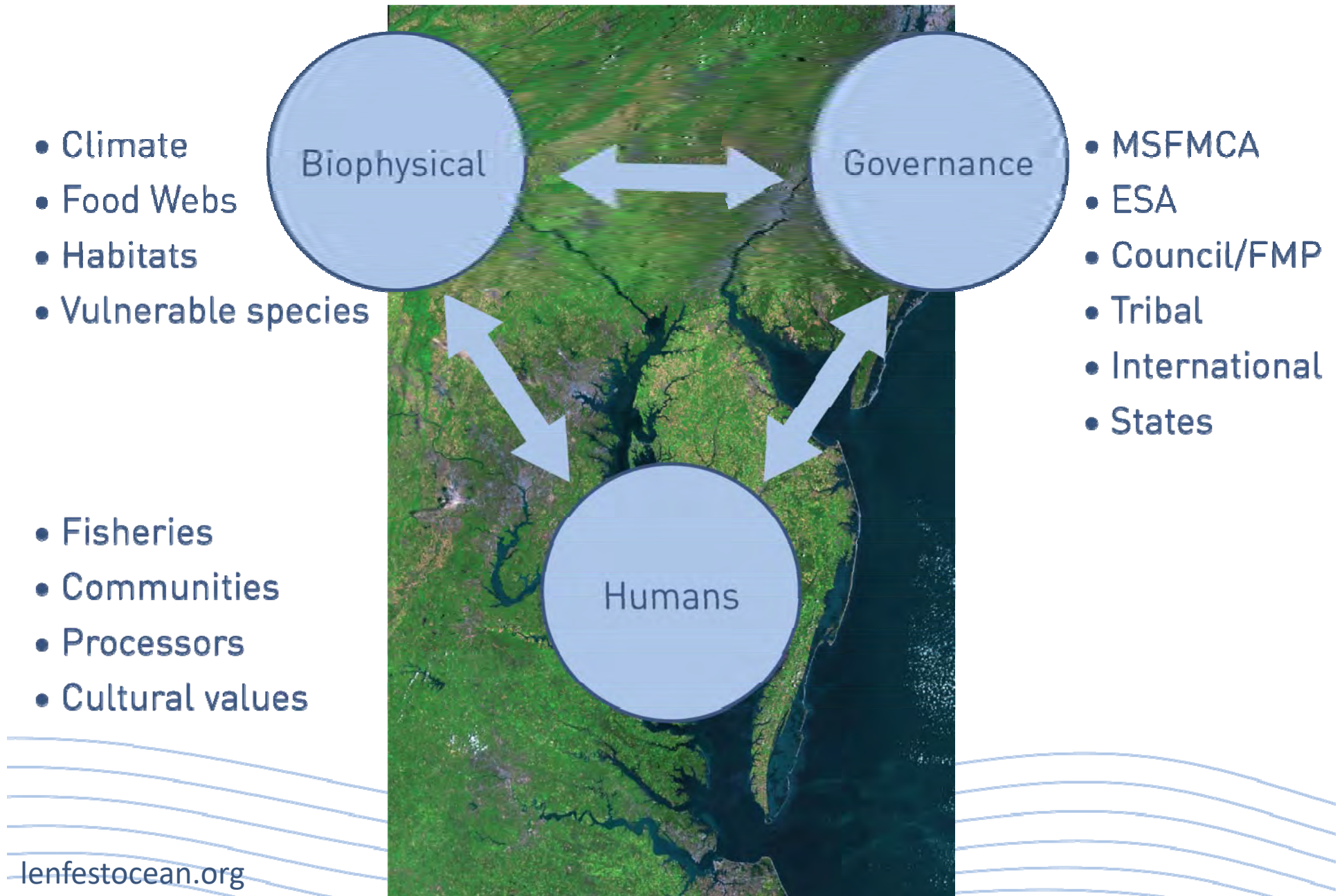
**Fishery Ecosystem Plans use existing tools**

