Aiding Navigation through Centralizing Information Dissemination

Forrest Vanderbilt, D.Env.

US Army Corps of Engineers

Institute for Water Resources

WEDA Pacific Chapter

October 25, 2018

Trusted Partners Delivering Value, Today and Tomorrow





US Army Corps of Engineers
BUILDING STRONG®







Outline



BUILDING STRONG

National Perspective

Civil Works Business Intelligence

Dredging Information System

Notice to Navigation Interests



ACHIEVE OUR VISION

Anticipate future conditions; take actions today to always be ready come what may.

USACE: STAYING WORLD CLASS NOW AND INTO THE FUTURE



Engineering Solutions for the Nation's Toughest Challenges



US Army Corps of Engineers



DELIVER THE PROGRAM

Our credibility is based on our ability to achieve desired results on time and on budget.

USACE MISSION

Deliver vital engineering solutions, in collaboration with our partners, to secure our Nation, energize our economy, and reduce risk from disaster.

STRENGTHEN THE FOUNDATION

Doing routine tasks to a high standard enables everything else. A strong foundation empowers leaders to think strategically.

MISSION AREAS

- · Military Programs
- · Civil Works
- Geospatial Support
- Contingency Operations
- Research and Development

We aspire to remain a WORLD-CLASS organization, now and into the future, by setting the professional standard and stepping-up as a reliable Federal option. Perhaps the MOST STRATEGIC thing we can do is to simply DELIVER OUR PROGRAM...with exceptional quality, on time, and on budget.



USACE Navigation Mission



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Provide safe, reliable, efficient, effective and environmentally sustainable waterborne transportation systems for movement of national security needs, commerce, and recreation.



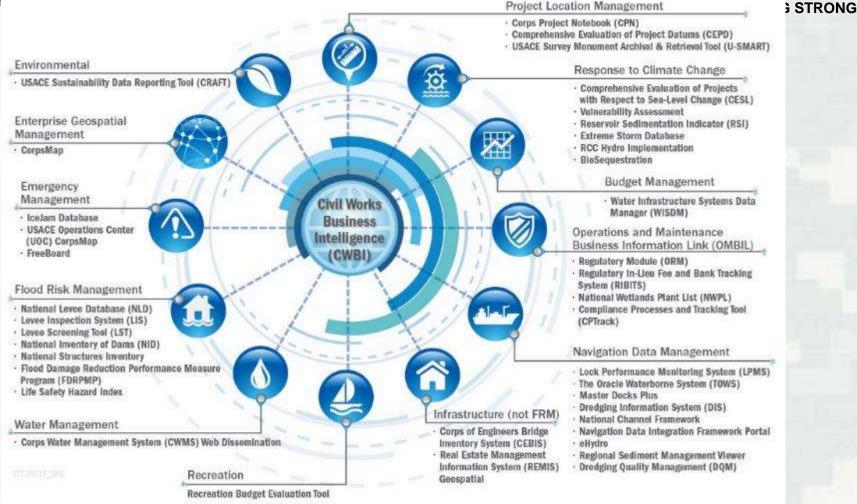
Enterprise Schedule Coordination

Communication and Transparency



Civil Works Business Intelligence (CWBI)







CWBI



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What is it?

► An effort to integrate existing data sets and systems to provide a holistic visual display of Corps assets across the US to better inform decision making and predict impacts to infrastructure

How?

► Leveraging existing national datasets as a starting point and extending technology investments in CorpsMap and CWMS could accelerate the time to make this concept operational.



