ENC Feedback from Mariners

• Too many alarms on caution areas
• Need more detailed depth areas in key locations
• Need accurate least depths on wrecks and obstructions—we are training our users to ignore the magenta Xs.
• ENC is not standalone products—they are components of a seamless suite. There are too many discontinuities.
• Symbology is not good for recreational mariners
Use of electronic charts and ECDIS will soon be mandatory for all large commercial vessels.
Paper to ENC – Scale Bar
Edge Matching
Improving Chart Schemes

Standardize Scales
Improving Chart Schemes

Create an orderly layout for ENCs
Improving Chart Content

Convert to metric

Reduce unwarranted alarms & isolated danger symbolization

ECDIS display of wrecks with an "isolated danger" symbol

“Normal” ECDIS display of the same two "non-dangerous" and one "dangerous" wrecks
Improving Chart Content

Provide timelier data

Standardization of USACE data formats
Improving Chart Content

Provide timelier data
Standardization of USACE data formats
Improving Chart Content

Provide timelier data
Standardization of USACE data formats
Improving Chart Production Efficiency

Increase efficiency
Direct input of USCG light list data into production

Office of Coast Survey
National Oceanic and Atmospheric Administration
**Purpose**  Improve NOAA nautical chart coverage, products, and distribution

**Improvements**

- **Reduce unwanted alarms**
- **Convert to metric**
- **Provide timelier data**
- **Improve chart coverage**
- **Create an orderly layout**
- **Reduce uncertainties**
- **Improve chart update information**
- **Increase efficiency**

**Outcome**  Ease of access to more precise, higher-resolution charts that deliver the most up-to-date navigation information possible
THANKS!!!