

**Navigation Services Charting Satisfaction Survey 2011 –
Commercial mariners and Coastal Managers Survey - 15th April 2011**

Introduction

The following cover emails will be used to invite participation in the surveys:

Dear Chart User

The National Oceanic and Atmospheric Administration's (NOAA) Office of Coast Survey is seeking to determine whether you as a Chart user are satisfied with the products and services you have received, and whether you have suggestions as to how they can be improved or made more useful. This information will be used to improve NOAA products and services.

A link is shown below to a questionnaire which can be completed on line. This survey should take no more than 10 minutes of your time – we have designed it with check boxes so it should be easy to complete.

Please click on the following link to access the questionnaire. **You will be asked for a password, which will be the email address used for this invitation (no capital letters).**

<http://www.snapsurveys.com/sw/surveylogin.asp?k=127317037635>

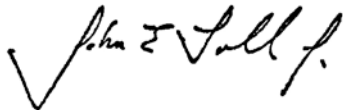
All data collected in this survey will be analyzed according to the specifications of the Market Research Society's Code of Conduct, which assures confidentiality to those participating in the survey. The information provided by answering the questionnaire will only be used for statistical analysis.

When you have completed the questionnaire please click on the "SUBMIT" button, then wait for the NOAA Website to show. This will ensure we receive your responses. Strategy, Research & Action Inc, a company that specializes in research on Charts and other Cartographic products, will receive the sent surveys and analyze the questionnaires and provide NOAA with the statistical results. Please complete the survey by May 31, 2011.

If you have any comments regarding this survey or any other aspect of this collection of information, please contact Matthew Kroll, National Ocean Service, 1315 East-West Highway, SSMC3, Room 6360, N/CS5, Silver Spring, Maryland 20910.

We appreciate your help and we look forward to hearing from you.

Sincerely,



Captain John E Lowell
Director, Office of Coast Survey

Dear Chart and Data User

The National Oceanic and Atmospheric Administration's (NOAA) Office of Coast Survey is seeking to determine whether you as a Chart and Data user are satisfied with the products and services you have received, and whether you have suggestions as to how they can be improved or made more useful. This information will be used to improve NOAA products and services for coastal management.

A link is shown below to a questionnaire which can be completed on line. This survey should take no more than 10 minutes of your time – we have designed it with check boxes so it should be easy to complete.

Please click on the following link to access the questionnaire. **You will be asked for a password, which will be the email address used for this invitation (no capital letters).**

<http://www.snapsurveys.com/swf/surveylogin.asp?k=127317037635>

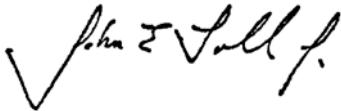
All data collected in this survey will be analyzed according to the specifications of the Market Research Society's Code of Conduct, which assures confidentiality to those participating in the survey. The information provided by answering the questionnaire will only be used for statistical analysis.

When you have completed the questionnaire please click on the "SUBMIT" button, then wait for the NOAA Website to show. This will ensure we receive your responses. Strategy, Research & Action Inc, a company that specializes in research on Charts, Data and other Cartographic products, will receive the sent surveys and analyze the questionnaires and provide NOAA with the statistical results. Please complete the survey by May 31, 2011.

If you have any comments regarding this survey or any other aspect of this collection of information, please contact Matthew Kroll, National Ocean Service, 1315 East-West Highway, SSMC3, Room 6360, N/CS5, Silver Spring, Maryland 20910.

We appreciate your help and we look forward to hearing from you.

Sincerely,



Captain John E Lowell
Director, Office of Coast Survey

Questionnaires

1. Which marine sector best describes your primary role?

Navigationally focused

- Port operators
- Pilots
- Commercial vessel operators
- Federal/Military vessel operators
- Commercial Fishing

Non-navigationally focused

- Coastal Resource Management
- Science and Research
- Industry
- Parks and Recreation
- Hazard and Emergency Management
- Coastal Developers
- Coastal Engineering

Non-Navigational Section

2. Which of the following coastal or management issues are you involved with for the US coastal or Great Lakes areas?

Key activities

- Coastal Land Use Planning
- Coastal Conservation Planning Issues
- Coastal Hazards

2b) Which of the following are you involved in for each activity?

