

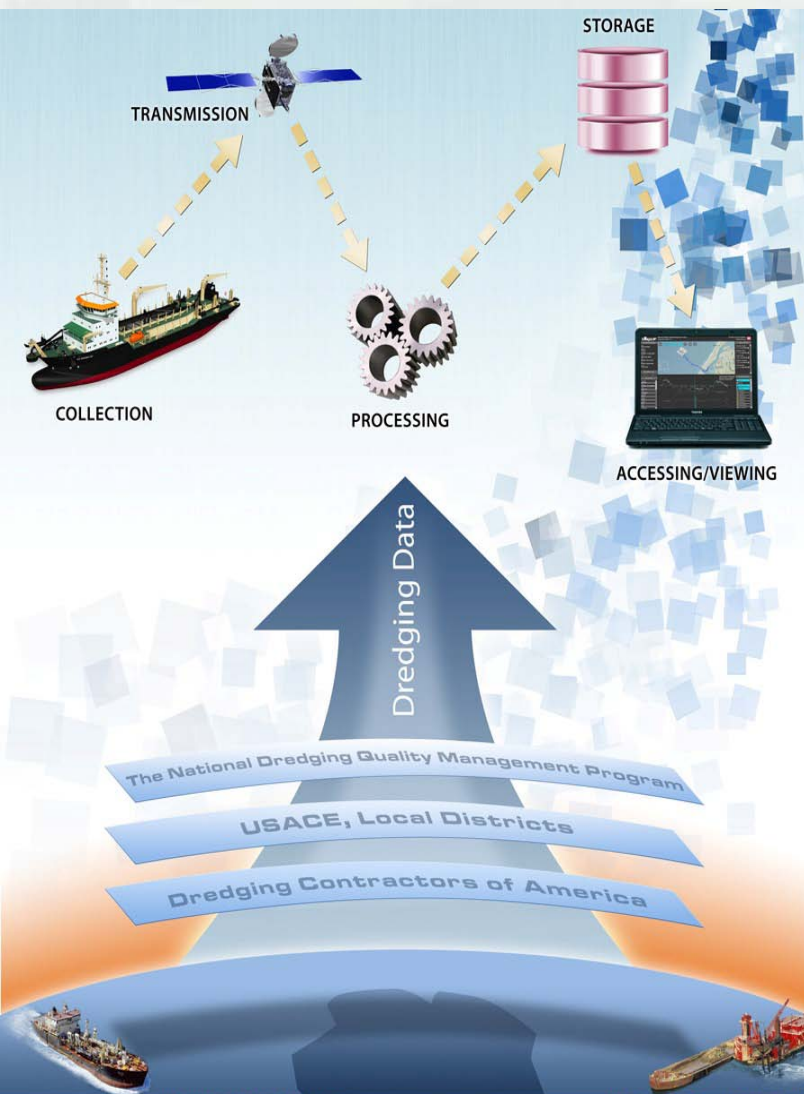
NATIONAL DREDGING QUALITY MANAGEMENT (DQM) PROGRAM

WASHINGTON, DC
JUNE 2012

VERN GWIN
NATIONAL DQM CENTER



NATIONAL DQM 2012 PROGRAM UPDATE



- 2012 Highlights
- New Initiatives
- Program Vision



BUILDING STRONG®

NATIONAL DQM PROGRAM HIGHLIGHTS

- Database Optimization – Spring 2012
- V2.5 Release – June 2012
 - ▶ Cycle Analysis/Dredge State
 - ▶ Multiple Load and Custom Data Export
 - ▶ Multiple Load Disposal Plots
 - ▶ New Hopper On-board Software – Testing June 2012
 - ▶ Dynamic DQM Website – May 2012
 - ▶ Back-up Server
 - ▶ New Parameter Compatibility

V2.5 CYCLE ANALYSIS

DQM Viewer - Windows Internet Explorer
http://dqm-portaltest.usace.army.mil/ National DQM Program

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DQM Viewer

National Dredging Quality Management Program
Online Data Viewer (ver. 2.5.1)

US Army Corps of Engineers
Building Strong

Currently Viewing

Plant
Terrapin Island (Hopper)

Project
Ambrose Channel

Contract
W912DS-09-C-0023 (NAN)

Data
Cycle 10 (ID: 469426)

