



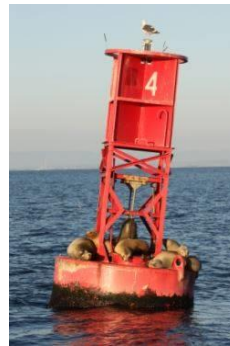
# United States Coast Guard Office of Navigation Systems

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## Navtech 2022

### “Charts & Waterway Harmonization”



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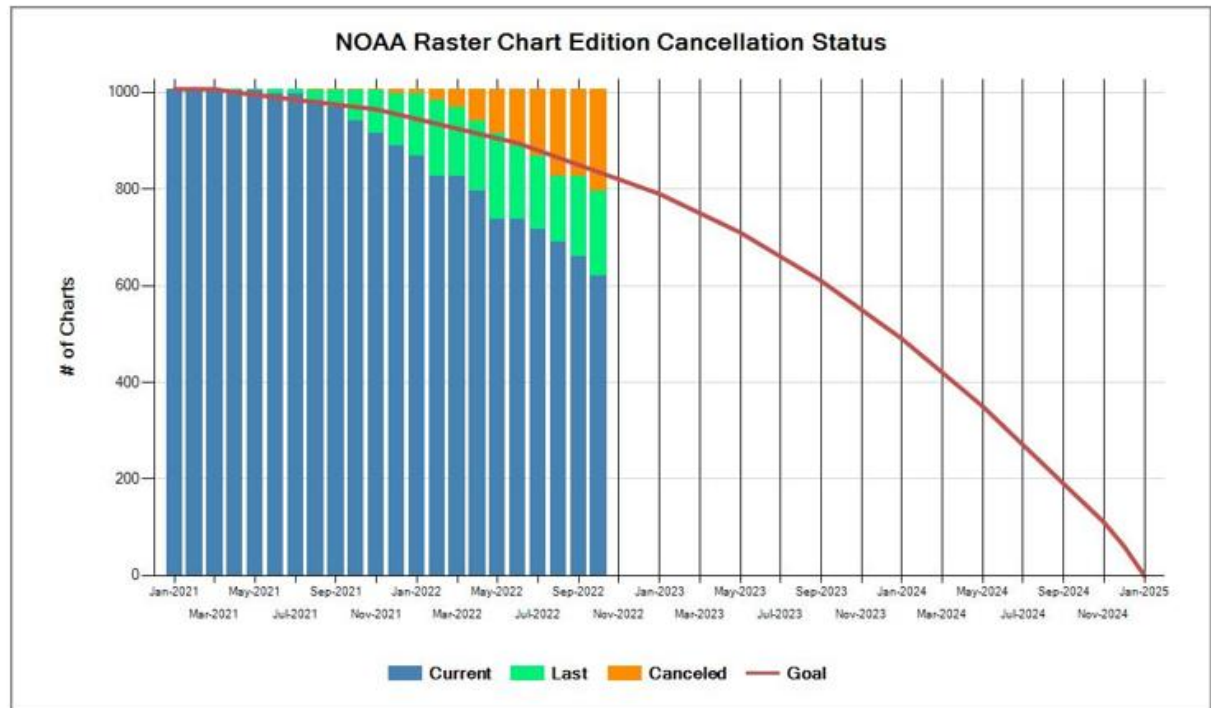


# Paper Chart Sunset & Data Sharing Update



## Raster Chart Status as of Nov 16, 2022

Canceled	235
Last Edition	+ 183
<hr/> Subtotal	418
Active Charts	+ 589
<hr/> Total	1007



589 charts / 19 months = 31 last editions per month through June 2024 to complete sunset by Jan 2025.



# Paper Chart Sunset & Data Sharing Update



## 2022 Last Edition Schedule

	Month	Area	Qty
	.	.	.
	.	.	.
	.	.	.
	.	.	.
	.	.	.
	.	.	.
	.	.	.
	.	.	.
✓ 21	October	Great Lakes	40
✓ 20	November	More Great Lakes	30
19	December	BGN* Charts	13

\* Charts for which the US Board on Geographic Names has approved replacements for derogatory place names.