Coastal Land Use Planning

- Climate change impacts including adaptation planning
- Land use planning/growth management/regulation
- Wetland loss
- Shoreline change management
- Climate change impacts including ocean acidification
- Near shore and offshore habitat mapping
- Energy development including alternative energy

Coastal Conservation Planning Issues

- Habitat management
- Water quality and quantity adaptation
- Adapting to impacts of climate change

Coastal Hazards

- Sea level rise/change and lake level change
- Flooding/inundation/storm surge
- Coastal erosion/shoreline change management

- Other climate change impacts.

3. Which of the following NOAA products, services and data are you aware of? Check all that apply.

- | | |
|---|--------------------------|
| Traditional Paper Nautical Charts | <input type="checkbox"/> |
| Coast Pilot | <input type="checkbox"/> |
| Electronic Navigational Charts | <input type="checkbox"/> |
| Raster Navigational Charts | <input type="checkbox"/> |
| Historical Charts | <input type="checkbox"/> |
| BookletCharts | <input type="checkbox"/> |
| Shoreline | <input type="checkbox"/> |
| Bathymetry | <input type="checkbox"/> |
| Hydrographic Survey Priorities | <input type="checkbox"/> |
| nowCoast | <input type="checkbox"/> |
| ENC Direct to GIS | <input type="checkbox"/> |
| V-Datum | <input type="checkbox"/> |
| Online Chart Viewer | <input type="checkbox"/> |
| Tide Predictions | <input type="checkbox"/> |
| Current Predictions | <input type="checkbox"/> |
| Tidal Datums | <input type="checkbox"/> |
| Real Time Water Level Data | <input type="checkbox"/> |
| PORTS® | <input type="checkbox"/> |
| Enhanced GPS positioning
(e.g., CORS/OPUS) | <input type="checkbox"/> |
| Metrological Data | <input type="checkbox"/> |
| Coastal and Estuarine Operational
Forecast Systems | <input type="checkbox"/> |
| Sea Level Trends | <input type="checkbox"/> |
| Storm Quicklook | <input type="checkbox"/> |
| None of these | <input type="checkbox"/> |

4. Which of the following NOAA products, services and data do you routinely use to perform your job functions? Check all that apply.

- | | |
|---|--------------------------|
| Traditional Paper Nautical Charts | <input type="checkbox"/> |
| Coast Pilot | <input type="checkbox"/> |
| Electronic Navigational Charts | <input type="checkbox"/> |
| Raster Navigational Charts | <input type="checkbox"/> |
| Historical Charts | <input type="checkbox"/> |
| BookletCharts | <input type="checkbox"/> |
| Shoreline | <input type="checkbox"/> |
| Bathymetry | <input type="checkbox"/> |
| Hydrographic Survey Priorities | <input type="checkbox"/> |
| nowCoast | <input type="checkbox"/> |
| ENC Direct to GIS | <input type="checkbox"/> |
| V-Datum | <input type="checkbox"/> |
| Online Chart Viewer | <input type="checkbox"/> |
| Tide Predictions | <input type="checkbox"/> |
| Current Predictions | <input type="checkbox"/> |
| Tidal Datums | <input type="checkbox"/> |
| Real Time Water Level Data | <input type="checkbox"/> |
| PORTS® | <input type="checkbox"/> |
| Enhanced GPS positioning
(e.g., CORS/OPUS) | <input type="checkbox"/> |
| Metrological Data | <input type="checkbox"/> |

- Coastal and Estuarine Operational Forecast Systems
- Sea Level Trends
- Storm Quicklook
- None of these