**Fishery Ecosystem Plans integrate social, economic, and ecological goals**

**Fishery Ecosystem Plans promote transparency in decision making and trade-offs**

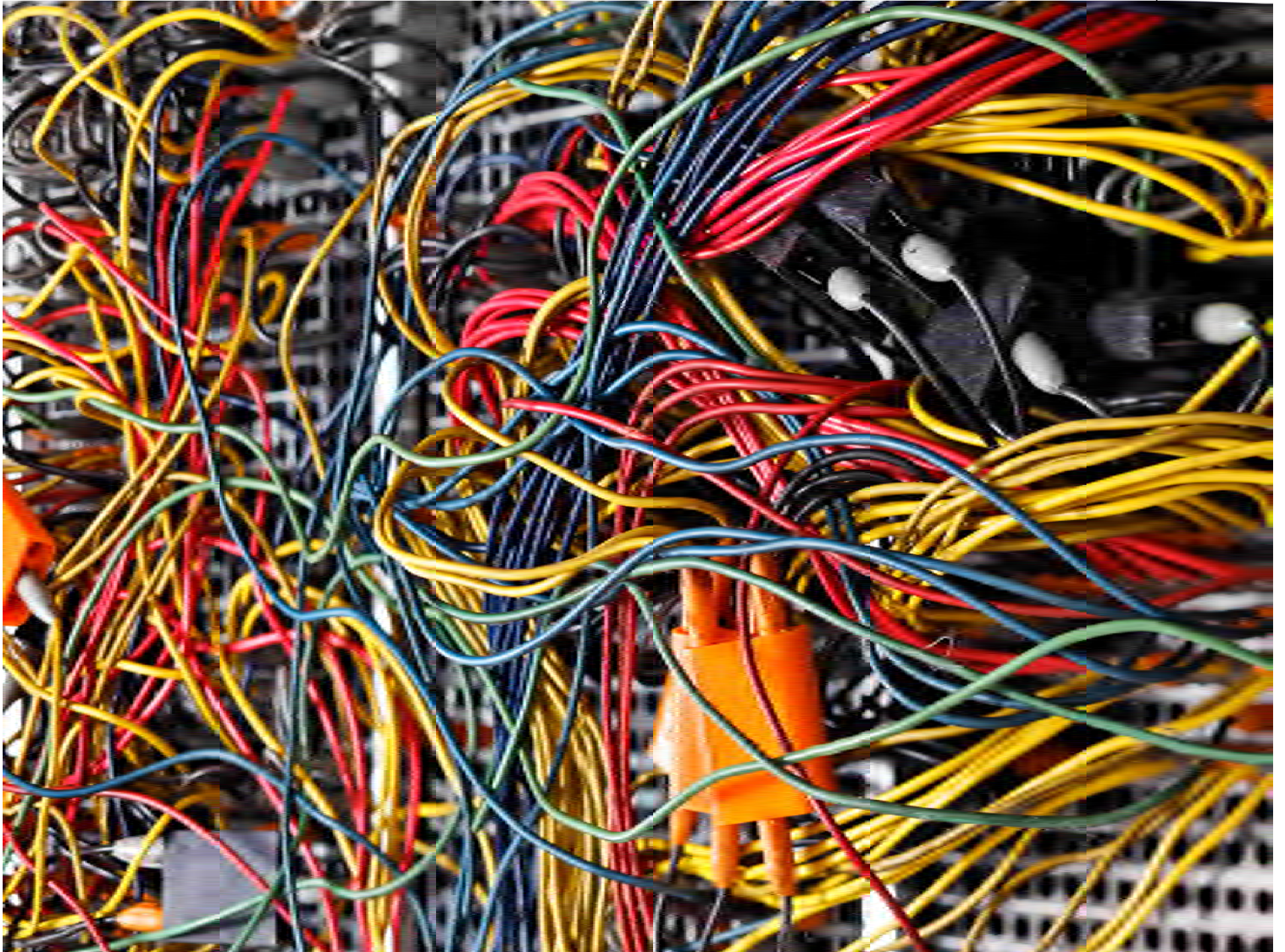


# Ecosystem-Based Fisheries Management



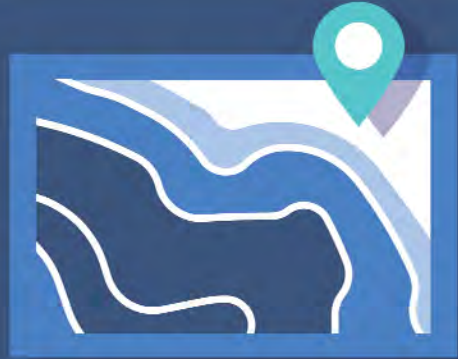






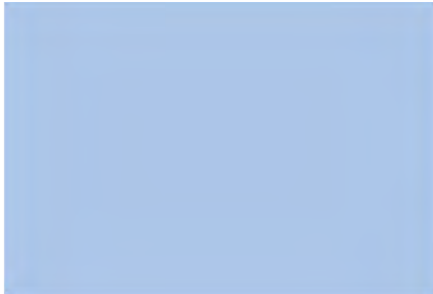






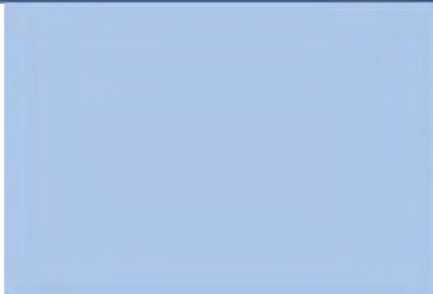
# 1 WHERE ARE WE NOW?

- Develop a conceptual model
- Select and calculate indicators
- Inventory threats



## 2 WHERE ARE WE GOING?

- Articulate a strategic vision
- Develop strategic objectives
- Analyze risks to objectives