# CG-NAV-3 Paper Chart Sunset & Data Sharing Update



## 2023 Last Edition Schedule

	Month	Area	Qty
18	January	East Coast (TBR)	31
17	February	East Coast (TBR)	31
16	March	East Coast (TBR)	31
15	April	TBD	31
14	May	TBD	31
13	June	TBD	31
12	July	TBD	31
11	August	TBD	31
10	September	TBD	31
9	October	TBD	31
8	November	TBD	31
7	December	TBD	31



# CG-NAV-3 Paper Chart Sunset & Data Sharing Update



## 2024 Last Edition Schedule

	Month	Area	Qty
6	January	TBD	31
5	February	TBD	31
4	March	TBD	31
3	April	TBD	31
2	May	Small Scale Charts	31
1	June	Smallest Scale Charts	31

**Remaining charts will continue to be canceled July - December**





# Significant Regulatory Changes Related to Chart Carriage

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## NOAA Chart Sunset Initiative

- Triggered a significant Rule Making / Technical Amendment Effort
  - 43 Sections of CFR Identified
    - 19 Technical Amendments related to Datum Shift  
(NAD27 -> NAD83 -> WGS84)
    - 33 Rule Making Efforts Related to Carriage & ENC's  
(includes ECDIS/ECS equipment & NOAA Custom Chart)
    - Advanced Notice of Proposed Rule Making (ended June 2022)
    - Proposed Notice of Rule Making expected Summer 2023



# Waterway Harmonization Project Update

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## Waterway Harmonization Goals & Objectives:

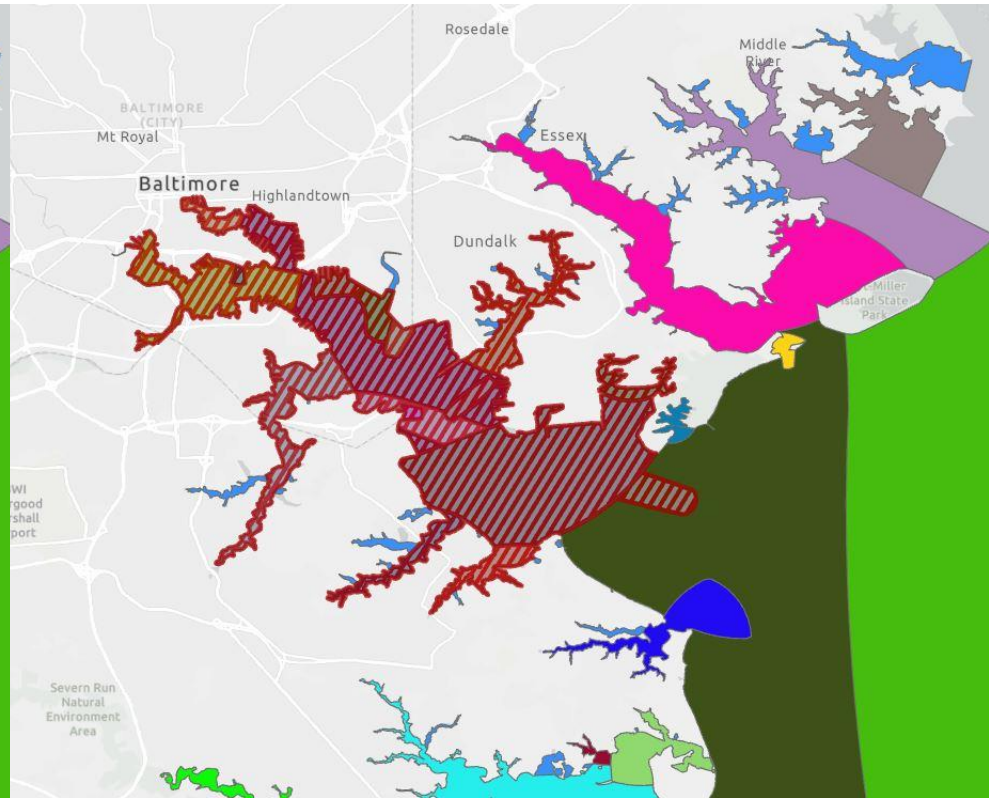
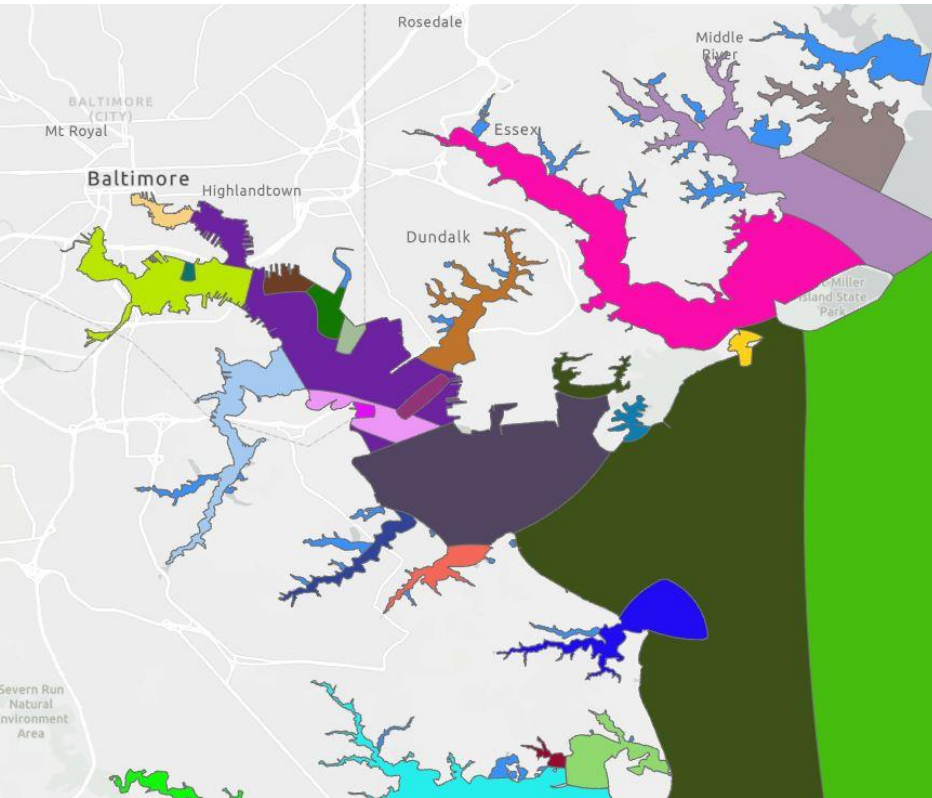
- ✓ Provides unified Federal Gov't geospatially defined platform on which all things navigationally significant can be referenced (replaces Chart Name, Number, Edition paradigm)
- ✓ Enables visualization of Marine Safety Information (replaces LNM/BNM text only paradigm)
- ✓ Enables machine to machine data exchange within USCG & Externally (replaces emails, faxes, etc. from other Federal, State, or Local Authorities)