Start
10/01/2010 20:52:18 GMT

End
10/02/2010 01:43:06 GMT

Points
2835

Prev/Next Cycle

Point Info

Point ID:
9978862

Time:
10/01/2010 21:53:02 GMT

Load Num:
591

Cycle Num:
10

Lat:
40.503545 °

Lng:
-73.94949 °

Heading:
298.5 °

Speed:
7.8 kts

Course:
299 °

Tide:

Layer Opacity

Basemap: Imagery

Basemap: Vector

NOAA Charts

Channel Framework

Disposal Areas

Done

Local intranet | Protected Mode: Off

100%

V2.5 GRAPHING FEATURES

The screenshot displays the DQM Viewer application interface. At the top, the browser window shows the URL <http://dqm-portaltest.usace.army.mil/> and the page title "National DQM Program". The application header includes the "National Dredging Quality Management Program Online Data Viewer (ver. 2.5.1)" logo and the "US Army Corps of Engineers Building Strong" branding.

The main interface is divided into several sections:

- Currently Viewing:** A sidebar on the left lists project details: Plant (Terrapin Island (Hopper)), Project (Ambrose Channel), Contract (W912DS-09-C-0023 (NAN)), Data (Cycle 10 (ID: 469426)), Start (10/01/2010 20:52:18 GMT), End (10/02/2010 01:43:06 GMT), Points (2835), and navigation buttons for "Prev/Next Cycle".
- Map:** The central area shows a satellite map of the Raritan Bay region. Key features labeled include "Raritan Reef Channel", "Atlantic Inlet", "COMFY ISLAND CHANNEL", "East Rockaway Inlet", "Rockaway Reef", "Atlantic Beach Reef", "Raritan Bay Channel", "Raritan Bay, Laurence Harbor, Madison Township", "Raritan Bay and Sandy Hook Bay, Keansburg", "Historic Area, Remediation Site (HARS)", "Sea Bright, Contract 1B", "Sandy Hook Reef", "Sea Bright to Monmouth Beach, Contract 1A", and "Sea Bright to Spring Lake Renourishment Contract 1".
- Layer Opacity:** A sidebar on the right allows users to adjust the opacity of various map layers: Basemap: Imagery, Basemap: Vector, NOAA Charts, Channel Framework, and Disposal Areas.
- Point Info:** A sidebar on the left provides detailed information for a selected point: Point ID: 9978862, Time: 10/01/2010 21:53:02 GMT, Load Num: 591, Cycle Num: 10, Lat: 40.503545°, Lng: -73.94949°, Heading: 298.5°, Speed: 7.8 kts, Course: 299°, and Tide.
- Graphing Interface:** The bottom section displays a graph with multiple data series. A legend on the right, titled "Graph Controls", lists the series: Speed (checked), Course, Displacement, Volume, DraftFore (checked), DraftAft, UllageFore, and UllageAft. Instructions for graph manipulation are provided: "Ctrl-Click to select a single graph", "Click-and-Drag to move graphs", and "Shift-Drag to stretch graphs".

The status bar at the bottom indicates "Done" and "Local intranet | Protected Mode: Off" with a zoom level of 100%.

V2.5 DETAILED DISPOSAL

DQM Viewer - Windows Internet Explorer
http://dqm-portaltest.usace.army.mil/ National DQM Program

File Edit View Favorites Tools Help

DQM Viewer

National Dredging Quality Management Program
Online Data Viewer (ver. 2.5.1)

US Army Corps of Engineers
Building Strong

Currently Viewing

Plant: Terrapin Island (Hopper)
Project: Ambrose Channel
Contract: W912DS-09-C-0023 (NAN)
Data Cycle 10 (ID: 469426)
Start: 10/01/2010 20:52:18 GMT
End: 10/02/2010 01:43:06 GMT
Points: 2835

