EcoSystem Indicator Partnership

Working Together for a Healthy Gulf

What is the Ecosystem Indicator Partnership?

The Ecosystem Indicator Partnership (ESIP) is a committee of the Gulf of Maine Council for the Marine Environment (GOMC).

This committee is made up of more than 100 volunteers from local, state, provincial, and federal governments, along with academics and partners from non-government organizations. We are committed to identifying key indicators for six theme areas, compiling the relevant data, and engaging decision-makers in using environmental indicators and trends when making choices related to the Gulf of Maine.

GOMC mobilized regional resources to devise what had previously not existed: a suite of scientifically objective methods for assessing the state of the environment of the Gulf of Maine and for evaluating the short- and long-term responses to best management practices. This was in reaction to observing increasing negative impacts of water use, waste management, community development, fisheries, recreation, and tourism, on the health of the marine and coastal environments in recent decades.

GOMC formed the Ecosystem Indicator Partnership to work collaboratively with regional experts in order to develop just such a suite of indicators, as well as to integrate regional indicator data and make it easily accessible for decision-makers through a web-based reporting tool.

ESIP's initial focus is in six indicator areas:
- aquatic habitat
- climate change
- coastal development
- contaminants
- eutrophication
- fisheries and aquaculture

There is a subcommittee for each of these areas. Relying on a consensus-based process, these subcommittees selected priority indicators for each of the indicator areas.

Priority indicators

Aquatic Habitats
- Extent of eelgrass
- Extent of salt marsh
- Locations of tidal restrictions

Climate Change
- Sea level change
- Precipitation trends and anomalies
- Air temperature trends and anomalies

Coastal Development
- Point sources/Known discharge
- Population density
- Employment density
- Impervious surface coverage

Contaminants
- Sediment triad data
- Shellfish sanitation data
- Gulfwatch/Mussel Watch data

Eutrophication
- Nitrogen loading
- Secchi depth
- Dissolved oxygen
- Chlorophyll a

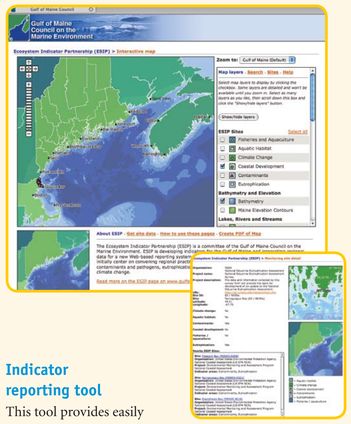
Fisheries and Aquaculture
- Production/area for aquaculture
- Economic value of aquaculture
- Mean length of all sampled fish
- Economic value of fisheries
- Proportions of stock at or above targeted biomass

The ESIP toolbox

Two web tools for accessing information on environmental indicators and monitoring environmental health in the Gulf of Maine are now available on the ESIP web site.

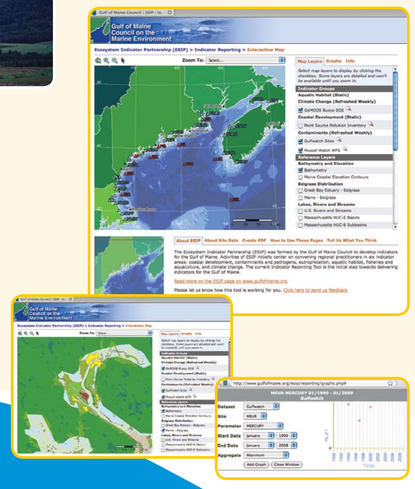
Monitoring map

The map displays information on all known monitoring locations for the six theme areas within the Gulf of Maine. It identifies who and what is being monitored and provides information on where the data can be found. www2.gulfofmaine.org/esip/map



Indicator reporting tool

This tool provides easily accessible data available for the selected priority indicators. It enables users to display and visually assess data, and provides a graphing function to view status and trends at specific sites or for specific time periods. Data are automatically updated on a regular basis, providing the user with the most current information. www2.gulfofmaine.org/esip/reporting



Be part of the answer. Be part of our team.

ESIP has identified key indicators for each theme area and is now working to name and compile the necessary data.

This effort addresses highly complex interactions among time scales, geographic scales, data collection methods, and data quality for comparison across the Gulf of Maine.

Numerous datasets have been identified for use with selected indicators. However, ESIP has encountered data gaps throughout each of the theme areas and while these could act to hinder forward movement, ESIP is reaching out to other knowledgeable practitioners for assistance in locating and obtaining the required facts.

Do you have, or know who has, data for the following indicators?

Indicator Area	Parameter	What's needed
Aquatic Habitats	Tidal restriction	Need data for Massachusetts
Coastal Development	Industrial point sources	Need data for Nova Scotia and New Brunswick
Coastal Development	Employment and population density	Need data for New Brunswick pre 2000 Need data for Nova Scotia pre 1990
Coastal Development	Impervious surface	Need data for Nova Scotia and New Brunswick
Contaminants	Sediment triad (toxicology, chemistry, and benthic community)	Need data for Nova Scotia and New Brunswick
Contaminants	Shellfish sanitation	Need data for Nova Scotia and New Brunswick
Eutrophication	Stream gauge	Need data for Nova Scotia and New Brunswick

Contribute to a better understanding of the Gulf of Maine and improve the quality of this beautiful and precious environment. For today. For tomorrow.

Ways you can contribute
- Join a subcommittee.
- Provide data for this group of indicators.
- Submit short articles, insights, and ideas for ESIP's monthly Journal Entries.
- Direct your colleagues to the ESIP web site and tools.

For more information or to join ESIP, please visit www.gulfofmaine.org/esip

Gulf of Maine Council

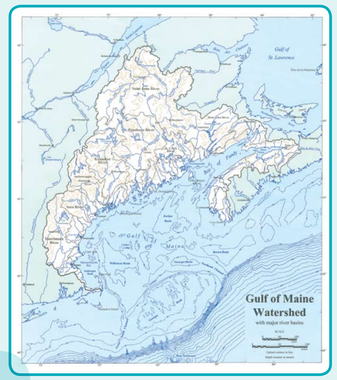
Nearly 20 years ago, the premieres of New Brunswick and Nova Scotia, and the governors of Maine, Massachusetts, and New Hampshire recognized the beauty and diverse array of wildlife habitats in the Gulf of Maine and the reliance of the region on its natural resources. They formed the Gulf of Maine Council on the Marine Environment (GOMC) to maintain and enhance environmental quality in the Gulf of Maine and allow for sustainable resource use by existing and future generations.

A sea beside the sea

The Gulf of Maine is bordered by Massachusetts, New Hampshire, Maine, New Brunswick, and Nova Scotia. It covers 93,000 square kilometers (36,000 square miles) of ocean and has 12,000 kilometers (7,500 miles) of coastline.

The Gulf of Maine is one of the world's most biologically productive environments. Its marine waters and shoreline habitats host some 2,000 species of plants and animals. Land and ocean processes interact to regulate temperatures and bring nutrients to this rich region of the ocean.

Contact us to find out how you can play a part in protecting this priceless resource.



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EcoSystem Indicator Partnership
Information on change in the Gulf of Maine

For more information on any of the ESIP products, please visit our web site at www.gulfofmaine.org/esip. You may also contact the ESIP program manager at ctilburg@securespeed.us. We always welcome new members to our work.