

LOCK PERFORMANCE MONITORING SYSTEM (LPMS) UPDATE

Inland Waterways Users Board
Meeting No. 98
December 1, 2022

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Civil Works and Data Analysis and
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US Army Corps
of Engineers®





AGENDA



LPMS BACKGROUND

LPMS 1.0

LPMS 2.0

LPMS Public Sites



LPMS BACKGROUND



History:

- Rivers and Harbors Act, 1922
- Water Resources Development Act of 1986
- Recognition of need to track the US Transportation System, 1970s
- Creation of LPMS
- Evolution of LPMS

Today:

- Data used to inform:
 - USACE Planning Studies
 - Ranking of projects
 - Budget development (tonnage)
 - Reports to OMB (availability of locks)
 - Directing other agency resources

PURPOSE

Data System used to collect and report data on vessels as they traverse through Corps-owned/operated locks



LPMS 1.0 – INTERNAL DATA ENTRY



LPMS - PENDING ARRIVALS

User ID: Q0IWRSDR
KEYSTONE LOCK

Lock: 31

Timezone: CDT

Last Refresh Date: 10/16/2018

AIS Vessels DownBound (as of 10/16/2018 22:48 CDT): 0 Vessels-Down-Bound

Seq	* Name Origin/Dest	Length	Width	* Arrival (HH24MI)	Haz Incl
1	RV ALGIERS (REC)	50	30	03/08/2016 1739	<input type="checkbox"/> <input type="checkbox"/> Flotilla
2	AUSTIN GOLDING	100	50	03/08/2016 0826	<input type="checkbox"/> <input type="checkbox"/> Flotilla
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> <input type="checkbox"/> lov

Save Operations Reset

AIS Vessels UpBound (as of 10/16/2018 22:48 CDT): 0 Vessels-Up-Bound

Seq	* Name Origin/Dest	Length	Width	* Arrival (HH24MI)	Haz Incl
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> <input type="checkbox"/> lov

Save Operations Reset

LPMS - Operations Main Screen

User ID: Q0IWRSDR

Lock: 31 OPS ID: 7329489 Previous End of Lockage: 11/11/2016 14:30
Downbound - Override = NO (Change to [YES](#))

Timezone: CDT

Today's Date: 06/14/2017

OPS ID: 7661354

* Chamber No: * Direction: Multi Vessel: Yes No Boats: Light Rec

[Lockage Comments](#) [Stall Stoppages](#) [Signal and Departure](#)

Traffic Information

(1 - [Get AIS Times](#)) * Vessel Name: * Lockage Type: Flotilla #: [Multi-Cut](#) Arrival Date (MM/DD/YYYY HH24MI): SOL Date:

Bow Over Sill: End of Entry: Start of Exit: EOL Date: Nbr Cmrcd Passgrs:

Vessel Function Type: Origin: Destination:

Done Partial Save Another Vessel Add Vessel Assist Delete Help



LPMS 2.0 – OPERATIONS SCREEN



Lock Performance Monitoring System (LPMS) User: Schafer, Alexandra L Log Out

Home Lock Selection Arrivals **Operations** Stall Stoppage Edit Screens Reports Help Administration

Operations

Lock **B2 BT 31 - Keystone Lock** Time Zone **CST** << Arrivals

OPS ID: 119048475 (Chamber 1 Upbound) Chmbr Status: **OPEN** Chmbr Type: **MAIN** EOL Override: No

* Light Boats: 1 * Rec Boats: 0

Assisting Vessels (0)

Previous EOL: 10/27/2022 1904 OPS ID: 119047451 (Downbound)

Locked Traffic Barges and Commodities **Data Validation Checks**

Edit	Vessel Name	Lockage Type	Flotilla No	Mech	BOS	EOE	SOE	EOL	Mech Assist	Num Psgrs	Edit Cut
	C SMITH		[Add Flotilla]		09/28/2022 0000	09/28/2022 0000	09/28/2022 0000				

1 rows selected Total 1

+ Help

Built in error checks

Data Validation Checks

Increased Data Validation



LPMS 2.0 – QA REPORTS

Check these daily!



Lock Performance Monitoring System (LPMS)

User: Schafer, Alexandra L Log Out

- Home
- Lock Selection
- Arrivals
- Stall Stoppage
- Hydrology
- Edit Screens
- Reports**
- Help
- Administration

QA Reports - Detail

QA Report Parameters

* EROC

River

Lock

* Start Date (MM/DD/YYYY)

* End Date (MM/DD/YYYY)

Nav Notices Within Days Old

Run

Select Report(s):

① Selecting more reports results in a longer runtime to complete

Check/Uncheck All

- Check Flotillas
- Check Barges
- Check Stalls
- Traffic Analysis
- Check Times
- Missing Traffic
- Overlapping Lockages
- Missing Stall Stoppages

- Show All
- Check Flotillas
- Check Barges
- Check Stalls
- Traffic Analysis
- Check Times
- Missing Traffic
- Overlapping Lockages
- Missing Stall Stoppages

Check Flotillas



CORPS LOCKS 1.0



US Army Corps of Engineers

Lock Performance Monitoring System

LPMS Public Web - Home

Welcome to Corps Locks!