Prev/Next Cycle
<< >>

Point Info

933	934	935	936	939	940	941	942	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961			
964	965	966		971	972	973	974	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992				
995	996	997		1002	1003	1004		1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023				
1026	1027	1028						1039	1040		1042	1043	1044	1045	1046	1047	1048	1049	1050		1052	1053	1054					
1057	1058	1059						1071						1077	1078	1079		1081	1082	1083	1084							
1088	1089	1090						1102						1108	1110		1112	1113	1114	1115	1116							
1118		1121	1122					1133						1135	1136		1138	1139	1140	1141	1142	1143	1144	1145	1146	1147		
1150		1152	1153											1167		1169	1170	1171	1172		1174	1175	1176	1177	1178			
1181	1182													1199	1200	1201	1202	1203		1205	1206	1207	1208	1209				
1212	1213													1230	1231	1232	1233	1234			1237	1238	1239	1240				
1243	1244	1245	1246	1247														1264	1265	1266		1268	1269	1270	1271			
1274	1275	1276		1278	1279	1280		1284	1285	1286	1287		1290	1291			1295	1296	1297	1298	1299	1300	1301					
1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333
1336	1337	1338	1339	1340	1341	1342		1344	1346		1348	1349	1350		1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	
1367	1368	1369	1370	1371	1372			1375	1377		1379				1383	1384	1385	1386	1387	1388	1389		1391	1392	1393	1394	1395	

Map data not yet available

Mud Dump

Layer Opacity

- Basemap: Imagery
- Basemap: Vector
- NOAA Charts
- Channel Framework
- Disposal Areas

Local intranet | Protected Mode: Off | 100%

NEW DQM WEBSITE

Welcome » National Dredging Quality Management Program « US Army Corps of Engineers - Windows Internet Explorer

http://dqm.usace.army.mil/

File Edit View Favorites Tools Help

DQM Viewer Welcome » National Dr...

Home About Us Certifications/Inspections Dredging Status Specifications Tools Education

DQM Home

About DQM

- About DQM Home
- Benefits
- Authorization
- Roles/Responsibilities
- Contact Us/Support Center

Reference Links

- [Support Center](#)
- Have a problem or question, contact our DQM Support Center
- [How to Set-Up a Project](#)
- Instructions on how to begin a new DQM project...

National Dredging Quality Management Program

The DQM Program is a Corps-Dredging Industry partnership for automated dredging monitoring of Corps dredging projects. Onboard sensors monitor dredge activities, operations and efficiency. Data is routed to the DQM Support Center for data retrieval and storage. Districts may utilize Corps-provided software to prepare summary reports, plots or spreadsheet compilations of dredge operations. In addition to assisting dredge inspectors for monitoring performance, the data can be used to improve business practice, ensure environmental compliance, provide dredging information and data to support the National Dredging Mission, and increase our understanding of dredging science and technology.



Training

Manuals, software guidance and training plans/schedules for data collection, analysis and more

[Go Now](#)

DQM Viewer 2.0

Interactive Silverlight application for selecting dredging projects, graphing load data, etc.

[Go Now](#)

Support Center

Do you have questions, concerns or comments or need help from the support center?

[Go Now](#)

New Project Set-up

Do you need information on how to setup a new

[Go Now](#)