5. How do you use the above products, services and data in your job/profession for coastal management work?

- Risk and vulnerability assessment
- Hazard mitigation
- Forecasts and warnings
- Response immediately after a hazard disaster
- Inform policy decisions
- Issue emergency management actions (*i.e.*, evacuation)
- Make financial or insurance decisions
- Design coastal projects (*e.g.*, restoration, coastal engineering)
- Long-term recovery
- Organizational policy/process supporting use of tool and data
- Equipment/facilities/technology for tool and data use
- Coordination with other local entities to accomplish management objectives
- Education and communication with the public regarding management activities and objectives
- Coordination with other local entities
- Oil and Gas or offshore energy development
- Aquaculture
- Other industry or other applications (Please write in)-----

6 How often are you using the following when working with NOAA products, services and data for coastal management?

Daily, Weekly, Monthly, Only on occasion, Never, Do not Know, Not applicable to my work

- | | | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Online nautical mapping (browsing/viewing data) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Online databases (data portals data clearing houses) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Decision-support tools (manipulating/analyzing data) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| GIS layers, applications, tools, extension, etc | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Remote sensing data and derivatives (imagery, elevation, land cover, bathymetry, mapping) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Near real time data (<24 hours old e.g., buoys, tide gauges, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Model or model outputs (habitat modeling, SLOSH, HURREVAC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visualization (GIS-, 3D- and photobased)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If there are other uses (Please write them in) -----

7. What enhancements or changes to existing NOAA products, services and data, and/or what new products, services and data would assist you in more effectively doing your job?

Please write in _____

8. How frequently are you using these products, services and data in your job?

Daily	<input type="checkbox"/>
Twice weekly	<input type="checkbox"/>
Weekly	<input type="checkbox"/>
Monthly	<input type="checkbox"/>
Less often	<input type="checkbox"/>

9. How easy is it for you to access NOAA products, services and data?

Very easy	<input type="checkbox"/>
Easy	<input type="checkbox"/>
Neither easy nor difficult	<input type="checkbox"/>
Difficult	<input type="checkbox"/>
Very difficult	<input type="checkbox"/>

10. How do you access NOAA products, services and data?

Download it via the Internet	<input type="checkbox"/>
Just view it on the Internet	<input type="checkbox"/>
Purchase it	<input type="checkbox"/>

11. Do you convert the data to different formats for ease of use?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

11b) If yes, what formats are you changing the data to? (Please write in)-----

12. Which of the following statements best describes your ability to use NOAA products, services and data?

The NOAA products, services and data are in the correct/usable format	<input type="checkbox"/>
The NOAA products, services and data are transferable to other applications	<input type="checkbox"/>
Both as it depends on its application	<input type="checkbox"/>
The NOAA products, services and data are not in the correct/usable format	<input type="checkbox"/>
The NOAA products, services and data are not transferable to other applications	<input type="checkbox"/>

13a) Do you ever use similar products, services and data as described previously that are non-NOAA?

Yes
 No

13b) If Yes, which other products, services and data? (Please write in)-----

13c) Why do you use these non-NOAA products, services and data?

They have a better format
 They are easier to transfer
 They are easier to access
 They are more reliable
 There is no cost,
 Other (Please write in)-----

14. Please tell us the level of engagement you have with the following audiences when using NOAA products, services and data for coastal management.

	A lot of Engagement	Some Engagement	Very little Engagement	No Engagement At All
Coastal management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fisheries management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water quality and quantity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weather and climate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private sector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scientific Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation and tourism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Political	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other types of engagement (Please write in)-----				

15. Please tell us the number of years you've been involved with coastal management.

Less than 5 years
 6 – 10 years
 11 – 15 years
 16 – 20 years
 More than 20 years

16. Please indicate which of the following best represents your current professional position in coastal management. **CHECK ONLY ONE**

Education and outreach
 Emergency management
 Information technology
 (GIS, remote sensing, or related field)
 Natural resource management
 Permitting and regulatory enforcement

- Planning
- Program or site administration/management
- Academic
- Floodplain management
- Conservation
- Government (local, state, regional, federal)
- Industry
- Other (Please write in)-----

17. What is your level of engagement with the NOAA representative in your State or region of the US?

- Not sure if there is a state or regional representative
- I know who the representative(s) is(are), but I have had limited communication/interaction
- I have worked on a group with my representative(s)
- I have closely partnered with my representative(s) on 1 or more projects
- Not yet but I am interested in meeting with my local NOAA regional representative(s)

18. How satisfied are you with the products, services and data provided by NOAA's Navigational Services for use in Coastal Management?

