

Edgar B. Speer brings in 2022 Navigation Season



The March 25 lockage of the season's first freighter is the real start of spring for Sault Ste. Marie. This year, the 1,000 foot-long Edgar B. Speer arrived at the lower pier hours before the midnight opening of the Poe Lock. As part of an annual tradition, officials from the city and local agencies greet the first ship and present the captain and crew with mementos. The event is also celebrated by hundreds of people in the observation platform who gather to watch the first ship pass through.

With the lock opening still hours away, Captain Grogan invited the welcoming party on board where they had a tour of the ship. In the pilothouse, the Soo Locks Visitor Center Association President, Ray Bell, presented Grogan with a plaque on behalf of the association and its members as well as ball caps for the entire crew.



Hundreds of visitors braved the cold and waited in the observation platform for the official start of the 2022 navigation season. Promptly one minute after midnight, the Poe Lock opened, and visitors snapped their own photos of the exciting moment.



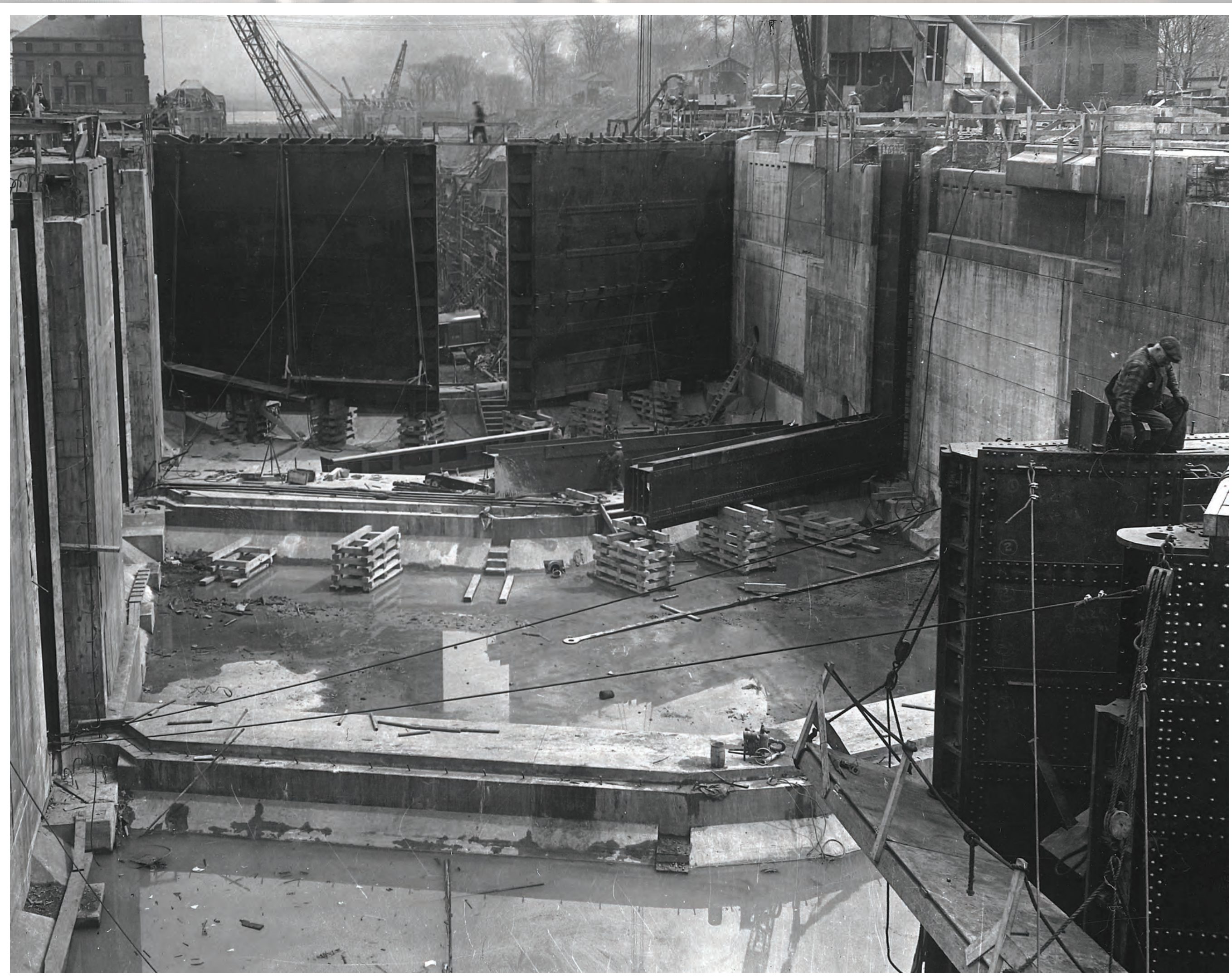
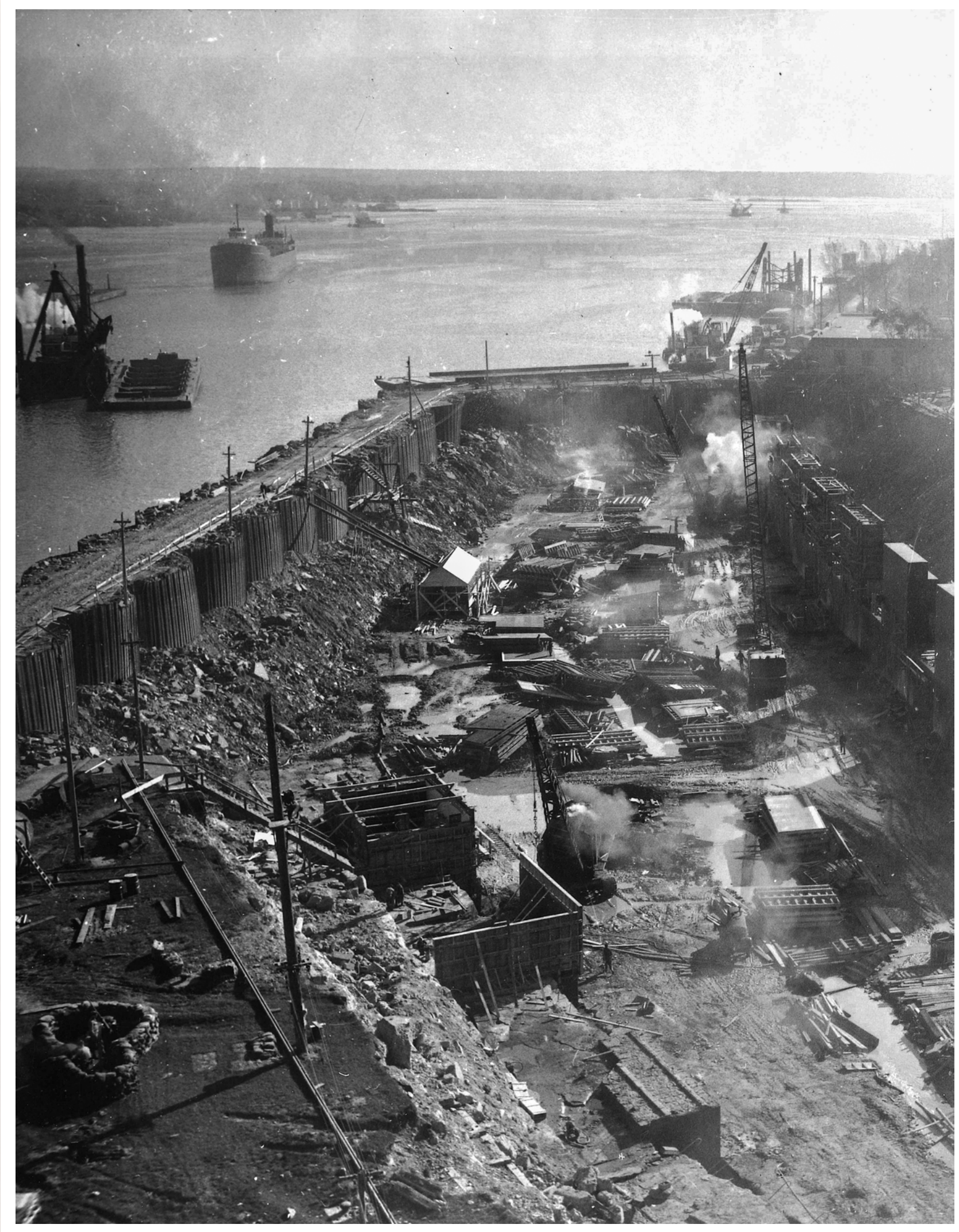
MacArthur Lock: a Wartime Wonder



Building the MacArthur Lock was a project like no other in the U.S. Army Corps of Engineers. Completed during the World War II it remains a piece of living history from this critical era. The Soo Locks form a choke point for the flow of raw materials crucial to making steel. During the war, keeping that supply moving and protecting the Soo Locks had never been more important.

