WEDA Midwest Chapter

National DQM Briefing

March 24, 2016

National DQM Center

Presentation Outline

- Program Status/ Advancements

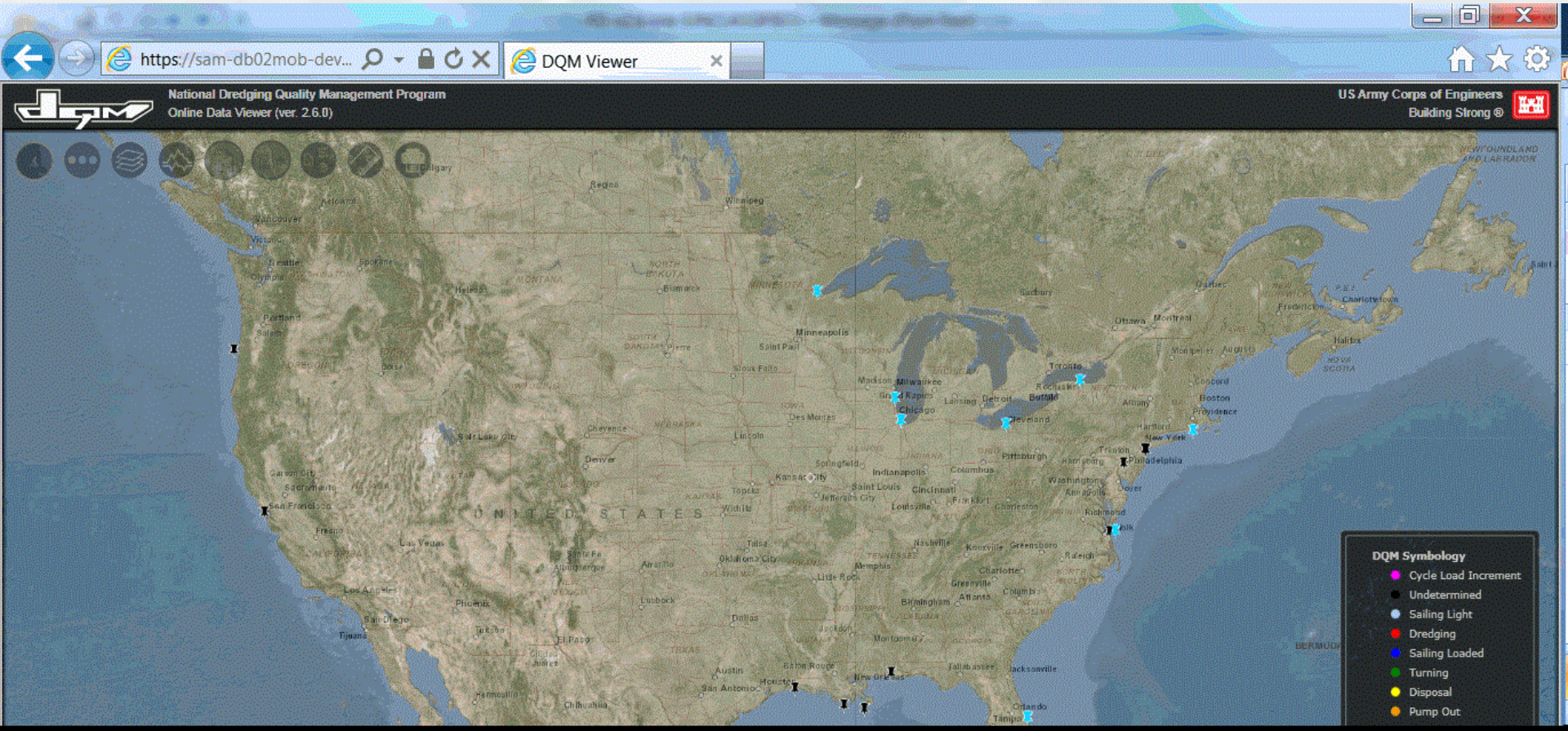
- Future Objectives

Program Status

Since Last Year….