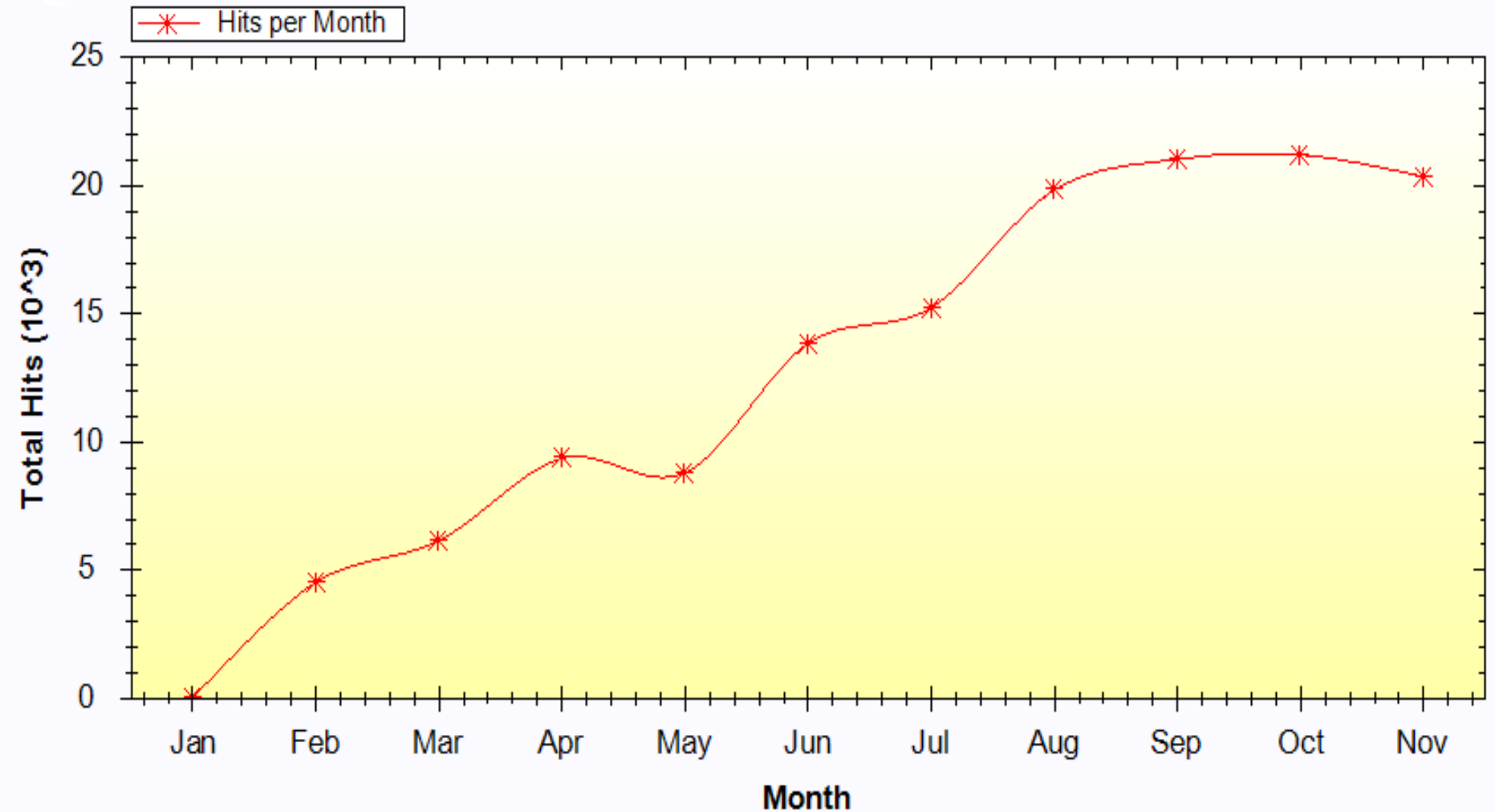
Local intranet | Protected Mode: Off 100%