Around the Clock Construction

Work on the MacArthur Lock began in June 1942 and the first cargo vessel passed through 13 months later in July 1943. In that time, crews created dry workspaces, removed the Weitzel Lock, deepened the approach canals, rebuilt the piers, assembled the gates, and installed all the operating machinery. To complete a project that usually takes 7-10 years in just over a year, crews worked in shifts 24 hours a day, seven days a week including through a record cold winter with temperatures dropping to -30F. The general contractor, Great Lakes Dredge and Dock, won the Army-Navy "E" Award for "Excellence in Production" for their work.



All Hands-on Deck

World War II affected every aspect of American life. Men aged 18-45 were drafted into military service, women worked in factories and served in auxiliary branches of the Army, Air Force and Navy. School children did their part through scrap drives, and victory gardens. At the Soo Locks, keeping the facility running and building the new lock were part of the war effort. Shortages meant families endured rationing of things like sugar, butter, metal goods and fuel. To build the new lock, precious resources were diverted to the project, including more than 12,000 tons of steel for the gates and equipment, enough to build 32 Sherman tanks.

On the Defense

To protect the Soo Locks and the flow of raw materials, the military stationed more than 7,000 soldiers in Sault Ste. Marie, Michigan, and Ontario. Barrage balloons floated over the facility, barbed wire lined the piers, and soldiers manned anti-aircraft guns along the river. The MacArthur Lock itself included back up operating gates and new protective features like torpedo nets and underground control stations. The control panel in this simulator reproduces one from an underground station that allowed lock operations to continue if an airstrike destroyed the controls on the surface.

