

# ESI ATLASES

## Online Guide

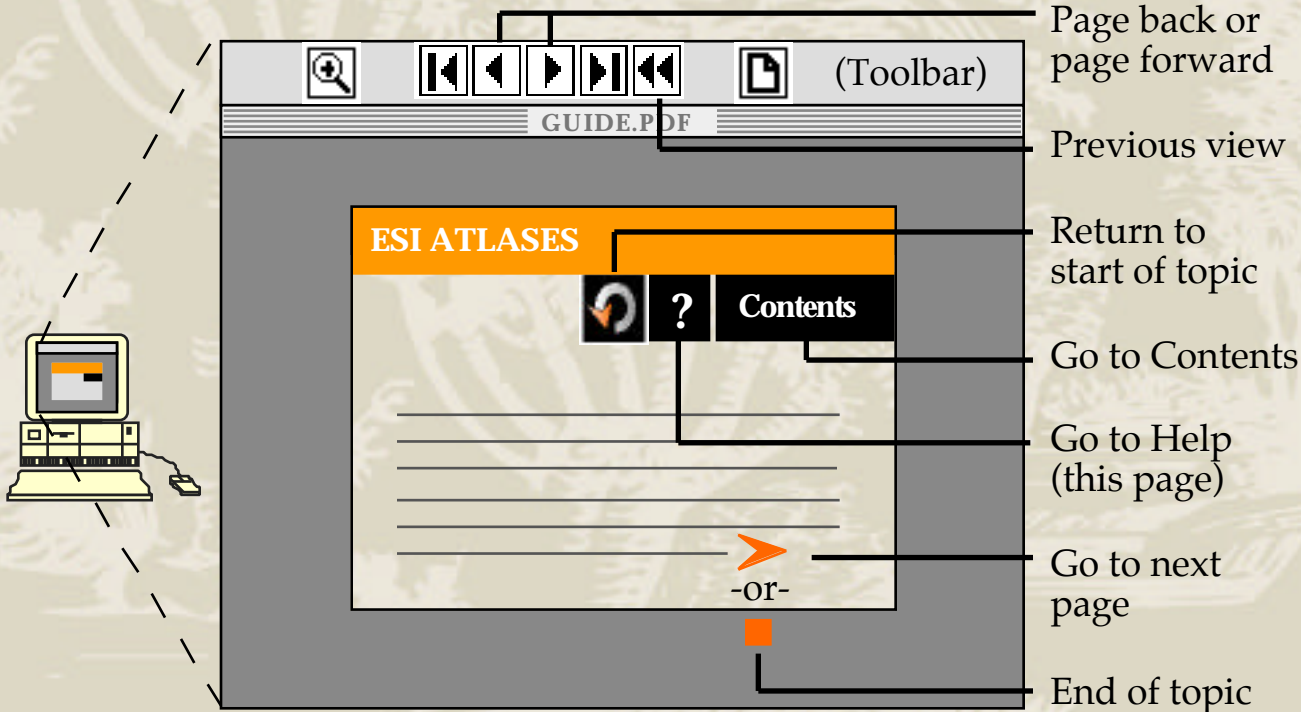
- How to use this online guide
- Files included on this CD-ROM
- How to navigate
- How to print ESI maps
- About ESI mapping
- About the producers of this CD-ROM

Click ➤ to go to section

# ESI ATLASES

## How to use this online guide

## Contents



# ESI ATLASES

## Files included on this CD-ROM

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Contents

- Introduction and shoreline habitat photos
- Legend and how to interpret ESI maps
- Index map showing ESI map coverages
- Seasonality tables
- Metadata

For more information about the contents of this CD-ROM, please continue. ➤

# ESI ATLASES

## Files included on this CD-ROM (cont.)



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Contents

**Directory named according to state (e.g., CALIF, S\_CAROL).**

This directory contains this Online Guide (GUIDE.PDF) and a directory called ESI\_DATA which contains the Index map, ESI maps, Seasonality tables, associated Introduction and Legend files, and a technical file about the actual data used in the ESI maps. ➤

# ESI ATLASES

## Files included on this CD-ROM (cont.)



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Contents

Within the ESI\_DATA directory are the following files and sub-directories:

**Introduction discussion** (INTRO.PDF). This file is a text introduction to the ESI Atlas that explains the purpose and content of the atlas. It lists animal species in the area, gives contacts for human-use features such as parks and marinas, and describes the various shoreline habitats found in the area.