Done

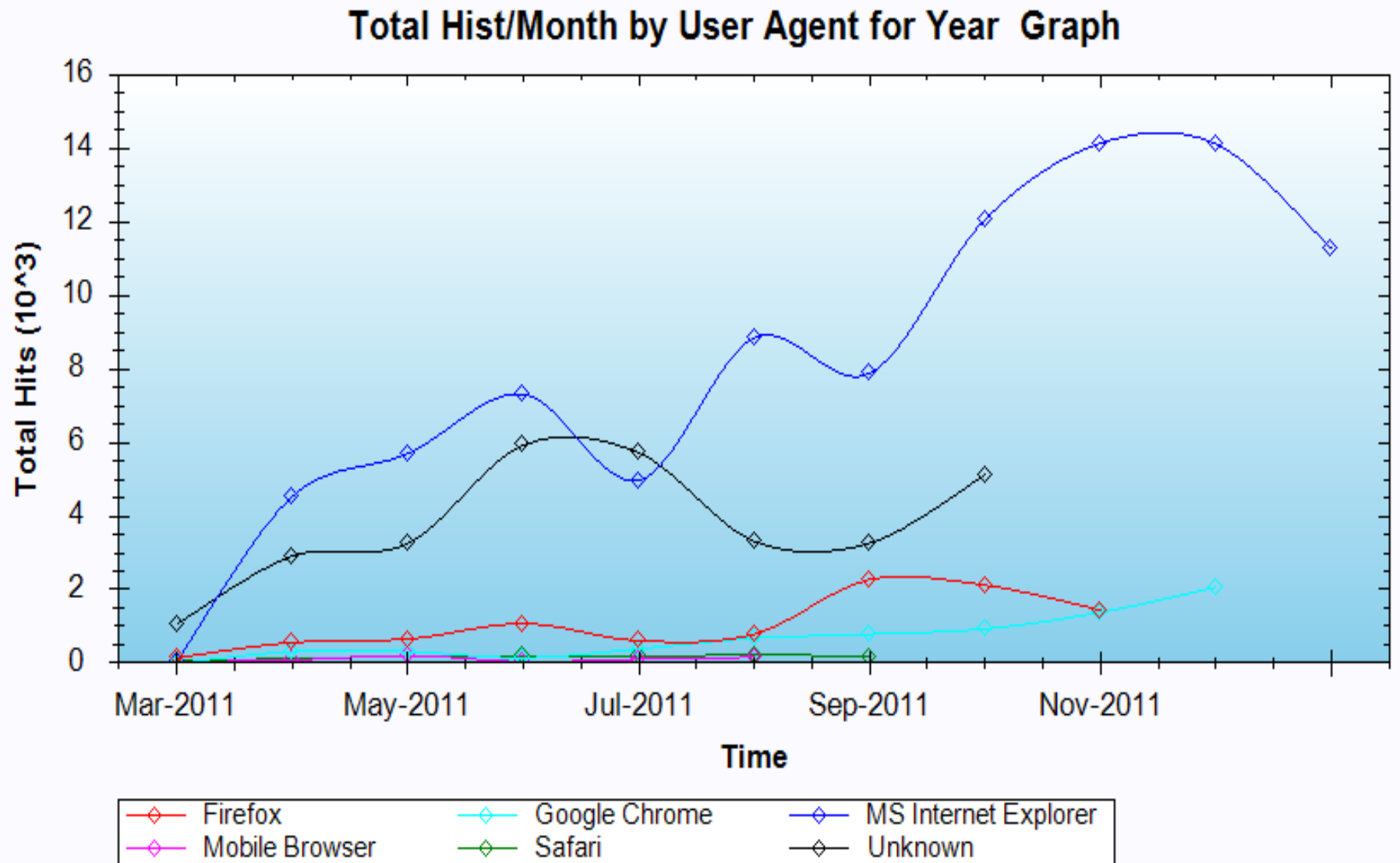
1:20 PM 5/30/2012

New DQM Website Hits

Total Hist per Month Graph



Hits by browser type...



NEW INITIATIVES FY 12

- Cutterhead Monitoring Initial PDT Meeting
 - ▶ Initial PDT Meeting – National Coordination
 - ▶ Implementation Plan
 - ▶ Coordination with Industry
- Password Access and Automated Email Alerts
- Near Real-Time Data for Scows



NATIONAL DQM PROGRAM

ALL-REMOTE VISION



ALL-MOBILE ACCESS



Hopper



Scow



Pipeline



Mechanical



Project Setup



Alerts



Contacts



Plants/
Plant Limits



MATLAB/ACS
Components



GIS



Support
Management



Plant
Write Boards

New Strategic Navigation Initiative

- **Integrates efforts on... Dredging & Inland Waterways to Start...**

- Dredging Quality Management (DQM)
 - Resident Management System (RMS)
 - Dredging Information System (DIS)
 - Dredging Histories (DH), etc

- River Information Services (RIS)
 - Lock Operations Management Application (LOMA)
 - IWR Multi-modal Effort, etc

- **To maximize interoperability**

- **Improve one time data entry**

- **Facilitate Business Line Decisions and Work Flow**



Benefits

- **Common Access**
- **Decreased Time and Effort**
- **Reduced Duplication of Data Entry**
- **Data Consistency**
- **Data Purpose**
- **Data Availability**
- **Data Timeliness**
- **Data Format**
- **User Friendly**
- **Increased Participation**



Project Overview

- **Phase I** – Development of a Dredging Portal “front end” to the dredging databases—DH, DIS, DQM, and RMS— their connection to the portal, and each other, and the portal’s connection to the District’s Navigation and Coastal Data Banks
 - Database Schema Review Meeting(s) – June
 - Reverse Engineer a completed dredging project – July
 - Dredging Portal Specifications – August/September
- **Phase 2** – Inland Waterways
- **Subsequent Phases** – Additional datasets, tools, and applications



Proof of Concept

Mobile Dredging Schedule App:

Portal for ArcGIS - DIS Planned Dredging Areas - Windows Internet Explorer

https://geoplatform.usace.army.mil/home.html?id=936fe794442eb651be6d17abd2ae5

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Search

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Free HTML

Portal for ArcGIS - DIS Planned Dredging Areas

Resource Center Show: Web Content Only Help Sign In

ArcGIS Portal GALLERY MAP GROUPS MY CONTENT Find maps, applications and more...

DIS Planned Dredging Areas

Planned Dredging Areas / Current Vessel Locations
Web Map by cesam (last modified: May 22, 2012)
☆☆☆☆ (0 ratings, 40 views)
Sign In to rate this item.