- Prioritize strategic objectives
- Develop operational objectives





# 3 HOW DO WE GET THERE?

- Develop performance measures
- Identify potential management strategies

- Evaluate alternative management actions
- Select management strategy



# 4 IMPLEMENT THE PLAN

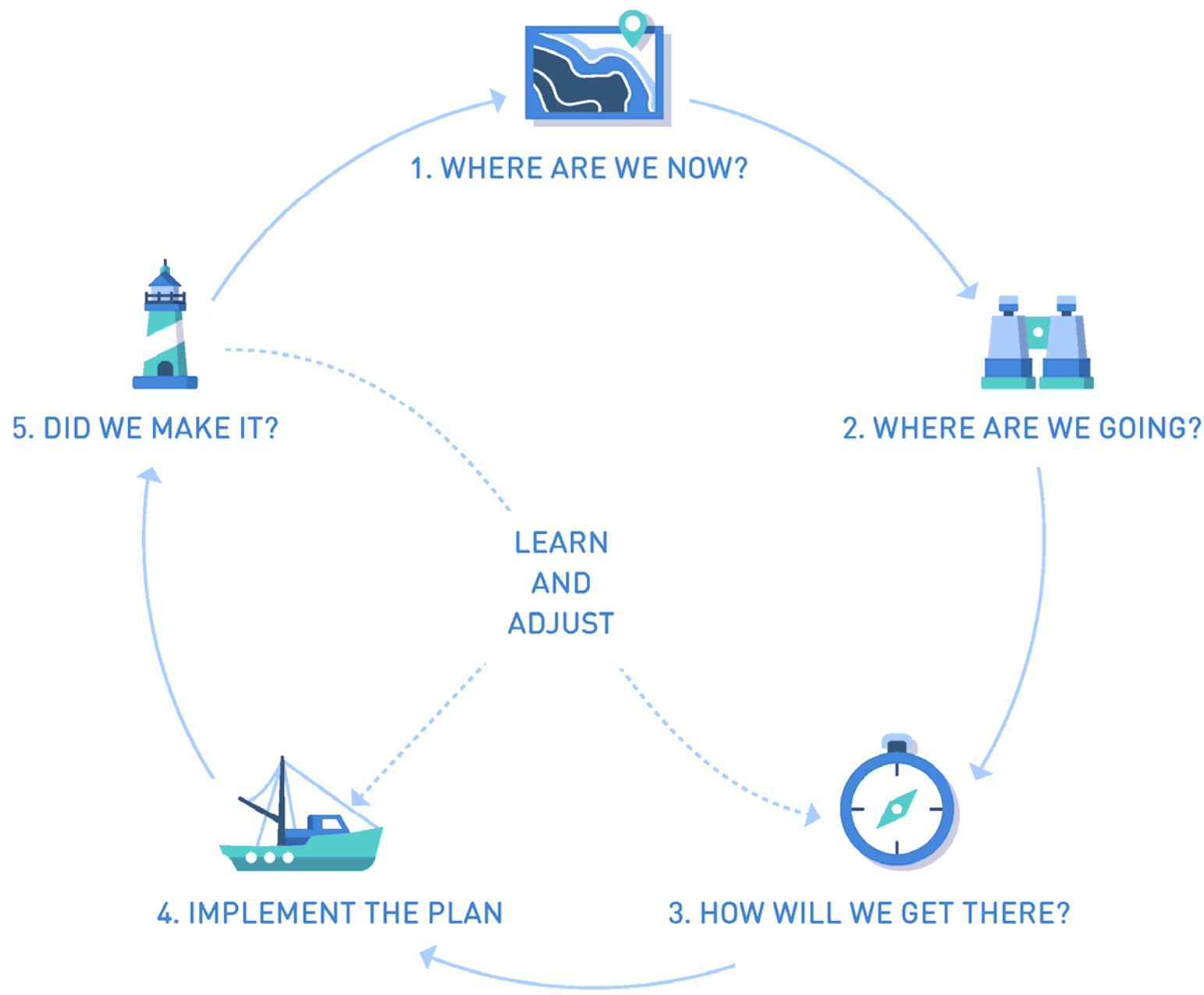
- Work plan
- Resources

- Outputs
- Timeline



- Compare monitoring data with predictions





# Next Generation FEPs Overcome Challenges

## CHALLENGE

## FEP Solution

Complexity

Indicators  
Prioritization

Uncertainty

