

***NATIONAL WEATHER SERVICE
PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)
TYPE: Experimental Product
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EXPERIMENTAL MARINE FORECAST GRAPHICAL WEB PRODUCT

Recreational boating on the Great Lakes is an increasingly popular summer activity. The State of Michigan alone has more than One Million registered watercraft. Many of these amateur mariners place themselves at significant risk because they fail to understand how quickly severe weather can develop on the Great Lakes, or how to properly prepare for rough waters.

The National Weather Service seeks to protect boaters from loss of life or watercraft by producing weather forecasts for the Great Lakes. In order to ensure these forecasts are available to the maximum possible audience, the National Weather Service must utilize multiple dissemination methods and formats. **Part 1 - Mission Connection**

1. Product/Service Description:

The Marine Forecast Graphical Web Product provides marine forecast information for the Great Lakes in a format that is easily understood even by inexperienced boaters, and easily obtainable by anyone via the Internet.

Images are provided that depict weather conditions for a specific area of a lake and for a specific time. These images include wind direction and wave height. The user can select to display a series of images in a loop to provide a sense of how the weather is expected to progress.

In addition to the images, the wind and wave conditions at selected points are available in a tabular format. The tabular format provides the forecast information in a text based form to meet 508 requirements. The tabular format can also be printed out, providing the information in a form that is easy to take with when going out onto the lakes.

2. Purpose/Intended Use:

The purpose of the Marine Forecast Graphical Web Product is to protect the lives and property of recreational boaters on and around the Great Lakes. It accomplishes this purpose through the presentation of marine weather forecast information in a format that is easy to understand, even for the inexperienced boater.

3. Audience:

The Marine Forecast Graphical Web Product is primarily intended for the recreational boating community. This product is also of value for beachgoers and those living in areas near to the lakes.

4. Presentation Format:

The Marine Forecast Graphical Product is made available to the public via the World Wide Web, using widely recognized standards that allow the product to be rendered on any standards compliant web browser.

5. **Feedback Method:**

The National Weather Service consistently seeks to improve our products based upon public feedback. Questions or comments about the Marine Forecast Graphical Web Product are welcome and may be sent to the National Weather Service by responding to the interactive survey:

<http://www.crh.noaa.gov/survey/>

The survey will be available for comment through the recreation boating season 2003.

Part 2 - Technical

1. **Format and Science Basis:**

The Marine Forecast Graphical Web Product consists of a set of HyperText Markup Language (HTML) files, some with embedded JavaScript code, and numerous images in the Portable Network Graphics (PNG) file format.

These files are served to any Internet user from the Central Region webserver farm located at Central Region Headquarters in Kansas City, Missouri. The user's web browser will combine these files to render the product's presentation. All coding is done in widely accepted standard computer languages, such as Hypertext Markup Language (HTML) and JavaScript. All coding conforms to standard specifications as published by the World Wide Web Consortium (W3C) and other appropriate international standards bodies in order to ensure compatibility with all standards-compliant web browsers. The image files are created at the local Weather Forecast Office by the GFE application. These files are pushed to the web site with each new forecast.

The images depict the forecast for wind direction, wind speed, and wave height. Wind direction and speed is depicted through the use of wind barbs. Wave height is depicted via color coding and overlain numeric values.

2. **Availability:**

The Marine Forecast Graphical Web Product will be available continuously during the Great Lakes recreational boating season. Generally, this season runs from the first week of April through December 31st each year, but may vary depending upon conditions. The forecast data available in the Marine Forecast Graphical Web Product will be updated at least twice daily, with more frequent updates when conditions warrant.

3. **Additional Information:**

At present, the Marine Forecast Graphical Web Product is an experimental product available on the Grand Rapids WFO web site. Currently, the product only displays the near shore forecasts for marine zones LMZ843 through LMZ849 (New Buffalo to Manistee). Eventually, we hope to expand the product's capabilities to include forecasts for all Great Lakes forecast zones, near shore and deep water for all 5 of the Great Lakes. It is also planned to reformat the product into a Corporate Web Image-compliant product that can be made available from all WFOs with Great Lakes forecasting responsibilities.

The experimental product can be viewed at the following URL:

http://www.crh.noaa.gov/grr/products/experimental/RPP/rpp_marine_main.html.