Open

Description

This webmap is a proof of concept web-based application, identifies near real-time dredge vessel locations. The data is from the Dredge Quality Management (DQM) database. It also identifies planned dredging projects for channels in the Mobile, AL, area. The data from this service originates from the Dredging Information System (DIS) and was downloaded from <http://www.ndciwr.usace.army.mil/dredge/dredge.htm>, which was last updated on 4/16/2012. Created by: Marie Crum, Date Created: May 7, 2012, Deletion Date: May 30, 2012.

Access and Use Constraints

The data herein, including but not limited to geographic data, tabular data, analytical data, electronic data structures or files, are provided "as is" without warranty of any kind, either expressed or implied, or statutory, including, but not limited to, the implied warranties or merchantability and fitness for a particular purpose. The entire risk as to the quality and performance of the data is assumed by the user. No guarantee of accuracy is granted, nor is any responsibility for reliance thereon assumed. In no event shall the U.S. Army Corps of Engineers, Mobile District Office, [Spatial Data Branch](#) be liable for direct, indirect, incidental, consequential or special damages of any kind, including, but not limited to, loss of anticipated profits or benefits arising out of use of or reliance on the data. The Spatial Data Branch does not accept liability for any damages or misrepresentation caused by inaccuracies in the data or as a result of changes to the data caused by system transfers or other transformations or conversions, nor is there responsibility assumed to maintain the data in any manner or form.

These data have been developed from the best available sources. Although efforts have been made to ensure that the data are accurate and reliable, errors and variable conditions originating from physical sources used to develop the data may be reflected in the data supplied. Users must be aware of these conditions and bear responsibility for the appropriate use of the information with respect to possible errors, scale, resolution, rectification, positional accuracy, development methodology, time period, environmental and climatic conditions and other circumstances specific to these data. The user is responsible for understanding the accuracy limitations of the data provided herein. The burden for determining fitness for use lies entirely with the user. The user should refer to the

Comments (0)

Sign In to add a comment.

Done

Local intranet 100% 12:40 PM

start Inboxes - Microsoft Outlook... DIS Planned Projects... Desktop\November 2011... DIF_IOM_2012... Microsoft PowerPoint... Portal for ArcGIS - 01...

ArcGIS Explorer Online - Windows Internet Explorer

http://geoplatform.usace.army.mil/explorer/?open=93befe47044842e6a51be6d1fabd2ae5

File Edit View Favorites Tools Help

Search

ArcGIS Explorer Online

DIS Planned Dredging Areas

Mapping Presentation

Home Details Share

Find Places

Map Legend

- Planned_Dredge_Projects
 - Planned_Dredging_Sites
 - Hopper
 - Pipeline
 - Channels Planned Dredging
 - Hopper
 - Pipeline
- VESSEL_LOCATIONS
 - Hopper
 - Scow
- National_Channel_Framework
 - National Channel framework
 - Center Anchorage Quarter Line
 - Center Turning Basin Quarter Line
 - Center Widener Quarter Line
 - Common Anchorage Line
 - Common Quarter Line
 - Common Turning Basin Line
 - Common Widener Line
 - Construction Centerline
 - Design Station Line
 - Historic Station Line
 - Left Anchorage Quarter Line
 - Left Quarter Line
 - Left TOE Line
 - Left Top of Slope Line
 - Left Turning Basin Quarter Line
 - Left Widener Quarter Line
 - Right Anchorage Quarter Line
 - Right Quarter Line
 - Right TOE Line
 - Right Top of Slope Line

