

US ARMY CORPS OF ENGINEERS ROCK ISLAND DISTRICT

Illinois Waterway Navigation System Maintenance

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Presentation to the
Waterways Council Symposium



US Army Corps
of Engineers®



FLASHBACK – LAGRANGE LOCK

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- Unsafe conditions for both Towing Industry and Lock personnel
- Steeply decreasing reliability of service
- Delays in restoring service after flooding conditions



The Nation's "Poster Child" for decaying infrastructure



ILLINOIS WATERWAY 2020 – THE PLAN



- Upgrade and improve infrastructure on the Illinois Waterway while minimizing the impact on industry
- Consolidate full closures into the same year, rather than closing one or two locks each year
- Work at 6 sites concurrently, with 4 Locks requiring dewatering
- Onsite work to take place during a summer closure/restriction period
 - Mostly July through October to avoid historical spring flooding seasons and fall harvest seasons



ILLINOIS WATERWAY – 2020 EXECUTION



- LaGrange Lock and Dam – Major Rehab/Major Maintenance
 - MR using C/IWTF funding, MM using O&M funding
 - Full closure 01 Jul – 30 Oct 2020 (up to 120 days)
 - Construction contract awarded in November 2018
 - Significant repairs to crumbling concrete, steel structures within the lock chamber, replacement of lock machinery, etc.
 - **Reopened to Navigation on 13 OCT 2020**
- Peoria Lock and Dam - Dewatering
 - Full closure 06 Jul – 30 Sep 2020 (87 days)
 - Dewatering of lock chamber for maintenance, repairs and inspection
 - Work done by in-house USACE maintenance teams
 - **Reopened to Navigation 30 SEP 2020**



2020 PLANNED RESTRICTIONS/CLOSURES

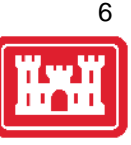


- Starved Rock Lock and Dam – Upper & Lower Miter Gate Installation
 - Full closure 01 July - 29 Oct 2020 (120 days)
 - Construction contract awarded in September 2019
 - Dewatering of lock chamber to replace/modify the miter gate sills and anchorages to accommodate new vertically framed Miter Gates, maintenance, inspections

- Marseilles Lock and Dam – Upper Miter Gate Installation
 - Full closure 01 July - 29 Oct 2020 (120 days)
 - Construction contract awarded in September 2019
 - Dewatering of lock chamber to replace/modify the miter gate sill and anchorages to accommodate new vertically framed Miter Gates, maintenance, & inspections



2020 PLANNED RESTRICTIONS/CLOSURES



- Dresden Island Lock and Dam – Upper Bulkhead Recess Installation
 - Partial closure (daytime locking, width restriction) 06 JUL - 07 OCT & 25-28 OCT
 - Full closure 07 OCT - 24 OCT
 - Replace emergency miter gates which have been deemed unfit for dewatering
 - Preparatory work for 2023 closures

- Brandon Rd Lock and Dam – Upper Bulkhead Recess Installation
 - Work Postponed to the future:
 - 90+ day restriction period with 21 day full closure
 - Replace emergency miter gates which have been deemed unfit for dewatering
 - Preparatory work for potential 2023 closures
 - Work will precede the planned 2023 closures, with an open period to clear the queue

LAGRANGE MAJOR REHABILITATION/MAINTENANCE



Vertical concrete pre-cast panel installation



New gate machinery base





PEORIA MAJOR MAINTENANCE



Miter gate anchorage repairs



New checkpoint





19 MAY 2020 – STARVED ROCK LOCK

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STARVED ROCK MAJOR MAINTENANCE



STARVED ROCK MAJOR MAINTENANCE





MARSEILLES MAJOR MAINTENANCE





MARSEILLES MAJOR MAINTENANCE





MARSEILLES MAJOR MAINTENANCE

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DRESDEN ISLAND BULKHEAD RECESSES





2023 (T) PLANNED RESTRICTIONS / CLOSURES



- Starved Rock Machinery / Sector Gear Rehab
- Marseilles Electrical and Machinery / Sector Gear Rehab
- Dresden Island Lock and Dam Upper Miter Gate Installation
 - Dewatering of lock chamber to replace/modify sills and anchorages to accommodate new vertically framed Miter Gates
- Brandon Road Lock and Dam Upper Miter Gate Installation
 - Potential to include any approved **GLMRIS** work that requires a lock closure
 - Bulkhead slot installation and dewatering of lock chamber to replace/modify sills and anchorages to accommodate new vertically framed Miter Gates
- Lockport Lock
 - Vertical lift gate replacement

Notes:

- This is 100% O&M work (all Major Maintenance, no Major Rehabilitation efforts)
- This is another 90-120 day effort – spring/summer 2023



QUESTIONS?

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