- V2.8 and V2.9 was released
- New Security Access
- Pipeline Monitoring
- Automated Ullage Implementation
- ODESS Program

New V2.9 DQM Viewer



Security Requirements

- AS2 Requirements for Data Web Services
  - Data Transmittal
  - User Access
- Security Matrix Roles and Access
  - Password Access

Pipeline Implementation

- Head Quarters Implementation Guidance April 2014
- USACE Dredging Plants in Summer 2014
- Meeting with Industry in February 2015
  - Two Specs 1) Compliance 2) Production
  - Pilot Project on Industry Dredge
  - Comments

National Dredging Quality Management Program (DQM)

Pipeline Data Flow
Sensor-Based Parameters
(per Compliance Specification)

Pump Sensors
- Pump Vac
- Pump Press
- Density
- Velocity

Position Sensors
- Position
- Heading
- Vert Correction (Tide)
- CH Depth

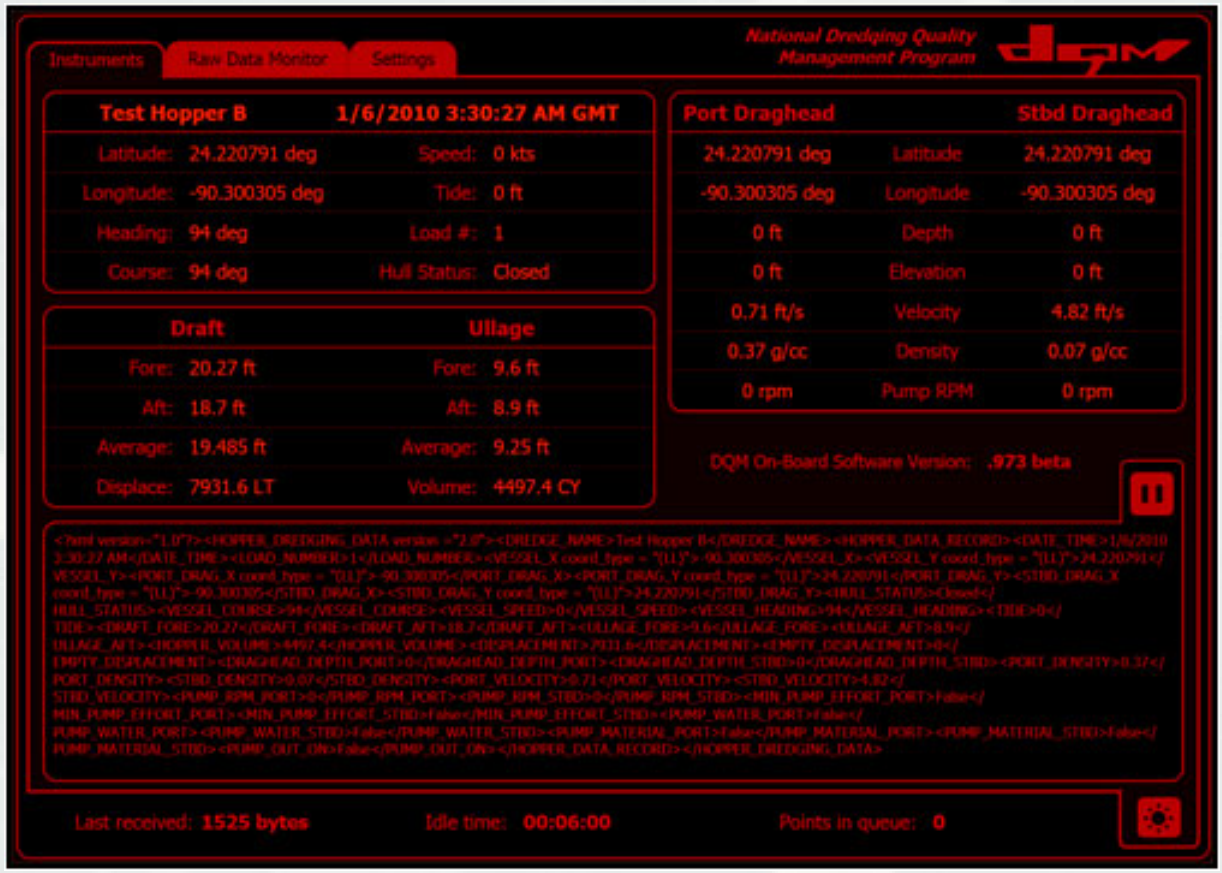
Discharge Sensors
(radio link)
- Discharge Position
- Discharge Elevation
- Discharge Heading