10/10/2011 1/8/2013

Loop playback

POWERED BY esri

Sources: Esri, Fcubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Done

start

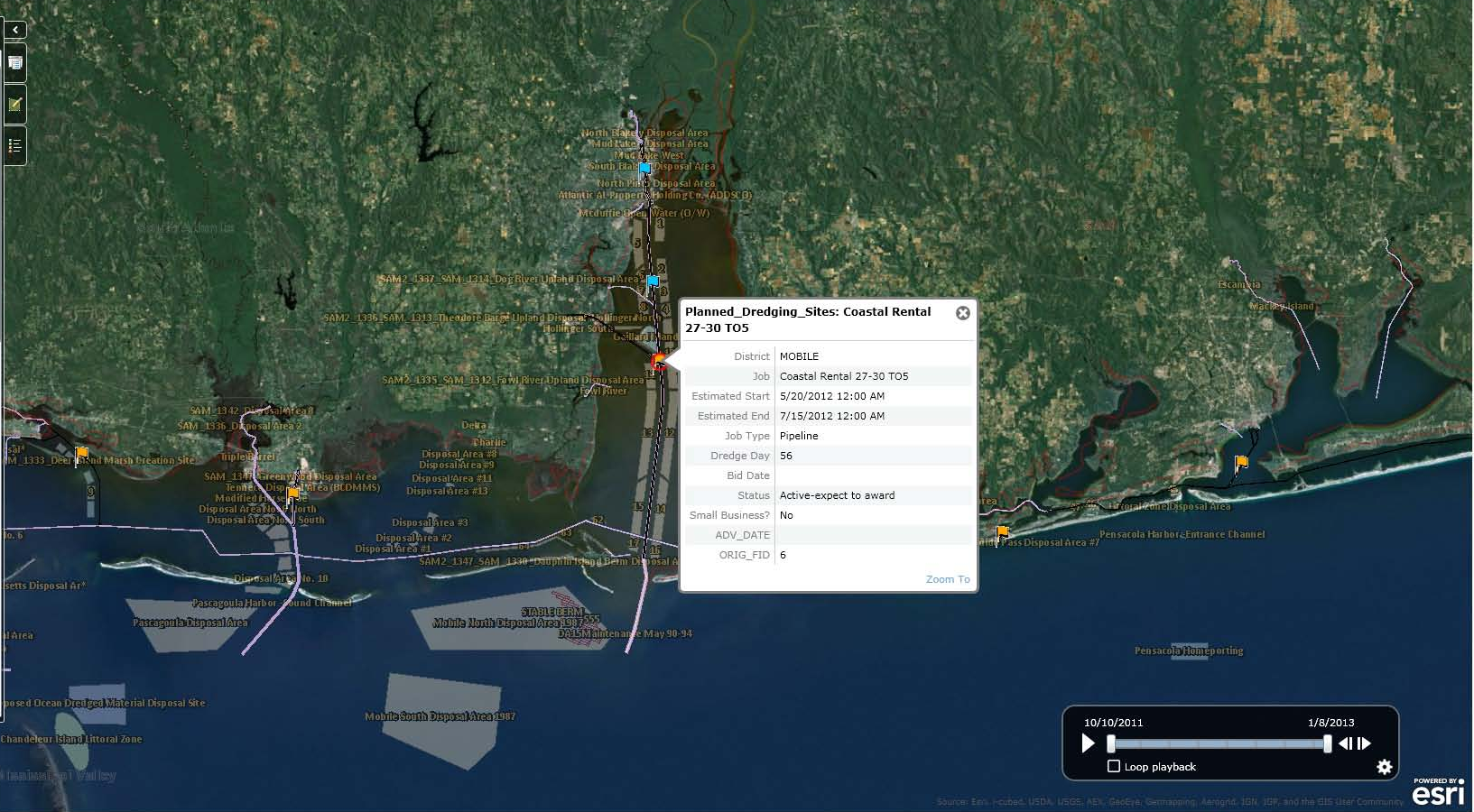
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Map Legend

- Planned_Dredge_Projects
 - Planned_Dredging_Sites
 - Hopper
 - Pipeline
 - Channels Planned Dredging
 - Hopper
 - Pipeline
- VESSEL_LOCATIONS
 - Hopper
 - Scow
- National_Channel_Framework
 - National Channel framework
 - Center Anchorage Quarter Line
 - Center Turning Basin Quarter Line
 - Center Widener Quarter Line
 - Common Anchorage Line
 - Common Quarter Line
 - Common Turning Basin Line
 - Common Widener Line
 - Construction Centerline
 - Design Station Line
 - Historic Station Line
 - Left Anchorage Quarter Line
 - Left Quarter Line
 - Left TOE Line
 - Left Top of Slope Line
 - Left Turning Basin Quarter Line
 - Left Widener Quarter Line
 - Right Anchorage Quarter Line
 - Right Quarter Line
 - Right TOE Line
 - Right Top of Slope Line