DIS Overview and Relevance



- History...
 - The Dredging Information
 System (DIS) is the USACE
 national database for all
 dredging data
 - DIS has been in use for over25 years
 - EP 1130-2-520, Navigation and Dredging Operations and Maintenance Guidance and Procedures

- Today...
- DIS is the system of record that captures a wealth of information including project name, quantity of dredged material, type of dredge, method of disposal or placement, government estimate, winning bid and bidder, and small business status.
- Used to meet WRDA 2016 reporting requirements



Other Corps Dredging Data



- Other Corps systems have been developed to capture Geospatial Information relating to...
 - Where dredging is taking place
 - Location and capacity of disposal sites
 - Ways to more efficiently use material to provide the highest benefit

- Other sources of contracting data...
- Resident Management
 System (RMS) collects
 dredging information, entered
 by contractors, covering many
 of the same post-bid topics
 that are contract related or
 required



Creating the E-DIS Project Delivery Team



- Recognizing that the system does not provide internal and external stakeholders with everything that's needed, this effort is intended to create a group of dredging experts to identify what information is needed to complete the mission
- Idea first arose after discussions of a 5 year national dredging schedule in July 2018
- After assigning members for the PDT, the kickoff meeting outlining the effort took place in September 2018 and includes both Corps and Industry stakeholders



E-Dis PDT purpose



- Summarize issues and opportunities already identified (in meetings, by email, etc.)
- 2 Gather feedback to determine whether there are additional opportunities for improvements not yet identified (subject of our next few meetings)
- 3 Explore opportunities to link or combine DIS with other existing data information systems.
- 4 Explore ways to increase frequency of data updates
- 5 Identify and develop data visualization and reporting tools for internal and external stakeholders
- 6 Identify and develop methods for utilizing DIS data to drive decision support, instead of just data collection



Milestones And Anticipated Schedule



	October
Identify Opportunities to Improve	2018
	November
Come to Consensus on Improvements	2018
	December
Obtain Support to Make Agreed Upon changes	2018
Begin DIS Improvements	January 2019
Test DIS Improvements with PDT Continue Updates and Testing	Feb-April 2019
Finalize e-DIS with Feedback	May 2019
Establish Way Ahead to Identify Future Improvements	April 2019



What we're looking for in the PDT



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People familiar with the DIS data entry process

People familiar with the external uses of public dredging reports

People willing to take time on a bi-weekly basis to discuss and test changes to E-DIS



Improvement Ideas Identified to Date

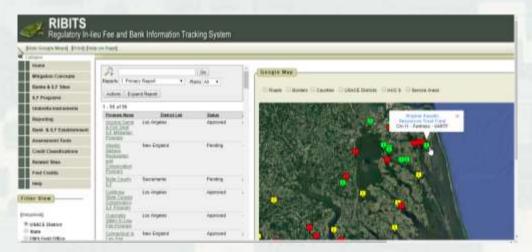


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- Linking DIS jobs to data already entered into the Resident Management System (RMS) for a reduced data entry requirement.
- Linking DIS to the Regional Sediment Management (RSM) effort to supply jobs
- Linking DIS to the CE-Dredge tool to complete the feedback loop of availability and capacity of disposal/placement sites.

Enhancing spatial awareness of planned dredging jobs utilizing existing assets:
 allow users to enter points and polygons instead of entering a latitude/longitude in

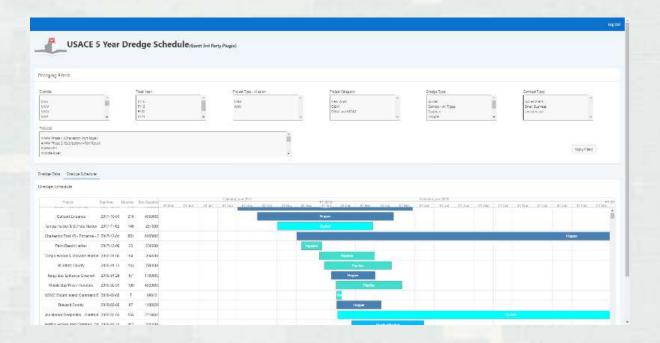
degrees, minutes, and seconds





Improvement Ideas Identified to Date (Cont.)