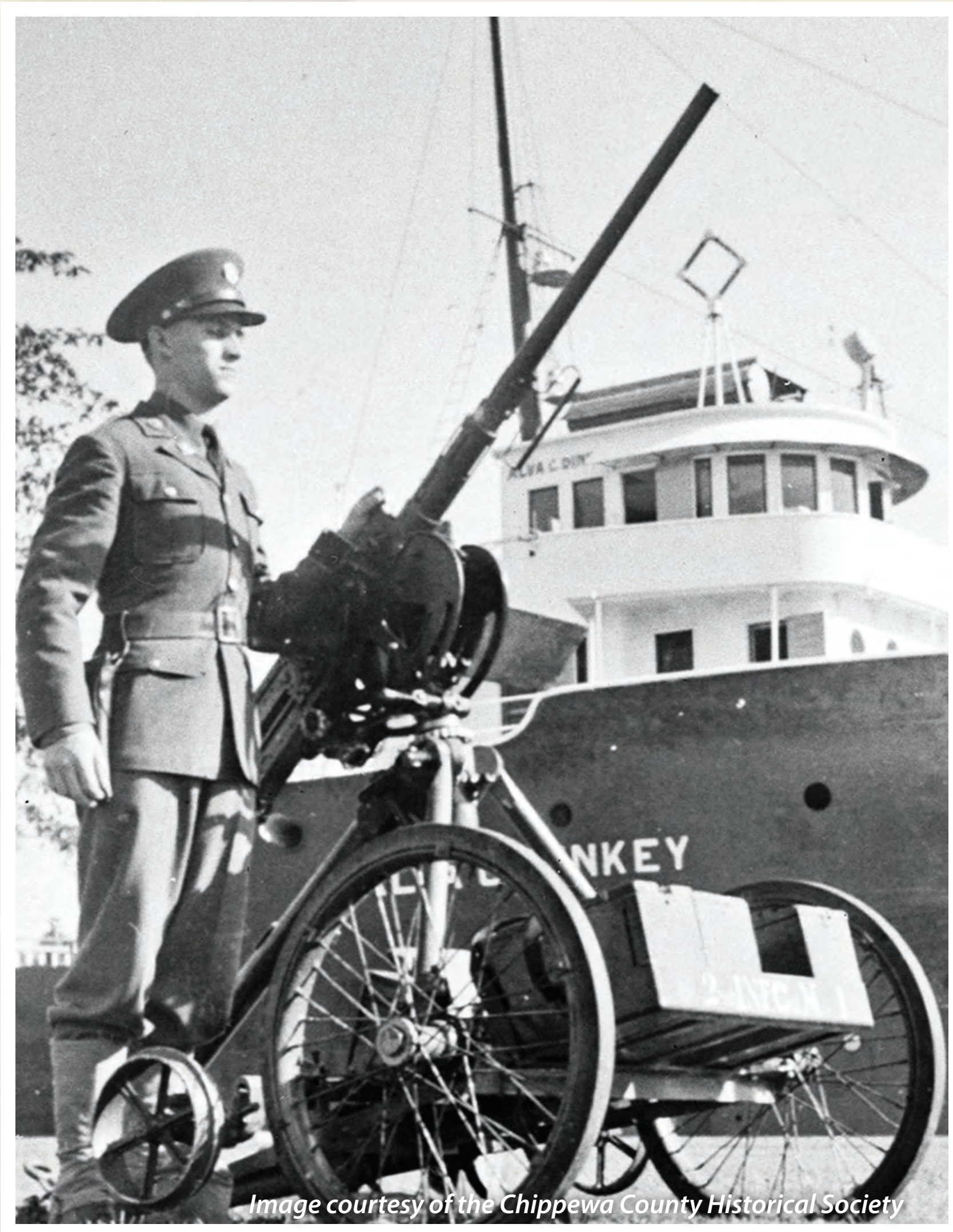


Image courtesy of the Chippewa County Historical Society

New Lock at the Soo



Vessels waiting for the Poe Lock, July 2017. Photo courtesy of Jim Lehecky

What is happening with the new lock project?

Work deepening the upper approach canal above the Sabin and Davis Locks began in summer 2020 and will wrap up this year. In 2021 contractors began work on the approach walls and should finish by fall 2023. Engineers have finalized the design for the new lock chamber.



Crews will finish deepening the upper approach canal this year. In all, they will remove 235,000 cubic yards of material to reach the project depth of 30 feet.

Why is a new lock needed?

The majority of cargo vessels only fit in the Poe Lock. Steel mills in the Great Lakes region depend on these boats to deliver raw materials. A new lock, the same size as the Poe, will reduce wait times and allow for maintenance work without stopping traffic.



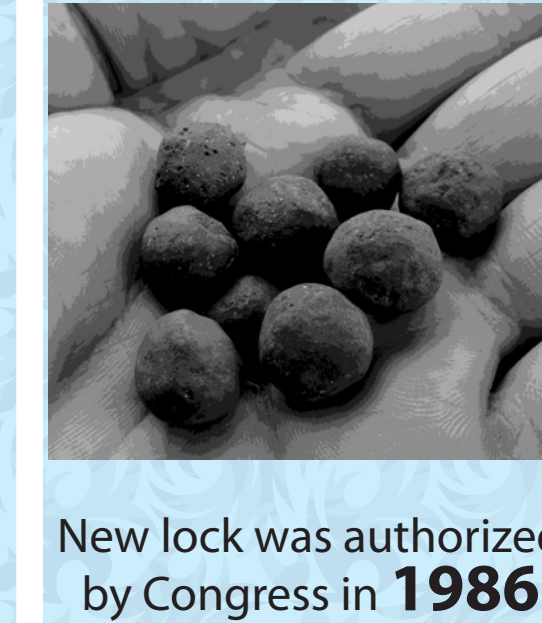
Contractors build a new approach wall at the upper end of the facility. The cells will be filled and capped with concrete.

86% of tonnage



is restricted to the Poe Lock

Approximately
95%
of domestic iron ore
used in the U.S.A.
transits the Soo Locks



New lock was authorized
by Congress in **1986**

A failure at the
Soo Locks
would have
significant
impact on
manufacturing
throughout
the U.S.A.