Structured process  
Adaptive management

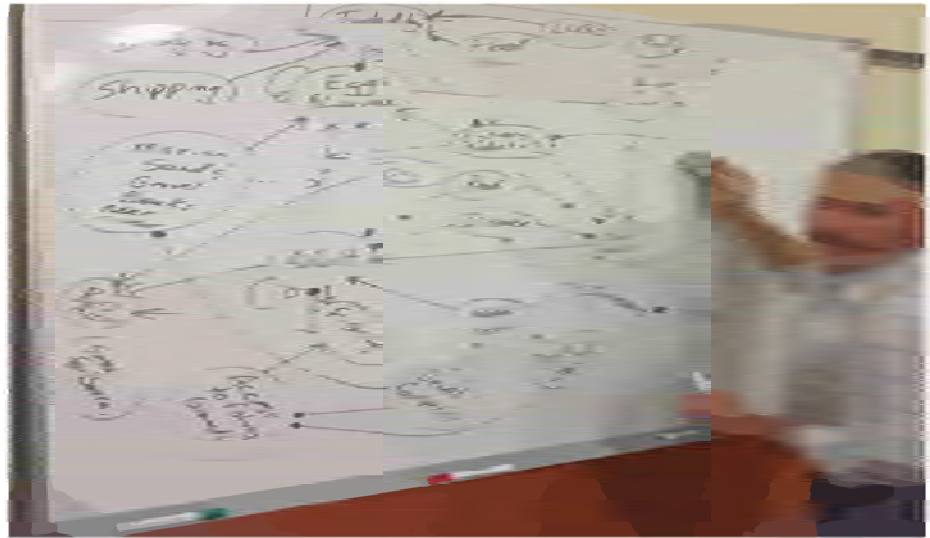
Cost

Streamline management

Clear Objectives

Objective setting

# Stakeholder Participation is Crucial Throughout Loop





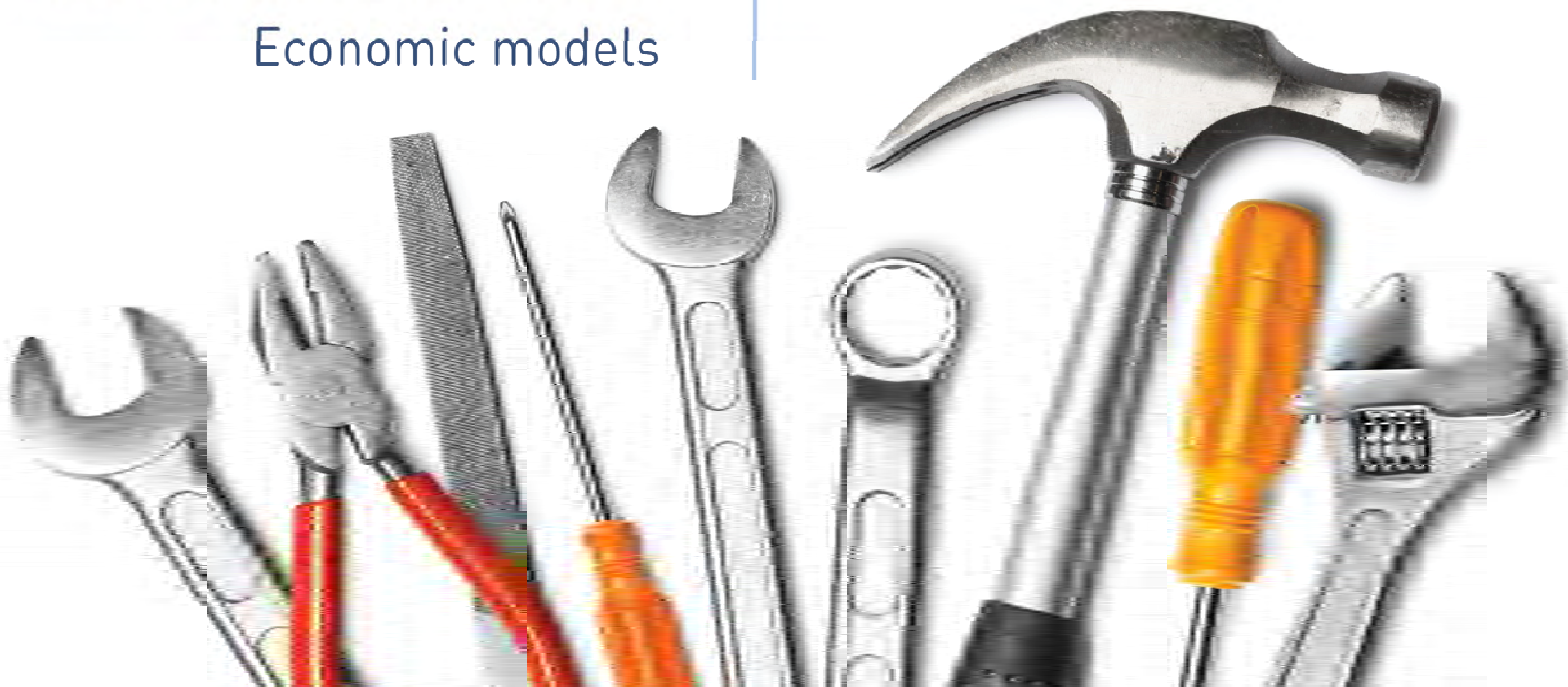
# Science and Policy Tools Already Exist

## SCIENCE TOOLS

Risk assessment  
Scenario planning  
Management strategy evaluation  
Coupled multi-species models  
Models with climate drivers  
Economic models

## POLICY TOOLS

Existing tools:  
But in novel combinations  
and calibrated differently to  
reach ecosystem objectives



# Case Studies



# Case Study Findings

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**No case study did every step**

**Almost each step was done somewhere**

**Steps sometimes done out of order (time cost)**

**Explicit prioritization not found in these case studies**

# Why FEPs?

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From principles to action

Can do

Triple Bottom Line

Choosing among trade-offs





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