**Legend of symbols used, and discussion on how to interpret ESI maps** (LEGEND.PDF). This file tells what each color and symbol used in the ESI maps stands for and gives tips for interpreting the map information. ➤



# ESI ATLASES

## Files included on this CD-ROM (cont.)



Contents

**Index map** (INDEX.PDF). This file is a map of the entire state with the ESI map coverages outlined. The coverage boxes are linked to the screen resolution ESI map pages. Just click the box to jump to the associated ESI map.

**Seasonality tables** (SEASON.PDF). This file lists the seasonal species data associated with each ESI map. The table shows each species present in the area, whether they are on any State or Federal threatened or endangered species lists and the level of concern, which months the species is present, and the times of various life stages such as nesting or spawning.

The map titles at the top of the page are linked back to the actual ESI map, so to view the ESI map associated with the table, click the title. ➤

# ESI ATLASES

## Files included on this CD-ROM (cont.)



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Contents

**High-resolution ESI maps (MAPS).** This directory contains 300-dpi ESI maps. These maps are accessed through the Index map and are associated with the Seasonality tables.

The titles of these maps are linked to the Seasonality tables, so to see the seasonality data for a map, click on the map title. ➤

# ESI ATLASES

## Files included on this CD-ROM (cont.)



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Contents

**Document on how the data was compiled and digitized** (METADATA.PDF). This file provides the technical documentation about the data shown on the ESI maps. It details the quality standards for the data, discusses how the spatial data was organized and referenced, and gives complete information about the entities and attributes portrayed on the maps. ■





# ESI ATLASES

## How to navigate



Contents

**Viewing the Index map.** Click on the "Index map" text on the "Files Included on this CD-ROM" section of this guide. From there, you can link to the individual ESI maps by clicking in the coverage boxes.

**Returning to the Index map.** Click  from the toolbar to return to the Index map from an ESI map. (NOTE: This button returns to the previous **view**, so if you zoomed into the ESI map, the button will return to the unzoomed view. Click the button again to return to the Index map.) 

# ESI ATLASES

## How to navigate (cont.)



Contents

**Viewing the Seasonality data.** Click the title of the ESI Map. Seasonality pages are included only for the areas where biology data was collected in 2001. These include the areas spanning the large index boxes titled Bering Glacier, Icy Bay, Mt. Fairweather, Mt. St. Elias, Yakutat and part of Juneau.

ESI Maps which do not have associated seasonality data return the user to the Index Map when the title of the map is clicked.

**Returning to the ESI map.** Close the Seasonality table, click the ESI map name on the Seasonality page, or navigate using the Window menu.