Planned_Dredging_Sites: Coastal Rental 27-30 TO5

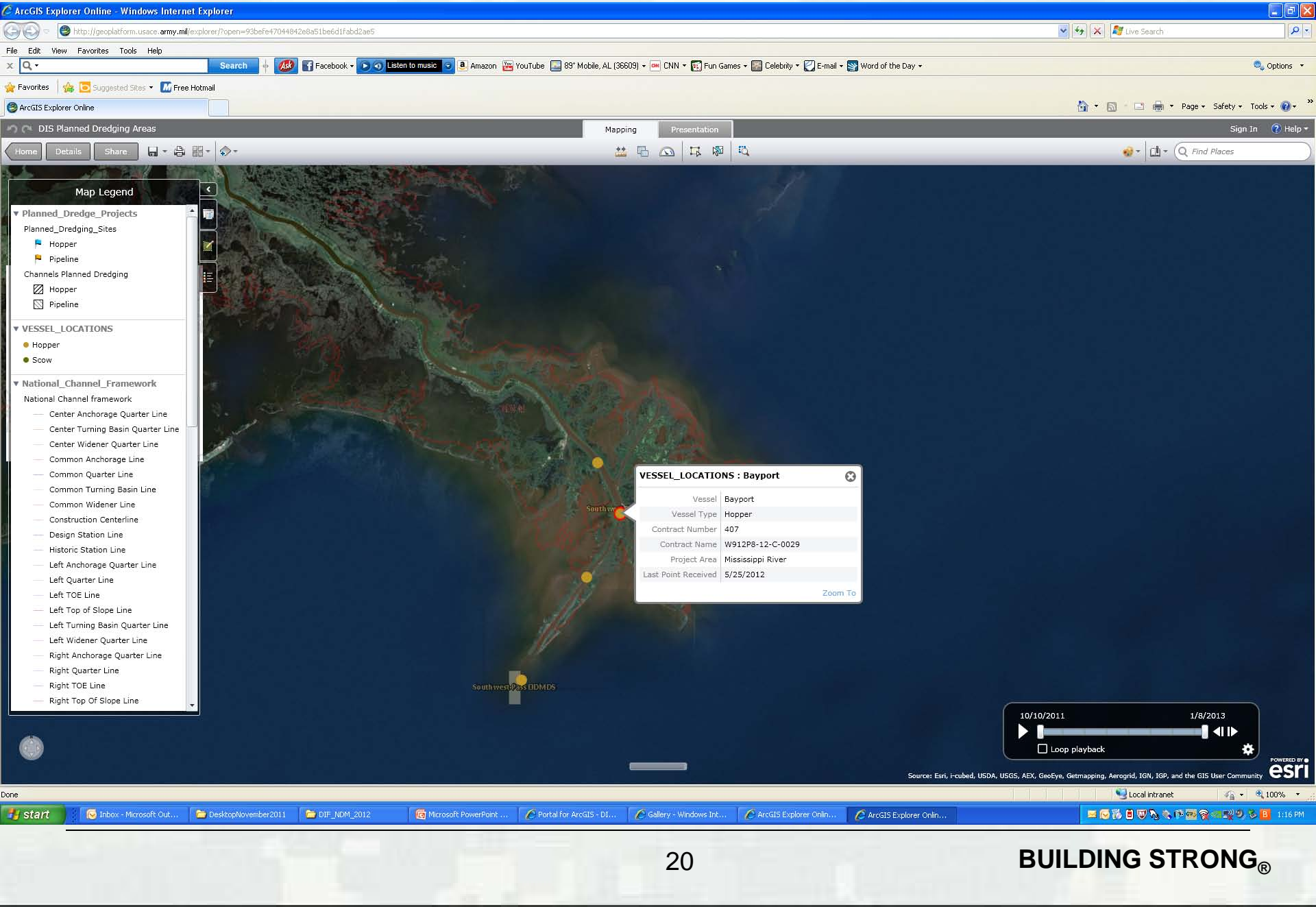
District	MOBILE
Job	Coastal Rental 27-30 TO5
Estimated Start	5/20/2012 12:00 AM
Estimated End	7/15/2012 12:00 AM
Job Type	Pipeline
Dredge Day	56
Bid Date	
Status	Active-expect to award
Small Business?	No
ADV_DATE	
ORIG_FID	6

[Zoom To](#)

10/10/2011 1/8/2013

Loop playback

POWERED BY **esri**





THE NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM

The DQM Program is a partnership between the Corps and the dredging industry for automated monitoring of dredge activities.

Onboard sensors provide near-real-time data that allows for immediate response to emerging situations.

Districts can use the web-based DQM software to view, analyze, report on, and export dredging data.

The data can be used to improve business practice, ensure environmental compliance, and increase our understanding of dredging science and technology.



Question/Comments?



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