# Waterway Harmonization Project Update



What was accomplished



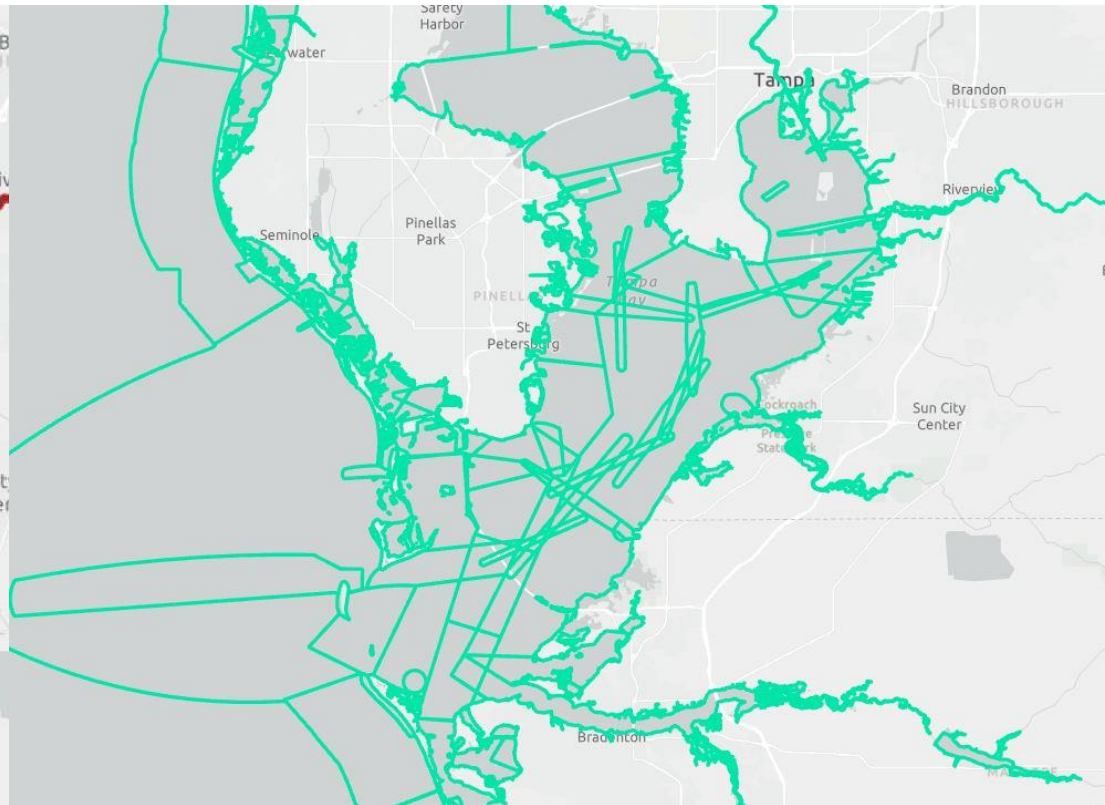
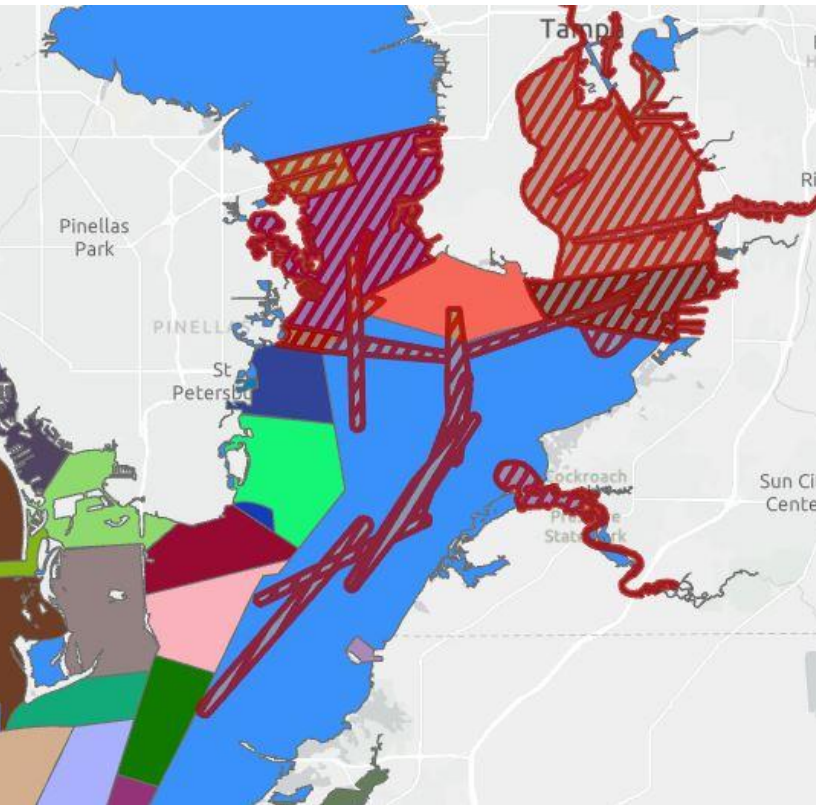




