

National Oceanic and Atmospheric Administration U.S. Department of Commerce

# NOAA's Integrated Ecosystem Assessment Program National Strategic Plan 2022-2024



# Vision

Through an integrated science approach, the NOAA IEA program balances the needs of nature and society for current and future generations, supporting diverse marine resource management objectives in an ecosystem context.

## Mission

The mission of the NOAA IEA Program is to provide a sound interdisciplinary analytical and science-based framework to support effective Ecosystem-Based Management (EBM) of our Nation's marine, coastal, estuarine, and Great Lakes resources.

# **10 Years of Integrated Ecosystem Assessment Program**

The NOAA Integrated Ecosystem Assessment (IEA) program was developed over ten years ago to help NOAA ensure the sustainable delivery of a broad spectrum of ecosystem benefits and services. To do this, IEAs assess the status of ecosystems in relation to defined societal goals and objectives; examine the cumulative impacts of natural and anthropogenic stressors; and analyze the cumulative risk of these stressors to US marine and coastal ecosystems.

IEAs provide vital information to resource managers by evaluating the effect of possible management actions upon all focal ecosystem components, including human needs and activities, in relation to their current state and to societal goals; assessing tradeoffs among potentially competing objectives; and ultimately producing scientific analyses and products to help inform management decisions within an ecosystem context, or Ecosystem-Based Management (EBM).

# IEA Program Goals for the Next Three Years

Goal 1: Implement the IEA process in each IEA region, resulting in successful transfer of science to management.

Goal 2: Enhance and expand science and management partnerships (considered as integrated IEA partners as opposed to users) with regionally relevant partners.

Goal 3: Conduct innovative, leading-edge science to support implementation of stakeholder and manager-driven EBM.

Goal 4: Strengthen internal and external communication to support effective dissemination of science to policy-makers, managers and stakeholders, exchange between scientists, and for messaging of progress, successes and [management] impact



The NOAA Integrated Ecosystem Assessment Approach. NOAA IEA Program, https://www.integratedecosystemassessment. noaa.gov/national/IEA-approach, Samhouri et al. 2014.

### Purpose of three-year plan

The purpose of the IEA 3-year national strategic plan is to provide longer-term priorities for the program and guide planning for each IEA region. The IEA Program's Steering Committee has responsibility to develop strategic planning documents to help guide regional IEA programs in their planning efforts. These include this 3-year strategic plan, and an annual "directives" document that provides current guidance to the regions and allows the incorporation of identified priorities during development of region-specific annual work plans.

The Plan includes tenets, which are fundamental guiding principles of IEA implementation, pillars, which are operational elements required to guide and frame that implementation, goals, which are discrete things the IEA program would like to accomplish, and objectives, which are means for accomplishing IEA program goals.

# Pillars of the IEA Program

### PILLARS

There are four pillars to the IEA strategic plan. The elements of the IEA process diagram generally will fall within one or more of these. They are:

- 1. Science Research and Development -- This pillar includes, but is not limited to, the science behind IEA products. These may include methodologies, indicators, risk assessments, models, and other products developed and used during each IEA process.
- 2. Transferring Scientific Knowledge to Management -- Also defined as Decision-Support, this pillar includes engagement with management partners to assist in identification of management objectives; conversion of science to products useful for management purposes and decision making; Management Strategy Evaluations (MSE), and other steps.
- 3. Communication This pillar results in effective communication through outreach and collaboration with stakeholders and dissemination of products that convey scientific findings on the health of marine, coastal, estuarine, and Great Lakes ecosystems in an open and transparent format on a regular basis. It also includes effective messaging about purpose, benefits, successes, and impact of the program and IEA approach.
- 4. Evaluation -- This pillar offers important feedback to enhance application and success of the other 3 pillars and provides the program with information that will help improve IEA development, implementation, and outcomes. Knowledge gained will convey, for example, best practices and lessons learned; program accomplishments; how effectively IEA science-based decision-support has been provided and used by management; what we are missing in the process to improve development and uptake of science and decision-support information and products; and it also informs next steps and future program development.

### IEA REGIONS

The NOAA IEA program oversees the direction and execution of IEAs within five US IEA regions, the Alaska (AK) IEA, the California Current Ecosystem (CCE) IEA, the Gulf of Mexico (GOM) IEA, the Northeast (NE) IEA and the West Hawai'i (WH) IEA. Each of these regions address projects across a range of socio-ecological systems according to need. The program also organizes national scale studies, strategic projects, workshops and meetings, and supports projects to enhance cross regional application of IEA advances.