- Very satisfied
- Satisfied
- Neither satisfied nor unsatisfied
- Unsatisfied
- Very unsatisfied
- Don't use

19. How likely is it that you would recommend NOAA's Navigational Services products, services and data to another user for Coastal Management applications?

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely
- Do not know

20. Which of the following describes the position in your organization that employs you for Coastal Management?

- Regulatory, Policy Makers and Government Representatives
- Managers in Non-Governmental Organizations
- Academia in Coastal Management
- Scientists/Research Scientists
- Modellers
- Researchers
- Data Managers
- Coastal Planners and Managers at Local, Regional, National and International levels
- Developers
- Waterfront Infrastructure Managers and Planners
- Natural Resource Stakeholders
- Fishermen
- Aquaculture and Agricultural Representatives
- Water Supply and Watershed Managers

- Coastal and Marine Resource Managers
- Marine Industrial Representatives
- Marine Shipping and Transportation
- Marine Facility Operators
- Coastal and Offshore Energy Developers
- Hazard and Emergency Management Planners and Responders
- Coastal and Flood-Plain Specialists
- Parks and Recreation Directors
- Recreational Fishing Interests
- Eco-Tour Businesses
- Conservationists
- Communication Specialists and Informal Educators

21. Which of the following regions do you represent (Check all that apply)?

- Northeast (ME, NH, RI, MA, CT)
- Mid-Atlantic (DE, MD, NJ, NY, PA, VA)
- Southeast (NC, SC, GA, FL)
- Caribbean (PR, VI)
- Gulf of Mexico (TX, LA, MI, AL, FL)
- Great Lakes (NY, IL, IN, MI, MN, NY, OH, PA, WI)
- West Coast (CA, OR, WA)
- Alaska
- Pacific Islands (HI, GU, AS, MP)
- National (all regions)

Commercial Mariners Section

1. Which products and services of NOAA are you aware of? CHECK ALL THAT APPLY

- Electronic Navigational Charts
- Raster Nautical Charts
- Print on Demand Charts
- Nautical Chart Users Guide
- Co-operative Charting
- BookletCharts, Pocket Charts
- Historical Charts
- Coast Pilot, Coastal Map and Vector Shoreline
- ENC Direct
- National Survey Plan
- Bathy/Topo/Shoreline, Now COAST
- Tides and Currents
- Physical Oceanographic Real Time System (PORTS)
- On-line catalog
- On-line notice to mariners Chart update
- On-line Chart viewer
- V-Datum
- None of these

2. And which of these activities and services of NOAA have you bought and/or used in the last 12 months? CHECK ALL THAT APPLY

- Electronic Navigational Charts
- Raster Nautical Charts
- Print on Demand Charts
- Nautical Chart Users Guide
- Co-operative Charting
- BookletCharts
- Pocket Charts
- Historical Charts
- Coast Pilot
- Coastal Map and Vector Shoreline
- ENC Direct
- National Survey Plan
- Bathy/Topo/Shoreline
- Now COAST
- Tides and Currents
- Physical Oceanographic Real Time System (PORTS)
- On-line catalog
- On-line notice to mariners Chart update
- On-line Chart viewer
- V-Datum
- None of these

3. How satisfied are you with the services provided by NOAA? CHECK ONE ONLY

- Very satisfied
- Satisfied
- Neither satisfied nor unsatisfied
- Unsatisfied
- Very unsatisfied