# Waterway Harmonization Project Update



What was accomplished

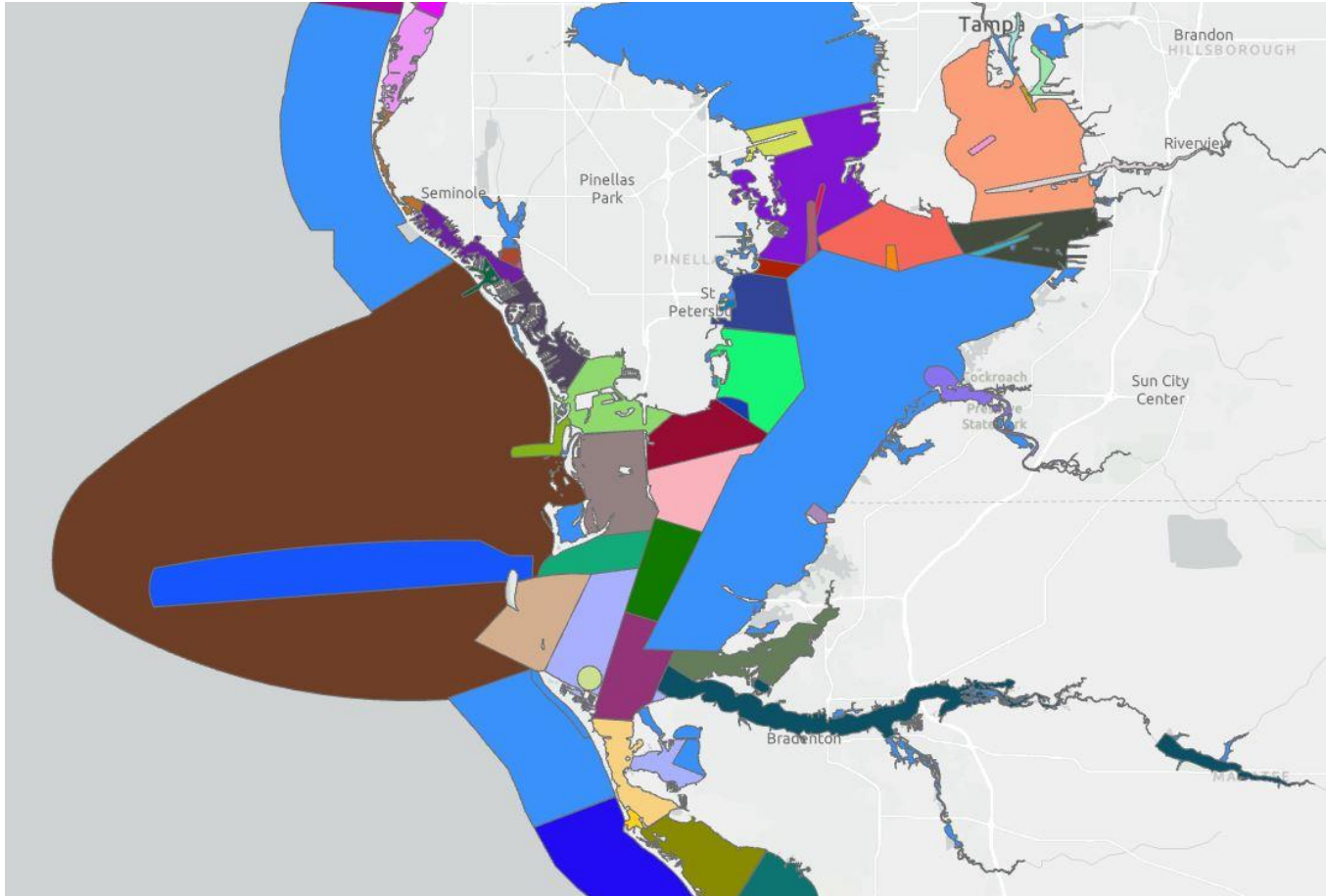




# Waterway Harmonization Project Update



What was accomplished





# Waterway Harmonization Project Update



## Waterway Harmonization Next Steps:

- USCG NAVCEN will Manage WW Harm Dataset
- NAVCEN will distribute to Federal, State, Industry, & Academia (USCGA & UNH Coastal Studies, etc.)
- NAVCEN will coordinate posting of dataset to ESR's "Living Atlas"
- Federal Agencies will each begin to align their respective eNavigation products and services to the Harmonized Waterways with emphasis on adoption of the IALA Marine Resource Name (MRN) unique identifier guideline.
- MRNs were assigned to each waterway following a parent-child relationship.  
ex: MRN:IALA:WWY:US:ATL:CHESBAY:POT:ANC
- ❖ MRN for waterways will enhance IEC S-421 Route Plan by enabling information search functions based upon waypoints within a route





# Chart Corrections Process ATON Information to NOAA/USACE



Current Process by which ATON Data for Maintenance of Electronic Navigational Charts (ENC) & Inland (IENC) is transferred to NOAA & USACE

## NOAA:

- An automated Weekly dataset from ATONIS is sent to a NOAA mailbox which strips the .CSV attachment from the email.
- The file is pushed through a Q&A tool then ingested by an ENC developer.
- NOAA, by international agreement submits the updated ENC to 3<sup>rd</sup> party for Q&A.
- NOAA pushes revised ENC to public. Elapsed time Approx. 2 weeks

## USACE:

- An automated Weekly dataset from ATONIS is sent to CG-NAV for Q&A.
- CG-NAV send dataset via email to USACE IENC Maintenance Team.
- USACE converts .CSV file into an S-57 (IENC) file for use on Electronic Charting Systems (ECS)
- USCG does not currently provide Fixed ATON data



# Chart Corrections Process ATON Information to NOAA/USACE



## Future plans

### NOAA:

- Replace email process with direct data exchange routine
- Develop same processes for PATON, Wrecks, Offshore Structures (PATON dataset under development)
- Increase frequency to daily delivery of dataset
- Convert .CSV file with S-201 dataset

### USACE:

- Replace email process with direct data exchange routine
- Develop same processes for Fixed ATON, PATON, Wrecks
- Increase frequency to daily delivery of dataset
- Convert .CSV file with S-201 dataset