- Scheduling assistance:
 - Capture all relevant dredging windows across the enterprise
 - Capture dredge inventory and associate jobs to individual dredges
 - Building out 5 year plans (replacing the spreadsheet)





More Information



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Dredging information at:

https://www.iwr.usace.army.mil/About/Technical-Centers/NDC-Navigation-and-Civil-Works-Decision-Support/

http://cwbi-ndc-nav.s3-website-us-east-1.amazonaws.com/dredge.html

- Email: <u>CEIWR-NDC.DIS</u>@usace.army.mil
- Forrest.B.Vanderbilt@usace.army.mil



Notice to Navigation Interests Overview and Relevance



- History...
 - The Notice to Navigation Interests (NTNI) is the USACE national database for all navigation notices
 - NTNI has been in use for the last three years
 - EP 1130-2-520, Navigation and Dredging Operations and Maintenance Guidance and Procedures

- Today...
- NTNI is the system of record that captures information including project or waterway name, type and category of notice, timing information, attachments and POC information.
- Used to meet Energy and Water Development Appropriations Act, 2005, requirements



NTNI Information



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Appendix E of EP 1130-2-520

- USACE work planned/in progress, including maintenance dredging and work on jetties and breakwaters
- Deliberate modifications to channel dimensions, including reductions in maintained depths, or changes in other significant project features
- Section 10 permit work which may impact general navigation
- Change in USACE issued navigation regulations
- Special/temporary operating restrictions imposed by the USACE
- Information for correction of USACE charts
- Advance notice of USACE chart revision publication of next edition)
- Changes or corrections to NOAA-National Ocean Servicecharted features

NTNI Homepage - External



Notices to Navigation Interests

http://ntninotices.usace.army.mil

Navigation Notices | Policy Notices

Welcome to Notices To Navigation Interest

The Notices To Navigation Interests (NTNI Notices) website contains navigation notices and policies issued by US Army Corps of Engineers Districts with a waterway navigation mission. These documents are disseminated according to EP 1130-2-520, Chapter 2, to inform mainers of information describing events that affect waterway navigation such as maintenance projects, hazards to navigation, and other pertinent information. The notices are removed from the page seven days past the end date on the latest amendment. The site also has Policy Notices that remain in place until superseded. This site does not contain all notices such as those published by other Federal agencies. Reference: The US Coast Guard Local Notice To Mariners site at: https://www.navcen.usco.gov/?pageName=hmMain

Search Criteria

Search Notice Document, Title, Waterways or Attachment Name:		Go Reset	
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Click the NTNI Nor to Download the notice. Click any column title to Sort. Click attachment link to Download attachment.

Navigation Notices

NTNI	Amendment Nbr	Begin Date (YYYY/MM/DD)	<u>Title</u>	Waterways	<u>Attachments</u>
9222	9180-1	IMMEDIATELY	Amendment to NTMI 9180 - Dashields Lock and Dam Ohio River Mile 13.3, Main Chamber Locking Procedure	OHIO RIVER	
9180	2.	IMMEDIATELY	Dashields Lock and Dam Ohio River Mile 13.3, Primary Chamber - Revised Locking Procedure -	OHIO RIVER	*
9160		IMMEDIATELY	OLMSTED LOCKS AND DAM NAVIGABLE PASS RESTRICTION OHIO RIVER MILE 964.6	OHIO RIVER	M1-M2 to M6-M7 buoys and map.pdf
9100	2	IMMEDIATELY	NAVIGATION RESTRICTION Gulf Intracoastal Waterway (M.C P.A. ALT RTE) Port Allen Lock	GIWW ALTERNATE ROUTE	
9076	9051-1	IMMEDIATELY	AMENDMENT - Navigation Notice 9051, MVN 18-101 GATE REPAIRS GIWW - Bayou Boeuf Lock	GULF INTRACOASTAL WW - WHL	
<u>8995</u>	-	IMMEDIATELY	NAVIGATION RESTRICTIONS Gulf Intracoastal Waterway Algiers Lock	GULF INTRACOASTAL WATERWAY ALGIERS CANAL	
8987	2	IMMEDIATELY	OPERATIONAL STATUS AND LOCK CLOSINGS ST. MARYS FALLS CANAL	ST. MARYS RIVER	2
8941	8939-1	IMMEDIATELY	AMENDMINET TO NTNI 8939 - Allegheny Lock and Dam 2 is Back in Operation	ALLEGHENY RIVER	
8939	2	IMMEDIATELY	Allegheny Lock and Dam 2 - Out of Operation	ALLEGHENY RIVER	
8894		IMMEDIATELY	Ohio River Mile 31.7, Montgomery Locks and Dam, Auxiliary Chamber Closure	OHIO RIVER	
8491	×	IMMEDIATELY	HIGH RIVER STAGES Mississippi River Baton Rouge to Venice, La	LOWER MISSISSIPPI	
8323		IMMEDIATELY	INTERMITTENT DELAYS Calcasieu River Saltwater Barrier	CALCASIEU RIVER	181
8227	÷	IMMEDIATELY	LOCKING RESTRICTIONS Gulf Intracoastal Waterway Calcasieu Lock	GULF INTRACOASTAL WW - WHL	*
8226	2.	IMMEDIATELY	LOCKING PROCEDURES Gulf Intracoastal Waterway Inner Harbor Navigation Canal Lock	GULF INTRACOASTAL WW - EHL	21
8225		IMMEDIATELY	HAZARDOUS EDDY Gulf Intracoastal Waterway Port Allen Lock	GIWW ALTERNATE ROUTE	