4. How likely is it that you would recommend a NOAA chart to another mariner to use? CHECK ONE ONLY

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely
- Do not know

5. Please look at each of the NOAA services listed below and rate each for how satisfied you have been with the services provided? CHECK ONE FOR EACH

	Very Satisfied	Satisfied	Neither satisfied Nor Unsatisfied	Unsatisfied, Very Unsatisfied
Quality of products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Timeliness of response to requests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost of the products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpfulness of NOAA staff who dealt with you prior and/or after sale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge of the staff in dealing with your needs		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity and accuracy of responses from NOAA staff to your questions		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ease in reaching correct NOAA office to deal with your request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The format of the NOAA data received	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The documentation of the data received	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The description of NOAA products and data in Catalogs and the Website	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall satisfaction with the services provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall satisfaction compared with products and services obtained from a Commercial publisher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall satisfaction compared with products and services from other US Federal Government Agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall satisfaction compared with products and services from foreign chart publishers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Would you like to add a comment about your satisfaction with a specific NOAA nautical charting product? _____

7. How long have you been a professional mariner?
CHECK ONE AS APPROPRIATE YEARS

Less than 2 years	<input type="checkbox"/>
2 to 5 years	<input type="checkbox"/>
6 to 10 years	<input type="checkbox"/>
11 to 15 years	<input type="checkbox"/>
16 to 20 years	<input type="checkbox"/>
21 to 25 years	<input type="checkbox"/>
Over 25 years	<input type="checkbox"/>

8. What is your primary use of NOAA products or services? CHECK ONE ONLY

Commercial Navigation	<input type="checkbox"/>
Scientific Research	<input type="checkbox"/>
Regulatory Compliance	<input type="checkbox"/>
Educational studies	<input type="checkbox"/>
Reference/Library use	<input type="checkbox"/>
Legal use	<input type="checkbox"/>
General information	<input type="checkbox"/>

9. Which types of vessel do you operate, work on or sail?
CHECK ONE ONLY

Container Ship	<input type="checkbox"/>
General Cargo Ship	<input type="checkbox"/>
Tanker	<input type="checkbox"/>
Bulk Carrier	<input type="checkbox"/>
Passenger Vessel (Passenger or Cruise ship)	<input type="checkbox"/>
Tug Boat	<input type="checkbox"/>
Crewboat	<input type="checkbox"/>
Naval or Coast Guard Vessel	<input type="checkbox"/>
Fishing Boat,	<input type="checkbox"/>
Powerboat	<input type="checkbox"/>
Sail Boat	<input type="checkbox"/>
Not applicable to my use of Charts	<input type="checkbox"/>

NOAA Office of Coast Survey (OCS) is trying to do an analysis of existing information on why customers may not use or may underuse NOAA navigation products. Competing products exist and are sometimes preferred over OCS products. Please answer the following questions to help OCS to meet your needs:

10. Which of the following are closest to your reasons why you might select a product other than a NOAA Office of Coast Survey product (e.g. NOAA Nautical Chart, RNC, ENC etc.)?

- They are more user friendly
- They are cheaper
- They have more benefits, information, etc
- They are more readily available
- I am more aware of them
- Or please write in your other reasons: _____

11. Why do you underuse NOAA Office of Coast Survey products if you do so?

- I don't refer to charts very often
- My charts and local knowledge is good enough
- I get automatic updates added to an electronic chart that I use instead of NOAA products
- They are too inconvenient or too hard to use
- Or please write in your other reasons: _____

12. Which of the following are closest to your reasons for not using any product?

- My local knowledge is sufficient
- I don't have space on the vessel I sail in
- I take the same route regularly
- They are too inconvenient or too hard to use
- Or write in your other reasons: _____

13. Please indicate in which age group you fall:

- Under 25 years old
- 25-29 years old
- 30-39 years old
- 40-49 years old
- 50-59 years old
- 60- 69 years old
- 70 years or above

At the end of both sections of the questionnaire:

14. Are you willing to take part in future product satisfaction research surveys about NOAA?

- Yes
- No

15. Are you interested in receiving a Summary of the Research?

- Yes
- No

Paperwork Reduction Act Information:

In accordance with Executive Order 12862, the National Performance Review, and good management practices, NOAA offices seek to determine whether their customers are satisfied with the services/products they are receiving and whether they have suggestions as to how the services/products may be improved or made more useful. The information will be used to improve NOAA's products and services. Responses to this survey are completely voluntary. No confidentiality can be provided for responses, but you need not supply your name and address. Public reporting burden for this collection of information is estimated to average 10 minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Howard Danley, CIO-PPA1, Station 9823, 1315 East-West Highway, Silver Spring, MD 20910. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

Definitions of NOAA Products and Services for explanation for respondent**Traditional Paper Nautical Charts**

The traditional paper chart is one of NOAA's signature products. The comprehensive suite of traditional paper charts can be used to navigate the Great Lakes and the coastal waters of the U.S. and its territories. (Traditional charts meet U.S. Coast Guard carriage requirements in U.S. waters.)

Coast Pilot

The United States Coast Pilot® consists of a series of nautical books that cover a variety of information important to navigators of coastal and intracoastal waters and the Great Lakes. Issued in nine volumes, they contain supplemental information that is difficult to portray on a nautical chart.

Electronic Navigational Charts

NOAA Electronic Navigational Charts® (NOAA ENCs) are vector data sets that represent NOAA's newest and most powerful electronic charting product. NOAA ENCs conform with the International Hydrographic Office (IHO) S-57 international exchange format, comply with the IHO ENC Product Specification, and are provided with incremental updates that supply Notice to Mariners corrections and other critical changes.

Raster Navigational Charts

NOAA Raster Navigational Charts® (NOAA RNCs) are full-color digital images of NOAA's entire suite of paper charts. NOAA provides weekly updates to the RNCs, which are available for free on this site in the BSB format.

Historical Charts

The Office of Coast Survey's Historical Map & Chart Collection is a rich archive of high-resolution images capturing a vast wealth of the U.S. government's historical surveying and mapping. The collection of over 35,000 scanned images - covering offshore and onshore sites - includes some of the Nation's earliest nautical charts, bathymetric maps, city plans, and Civil War battlefield maps.

Shoreline

The Remote Sensing Division of the National Geodetic Survey plans and acquires aerial photography and compiles shoreline data, primarily for application to the nautical charts produced by NOAA's Office of Coast Survey. In recent years these data have been produced in digital form. Many of the older hardcopy shoreline manuscripts have also been converted to digital form, mostly by projects managed by the NOAA Coastal Services Center. These digital data sets are thought to have value beyond the application to nautical charts, especially for those users conducting GIS analysis and producing special purpose maps in the coastal zone.

Bathymetry

Bathymetric data is used to compile the official nautical charts for the United States and its territories. The data is also available to the general public via NOAA's National Geophysical Data Center (NDGC).

The National Geophysical Data Center (NDGC) is the data archive and distribution centre for NOAA's digital bathymetric data.

BookletCharts

A up-to-date paper nautical chart arranged as a series of 8 ½" by 11" pages in the Adobe .PDF format that one may download from the Internet and print at home for free.

On-Line Chart Viewer

A free Internet site where one can view any NOAA nautical chart using only a Web browser. These charts are updated weekly for all Notices to Mariners.

Hydrographic Survey Priorities

NOAA establishes hydrographic survey priorities for general and long term project scheduling purposes. The priorities are outlined in the 2010 edition of "NOAA's Hydrographic Survey Priorities" document. NOAA continually reviews the marine community's needs for charting products and hydrographic surveys and will review and update this document every year.

nowCoast

NowCOAST provides NOAA users with centralized, one-stop access to on-line, real-time coastal environmental data, imagery, and NOAA forecasts for any region in the coastal United States. NowCOAST provides users with interactive maps depicting latest surface weather and ocean observations, NOAA satellite cloud imagery, NWS weather radar mosaics and model-based forecasts. NowCOAST's map functions and geospatial data are now available via Web Mapping Services (WMS), thus enabling access via desktop computers, other mapping websites, and mobile devices.