Notes

***Dredge Positioning Computer**—Data is compiled and converted to JSON format

****DQM Onboard Computer**—Minimum Specifications
CPU: Intel/AMD processor; 3 GHz (non-overclocked) clock speed
Hard Disk: 250 GB; internal
RAM: 2 GB
Ethernet Adapter: 10/100 Mbps internal network card; RJ-45 connector
Video Adapter: Supports 1024x768 resolution at 16-bit color depth
Monitor: 17" viewable display; supports 1024x768 resolution at 16-bit color depth
Keyboard: Standard 101-key
Mouse: Standard 2-button
CD-ROM Drive: 16X read speed/8X write speed
Ports: 2 free serial ports (standard 9-pin connectors); 1 free USB port
Cables: Cat-5 cable; standard RJ-45 plugs connecting the network adapter to the network hub; 1 spare cable
Software: Windows 7 Professional (fully licensed); any necessary manufacturer-provided drivers for the installed hardware

DQM On-Board Software (DQMOBS)



Currently Viewing

Plant	Bill Holman
Type	Pipeline
Project	Project_Test_Bill_Holman
Contract	CONTRACT_TEST_BILL_...
Start Date	05/30/2012
End Date	11/02/2015

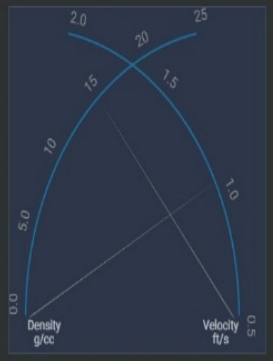
PREV NEXT

Selected Point

ADVANCE_DAILY	null
ADVANCE_HOURLY	null
ADVANCE_TOTAL	null
CH_DEPTH	-12.29
CH_HEADING	268.60
CH_LATITUDE	37.072012
CH_LONGITUDE	-88.564571
CH_RATE	null
CH_RPM	200.21
CH_SWING	null
MSG_BUNDLE_ID	916206
MSG_STATUS_ID	undefined
MSG_DATE	05/30/2012
MSG_TIME	11:27:06
OUTFALL_ELEVATION	null
OUTFALL_HEADING	-19.90
OUTFALL_LATITUDE	37.074674
OUTFALL_LONGITUDE	-88.562046
PROD_CUMULATIVE	1074.30
PROD_INSTANTANEOUS	11.30
PROD_INTEGRATED	null
SLURRY_DENSITY	1.02
SLURRY_VELOCITY	15.48
SURVEY_DEPTH	null
SWING_CABLE_PSI_PORT	0
SWING_CABLE_PSI_STBD	141.72
TARGET_DEPTH	null
VERT_CORRECTION	302

Dredge Status

Pipe Length	[Insufficient Data]
Boosters	[WIP][Insufficient Data]
Effective Time	[Insufficient Data]
Non-effective Time	[Insufficient Data]



NATIONAL DREDGING QUALITY MANAGEMENT

DQM

DESS

Operations & Dredging Endangered Species System

Overview

- Currently in a 2 year, 3-Phased Development
- Phase 1 Release, FY14 (est.)
- T&E Species Data Collection and Decision Making Tool in support of Operations and Dredging, starting with sea turtles
- Design will incorporate latest web and database technologies
- Streamline T&E species data collection, processing, and reporting

BUILDING STRONG®

DIF Integration

- DIS, RMS, DQM and DM
- Database Integration
- DQM QA Verification
- Reports Generation
- Automated Population
- Reduction in project set-up, paperless, centralized source

New DQM Portal

Question/Comments?

NATIONAL DREDGING QUALITY MANAGEMENT

DQM

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.

http://dqm.usace.army.mil

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