Export to CSV

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NOTICE TO NAVIGATION INTERESTS

ALASKA DISTRICT ATTN: CEPOA-DE 2204 3RD STREET JBER AK 99506-1518

HTTP://WWW.POA.USACE.ARMY.MIL/

POC: Michael Tencza

C: Operations Project
Manager
(907) 753-2648

NOTICE NUMBER: 4679-3
LOCAL NUMBER: POA 17-04

WATERWAY: NORTON SOUND

EFFECTIVE: Immediately thru Until Further Notice

AMENDMENT - OBSTRUCTION SURVEY UPDATE Navigation Notice 4679, POA 17-04

OBSTRUCTION
Norton Sound, Nome Harbor, Alaska

- 1. All navigation interests are advised of an obstruction in the outer entrance channel to Nome Harbor. The obstruction was identified during the 2015 maintenance dredging operations and confirmed by multi-beam sonar equipment during a **2017 dredge** survey. The approximate center location of the obstruction is N64° 29' 41.378", W165° 26' 11.939" as referenced in the attached PDF drawing.
- 2. The shoalest depth in the vicinity of the obstruction is <u>-21.9</u> feet mean lower low water. Mariners should exercise caution while navigating this area and report any strikes to Lucas Stotts, Harbornaster (907-304-1906).
- 3. The approximate obstruction location is based on final survey data submitted by <u>Hughes & Associates</u> to the U.S. Army Corps of Engineers, Alaska District. The approximate dimensions of the obstruction are $\underline{4.25}$ feet long by $\underline{3}$ feet wide by $\underline{1}$ feet tall.
- 4. The obstruction was identified as a rock using an underwater camera. Reference the attached PDF drawing.
- 5. The Alaska District will update this notice as soon as additional information becomes available.

Questions regarding this notice may be directed to Michael Tencza, Operations Project Manager (907-753-2648) or Tom Sloan, Chief Geomatics Section (907-753-2658).

//signed//

Julie Anderson, P.E.
Chief, Operations Branch
Engineering and Construction-Operations Division



NAVIGATION POLICY NOTICE

ROCK ISLAND DISTRICT

ATTN: CEMVR-DE CLOCK TOWER BLDG: - RODMAN AVE ROCK ISLAND IL 61299 HTTP://WWW.MVR.USACE.ARMY.MIL/ DATE: 03/13/2018

POC: Darla J. Schertz (309) 794-5366 NOTICE NUMBER: 8570 LOCAL NUMBER: Nav 1-2018 WATERWAY: CHIO RIVER UPPER MISSISSIPPI

EFFECTIVE: Until Superseded

ANNUAL NAVIGATION NOTICE NO. 1-2018 MVD and LRD

Mississippi Valley Division Great Lakes and Ohio River Div

"SEE ATTACHMENT for Complete Document"

INTRODUCTION:

1. As a result of partnering efforts with navigation interests, a consolidated Notice to Navigation Interests has been prepared for the Mississippi and Ohio Rivers and their tributaries. The intent is to provide consistency by replacing current district and division regulations with a joint notice that will be updated annually. The notice is applicable to the St. Paul, Rock Island, Chicago, St. Louis, Louisville, Nashville, Huntington, Pittsburgh, Memphis, Vicksburg, and New Orleans districts.