ENC Direct to GIS

The NOAA ENC Direct to GIS web portal provides comprehensive access to display, query, and download all available NOAA Electronic Navigational Chart data in a variety of GIS/CAD formats for non-navigational purposes using Internet mapping service technology.

V-DATUM

Vertical Datum Transformation, an innovative and evolving software tool under development by NOAA's National Ocean Service. Free to the public, V-Datum's primary purpose is to convert elevation data from various sources into a common reference system.

Online Chart Viewer

NOAA's 1,000-plus U.S. coastal and Great Lakes nautical charts are viewable here on-line. Each chart is up-to-date with the most recent Notices to Mariners corrections. Use these on-line charts as a ready reference or planning tool.

Tides Predictions

Annual listing of daily predicted times and heights of high and low tide at a specific location.

Currents Predictions

Annual listing of daily predicted times and speed of max flood and ebb tidal currents at a specific location.

Tidal Datums

A base elevation used as a reference from which to reckon heights or depths. A tidal datum is a standard elevation defined by a certain phase of the tide. Tidal datums such as Mean Lower Low Water or Mean High Water are used as references to measure local water levels.

Real-Time Water Level Data

NOAA's National Water Level Observation Network (NWLON) is a network of 210 long-term,

continuously operating water level stations throughout the coastal USA, including its island possessions and territories and the Great Lakes. NWLON stations are the reference stations for NOAA's tide prediction products, serve as controls in determining tidal datums, contributing to coastal zone management and are a key part of the NOAA Tsunami Warning System and the NOAA Storm Surge Warning System.

PORTS®

Physical Oceanographic Real-Time System (PORTS®) is a decision support tool that improves the safety and efficiency of maritime commerce and coastal resource management through the integration of real-time environmental observations, predictions and other geospatial information in port areas. PORTS® measures and disseminates observations and predictions of water levels, currents, salinity, bridge air gap, waves and meteorological parameters (e.g., winds, atmospheric pressure, air and water temperatures and visibility) that mariners need to navigate safely and efficiently.

Enhanced GPS positioning

Enhanced GPS positioning refers to the use of a NOAA managed network of Continuously Operating Reference Stations (CORS) that provide high accuracy GPS data in support of three dimensional positioning. The network is accessed through the Online Positioning User Service (OPUS), which accepts GPS user observations and computes coordinates for the CORS network. GIS users, engineers, surveyors and others use Enhanced GPS positioning services to improve the precision of their GPS positions.

Meteorological data

NOAA's National Water Level Observation Network (NWLON) is a network of 210 long-term, continuously operating water-level stations throughout the coastal USA, including its island possessions and territories and the Great Lakes. Each station is equipped with a suite of meteorological sensors. These sensors include wind speed and direction, atmospheric pressure, air and water temperatures and visibility.

Coastal and Estuarine Operational Forecast Systems

Coastal and estuarine Operational Forecast Systems (OFS) consist of the automated integration of real-time observing system data streams and hydrodynamic models to provide short-term predictions of water levels, currents, temperature and salinity. The OFS products are disseminated graphically and digitally and the system is subject to continuous quality-control monitoring. State-of-the-art numerical hydrodynamic models, driven by real-time data and meteorological, oceanographic, and river flow forecasts from other models, form the core of these end-to-end systems. The OFS perform nowcasts and short-term (0 hr. - 48 hr.) forecasts of the pertinent physical parameters and disseminate them to users via web-based graphics and digitally via OpenDAP & THREDDS servers.

Sea Level Trends

Long-term rates of sea level change relative to the land, as measured at a coastal tide station.

Storm Quicklook

Integrated display of meteorological and water level information in the path of a hurricane, overlaid on National Hurricane Center storm track with analysis of storm tide information.