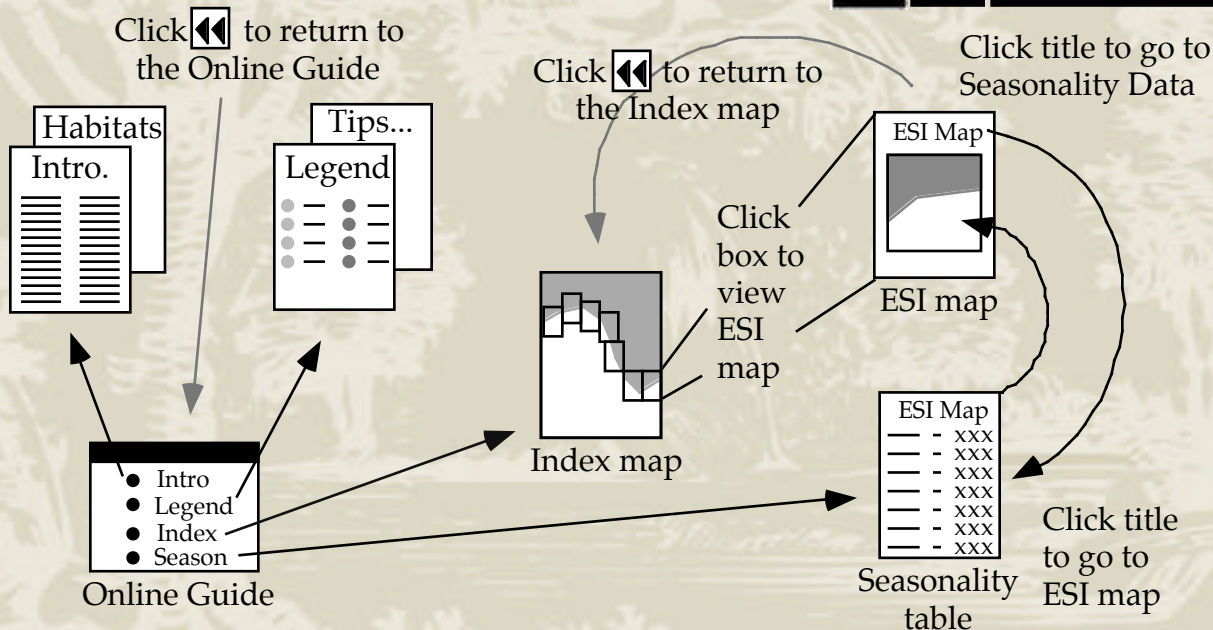
**Viewing unlinked ESI maps.** Some ESI maps have no link from the Index Map or the Seasonality data. Those maps must be accessed from the CD-ROM directly. ➤

# ESI ATLASES

## How to navigate (cont.)



Contents




For an alternate method of navigation where it is possible to keep multiple files open and to toggle between files using the Window menu, please continue. ➤

## Alternate navigation



Contents

Instead of using the  button, there is an alternate way to navigate among all of the documents on this CD-ROM, but it requires you to change a preference in the Reader 3.0 application. Once this preference is set, multiple files can stay open at the same time. To toggle back and forth, you simply have to select the file you are interested in from the Window menu.

To change the preference:

- Go to the File menu and select Preferences
- Choose General
- In the dialogue box that opens up, **UNCHECK** the "Open Cross Document Links in Same Window" option.
- Select OK.

Once set, the preference will remain, so you will not have to open the dialogue again the next time you use this CD-ROM. ➤

# ESI ATLASES

## Alternate navigation (cont.)



**Contents**

**Viewing the Index map.** Click on the "Index map" text on the "Files Included on this CD-ROM" section of this guide. From there, you can link to the individual ESI maps by clicking in the coverage boxes.