2. The basic document includes policies of general application to the described areas within the Mississippi Valley and Great Lakes and Ohio River Divisions, while the appendices cite policies applicable to certain rivers or projects. Also included as appendices as an appendix is the Code of Federal Regulations containing the "Blue Book" of navigation regulations prescribed by the Secretary of the Army.

3. Comments on how we may improve this notice may be sent to the U.S. Army Corps of Engineers, Rock Island District, Clock Tower Building, P.O. Box 2004, Rock Island, IL 61204-2004, ATTN: CEMVR-OD-Q (Darla J. Schertz), telephone (309) 794-5366 or email darla.j.schertz@usace.army.mil.

GENERAL:

1. Reference revised Regulations, 33 C.F.R. 207.300, Ohio River, Mississippi River above Cairo, Illinois, and their tributaries; use, administration, and navigation, and 33 C.F.R. 207.800, Collection of navigation statistics. These regulations contain information essential to the navigation of those waters and may be found at Appendix E and Appendix F. Copies of the above regulations may be obtained from lock operators without charge.

2. The following information is furnished in addition to the above-referenced regulations to provide guidance about the procedures, control, and management of the locks on the Mississippi River, Illinois Waterway and Ohio River System. Suggested towboat operations are also included that will enhance safety and reduce damage to Government structures, commercial vessels, and recreational craft.

3. The 2018 Inland Waterways Conference is scheduled to be held at the Hyatt French Quarter, 800 Iberville St, New Orleans, LA 70112 on March 20-21, 2018. For further information see http://www.maritimemeetings.com/inland-waterways-conference.php



Current NTNI Updates



- Internal advancements
 - Migrating to Cloud
 - CAC Enabled log in (one time)
 - One button to publish
- External advancements
 - 508 Compliance
 - Linking to External Data and Partners
 - Exploring an MOU with USCG to reduce duplication of notifications
 - Harmonizing Waterway names

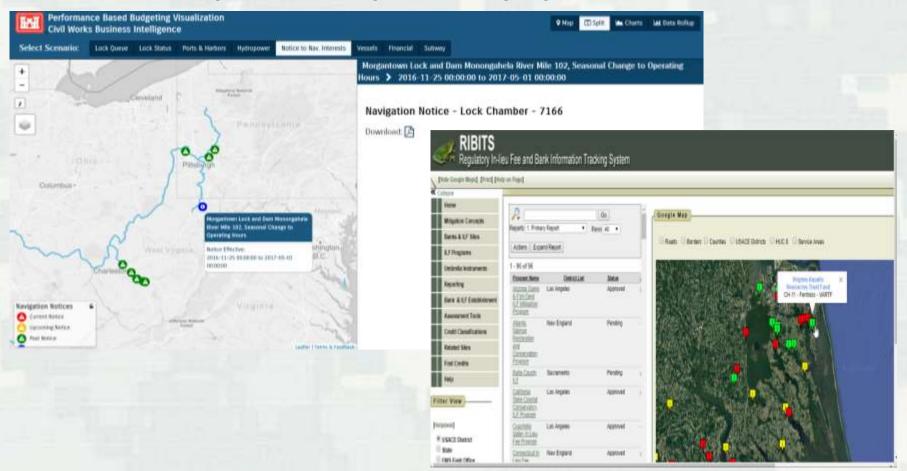


Improvement Ideas Identified



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 Enhancing spatial awareness of notices: allow users to enter points and polygons or select existing facilities along with other geographical names





Improvement Ideas Identified



- Enhanced view and search functionality on the public and internal NTNI site
- Increase number of characters in field codes
- Integration/data exchange with Districts American Forces Public Information Management System (AFPIMS) websites
- Auto-populate draft notices from DIS/LPMS



More Information



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Public NTNI page at:

http://NTNInotices.usace.army.mil

- Email: ceiwr-ndcntni@usace.army.mil
- Forrest.B.Vanderbilt@usace.army.mil



Questions?





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