The Corps Locks website contains lock and vessel specific information derived from the United States Army Corps of Engineers Lock Performance Monitoring System (LPMS). The information contained here represents an every 15-minute updated snapshot of Freedom of Information Act (FOIA) data on U.S. flag vessels and foreign vessels operating in U.S. waterways that transited a Corps-owned or operated lock structure. Detailed information on specific companies or commodities is considered privileged and is not included in the Corps Locks website.

[Find a Vessel](#)

[Lock Queue Report](#)

[Lock Flotilla Report](#)

[Lock Status Report](#)

[Tonnage Report](#)

[Data Web Services](#)

[River at a Glance](#)

[Glossary](#)

[Commodity Codes](#)

Notifications

12/10/2018: Corps Locks was updated to be 508 compliant.

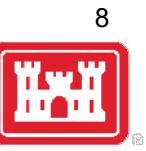
01/17/2017: A new report, additional clarification of terms, and calculation corrections have been deployed.

10/04/2016: Average Delay calculations now include vessels in queue.



Corps Locks 2.0 - Public Site

Available Now!



<https://ndc.ops.usace.army.mil/ords/f?p=108:1>

Live Updates!



US Army Corps of Engineers Lock Performance Monitoring System

corps locks

- Home
- Web Services
- Glossary



Corps Locks - Home

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Select a Report

- Find a Vessel
- Lock Status Report
- River at a Glance

- Lock Queue Report
- Tonnage Report
- Glossary

- Lock Flotilla Report
- Data Web Services
- Commodity Codes



LPMS - PUBLIC NDC SITE

Available Now!



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

- **Access to reports, no edit rights to the user.**
 - Prepopulated from data entries via USACE internal version.
 - Information is downloadable (.xlsx and .PDF formats)

**Key Lock Report
(monthly)**

**Lock Statistics by River
(annual)**

**Lock Statistics by
District/Division
(annual)**

**Public Lock Commodity
Report (annual)**

**Public Lock Usage
Report (annual)**

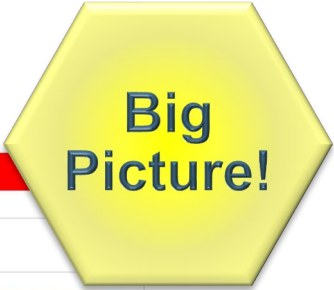
**Public Lock
Unavailability Report
(annual)**



WATERBORNE COMMERCE STATISTICS CENTER



<https://www.iwr.usace.army.mil/About/Technical-Centers/WCSC-Waterborne-Commerce-Statistics-Center-2/>



- WCSC
- Vessel Characteristics
- Navigation Infrastructure and GIS
- Commerce Data
- Foreign Data
- NDC



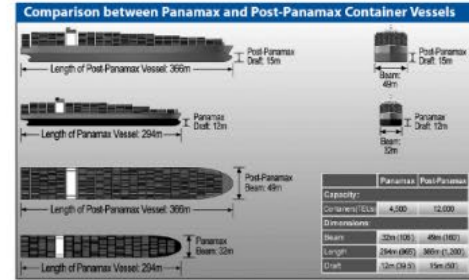
Vessel Characteristics



Navigation Infrastructure and GIS



Commerce Data



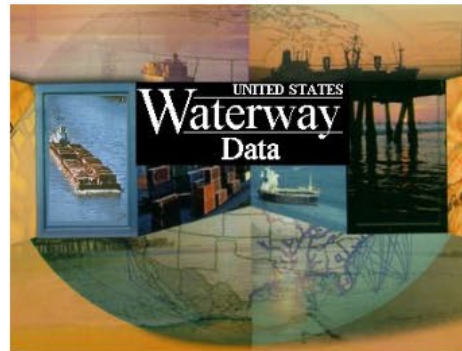
Foreign Data



Ports and States Data



Fact Cards



Origin/Destination Data



Container Traffic



LPMS ACTIONS



Upcoming Changes:

- Offline LPMS data entry
- Enhanced Data Services across NDC's suite of Navigation systems
- Robust Reporting across NDC's suite of Navigation systems



QUESTIONS, COMMENTS, OR FEEDBACK?

LPMS Mailbox: CEIWR-NDC.LPMS@usace.army.mil

LPMS Data Entry (To request access, email the LPMS Mailbox):

<https://ndc-navapps.ops.usace.army.mil/ords/f?p=10000:110>

Corps Locks:

<https://ndc.ops.usace.army.mil/ords/f?p=108:1>