**Returning to the Index map.** Choose "INDEX.PDF" from the Window menu.

**Viewing the Seasonality data.** Click the title of the ESI map.

**Returning to the ESI map.** Click the map name at the top of the Seasonality table. ➤



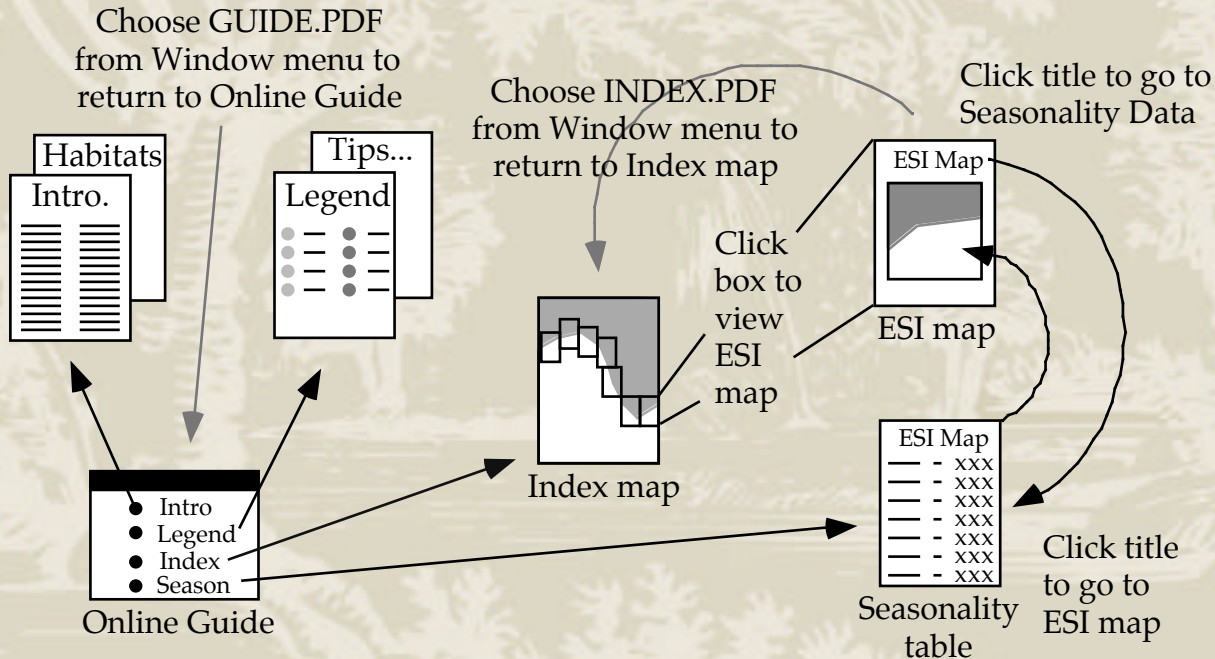
# ESI ATLASES

## Alternate navigation (cont.)



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# Contents



# ESI ATLASES

## How to print ESI maps



**Contents**

To print a page from this CD-ROM, open the file you wish to print and select "Print" from the File menu.

These files can be printed on any Postscript® compatible printer.

The maps are in 11"x17" format, so you will need to adjust the map size accordingly to fit your printer output. Select "Shrink to fit" or "Fit to page" from your Page Setup menu to automatically scale the map to paper sizes other than 11"x17". ➤

## How to print ESI maps (cont.)

[Contents](#)

The procedure for having the maps printed at a commercial printshop will vary depending on where you go. The computer that you use will need Acrobat Reader 3.0 (or later). The computer must have the 3.0 version (or later) because using an older version will cause irregularities in viewing and printing.

In order to give you a general idea of what might be involved, here are the printing costs from a local printshop: We used a computer for 10 minutes, which cost \$4.00. There was a one-time \$10.00 charge for the use of another computer that was used to set up the print files for the color copier (which was the only machine with 11"x17" color printing capability). Then, each color copy cost \$1.99, but this charge decreases with volume. So to print two pages was about \$19.50 (incl. tax), or about \$9.75 per page. To print 50 pages would have been about \$125.00 (incl. tax), or about \$2.50 per page. ■

# ESI ATLASES

## About ESI mapping



**Contents**

The most widely used approach to sensitive environment mapping in the United States is NOAA's Environmental Sensitivity Index (ESI) approach. This approach systematically compiles information in standard formats for coastal shoreline sensitivity, biological resources, and human-use resources. The ESIs are an important tool in emergency spill response, where their use helps to reduce the environmental consequences of the spill and cleanup efforts. ➤

# ESI ATLASES

## About ESI mapping (cont.)



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**Contents**

The primary objective of spill response in the United States, after protecting human life, is to reduce the environmental consequences of the spill and cleanup efforts. This objective is best achieved when ESI maps are used to identify the locations of sensitive resources before a spill occurs, so that protection priorities can be established and cleanup strategies developed in advance. Since their inception in 1979, ESI atlases have been prepared for most of the U.S. shoreline, including the Great Lakes, Alaska, Hawaii, and the Trust Territories. ➤



# ESI ATLASES

## About ESI mapping (cont.)



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Contents

To be effective, sensitive environment mapping must be an integral component of overall spill planning activities. Sensitivity maps are not an end in themselves, rather they are a starting point for prevention, planning, and response actions. The definitions in the NOAA sensitivity maps provide guidance that local organizations use to develop plans. Recently published manuals, including the **Mechanical Protection Guidelines** and the **Shoreline Countermeasures** series for temperate, tropical, Arctic, and freshwater environments are examples where the ESI definitions are the basis for site-specific planning. ➤

# ESI ATLASES

## About ESI mapping (cont.)



**Contents**

There are three general types of information found in ESI maps: habitats ranked according to geomorphological characteristics, sensitivity to spilled oil, natural persistence of oil, and ease of cleanup; biological resources including oil-sensitive animals and plants, with information at the species level; and human-use resources, such as high-use amenity beaches, parks, and marine sanctuaries. The intertidal habitat ranking scheme is based on an understanding of the complete coastal environment, not just the substrate type and grain size. Key to the rankings is an understanding of the relationships between physical processes and substrates that produce specific geomorphic shoreline types and predictable patterns in oil behavior and sediment transport patterns. The habitat ranking system has been widely incorporated into spill decision-making aids including manuals, matrices, and planning documents. ➤

# ESI ATLASES

## About ESI mapping (cont.)



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**Contents**

Recent work has focused on extending the original methodology for open coastal areas to inland rivers, and smaller ponds and streams. The strategy emphasizes standard map formats for electronic and hard-copy output. NOAA is undertaking a comprehensive program to provide electronic access to new ESI data and to existing data formerly available only as hard-copy maps. Our strategy is to make digital ESI data available on CD-ROM and via the Internet. Selected ESI atlases will be available in Portable Document Format for viewing and printing and in formats appropriate for use with Geographic Information System software. ➤

# ESI ATLASES

## About ESI mapping (cont.)



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For more information about ESI maps, contact the Hazardous Materials Response and Assessment Division at:

NOAA / HAZMAT  
7600 Sand Point Way N.E.  
Seattle, WA 98115

E-mail: [library@hazmat.noaa.gov](mailto:library@hazmat.noaa.gov)

Or, visit the ESI Home Page at:

<http://response.restoration.noaa.gov/esi/esiintro.html>

## About the producers

[?](#)

**NOAA - Hazardous Materials Response & Assessment Division**  
**New Hampshire Dept. of Environmental Services - Concord, NH**  
**New Hampshire Estuaries Project - Portsmouth, NH**

Click on the name of a producer to get additional information from their website.





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Welcome to our website! Here are tools and information for emergency responders and planners, and others working to understand and mitigate the effects of oil and hazardous materials in our waters and along our coasts.

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Revised: April 23, 2004

Office of Response and Restoration, National Ocean Service, National Oceanic and Atmospheric Administration

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## Prince William Sound Oil Spill Recovery Institute

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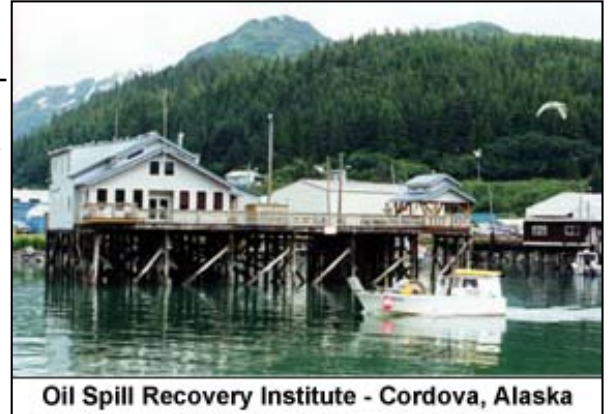
### NOWCAST - FORECAST



### INFORMATION SYSTEM

The Oil Spill Recovery Institute (OSRI) was established by Congress in response to the 1989 Exxon Valdez oil spill. The Congressional mandate given OSRI is:

1. To identify and develop the best available techniques, equipment and materials for dealing with oil spills in the Arctic and sub-Arctic marine environment; and,
2. To complement federal and state damage assessment efforts and determine, document, assess and understand the long-range effects of Arctic and sub-Arctic oil spills on the natural resources of Prince William Sound, and the environment, the economy and the lifestyle and well-being of the people who are dependent on those resources.



Oil Spill Recovery Institute - Cordova, Alaska

The Oil Pollution Act of 1990 established OSRI. Amendments in 1996 and 2002 extended the original mandate through September 2012 and provided a funding mechanism for the Institute. OSRI is administered through and housed at the Prince William Sound Science Center, a non-profit research and education organization located in Cordova. The PWS Science Center facilitates and encourages ecosystem studies in the Greater Prince William Sound region.

Click on "[About OSRI](#)" for a general overview of the organization and current programs.