SIZE 1200 feet long
110 feet wide
32 feet deep

Estimated completion date

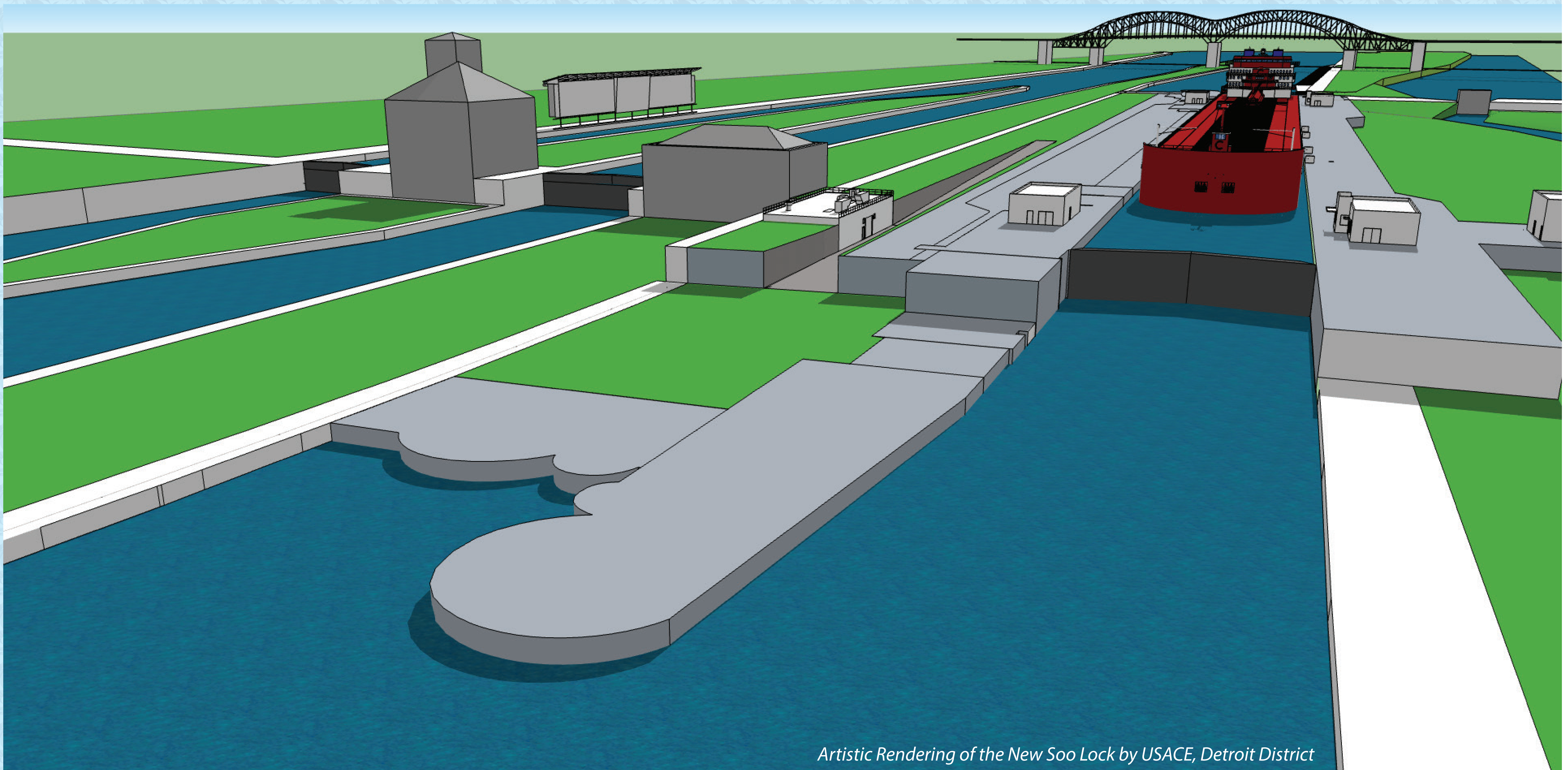
2030



1200 jobs supported
over construction period

For more information visit:

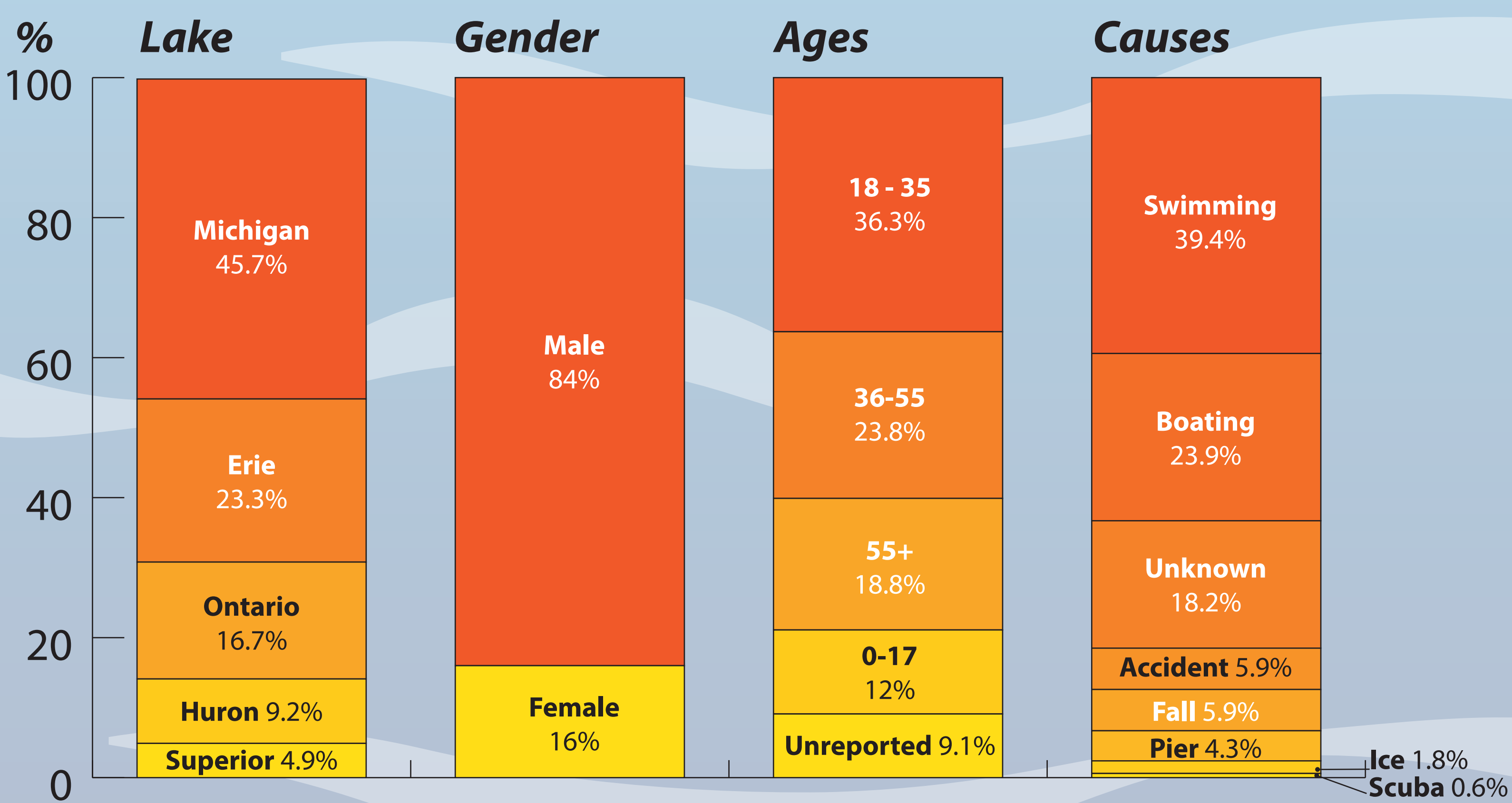
https://www.lre.usace.army.mil/About/Highlighted-Projects/New_Soo_Lock/



Artistic Rendering of the New Soo Lock by USACE, Detroit District

Take the water safety pledge and get your free goody bag!*

The Great Lakes offer some of the best beaches and recreation opportunities in the world but they can be deadly, with hazards like rip currents, dangerous waves and hypothermia. Avoid these hazards by learning to swim and being smart around the water. Never swim alone, supervise children, wear a life jacket and never mix alcohol with swimming or boating.



Between 2017-2021 more than 500 people have drowned on the Great Lakes, according to statistics compiled by the Great Lakes Surf Rescue Project. Most of these deaths could have been prevented by wearing lifejackets.

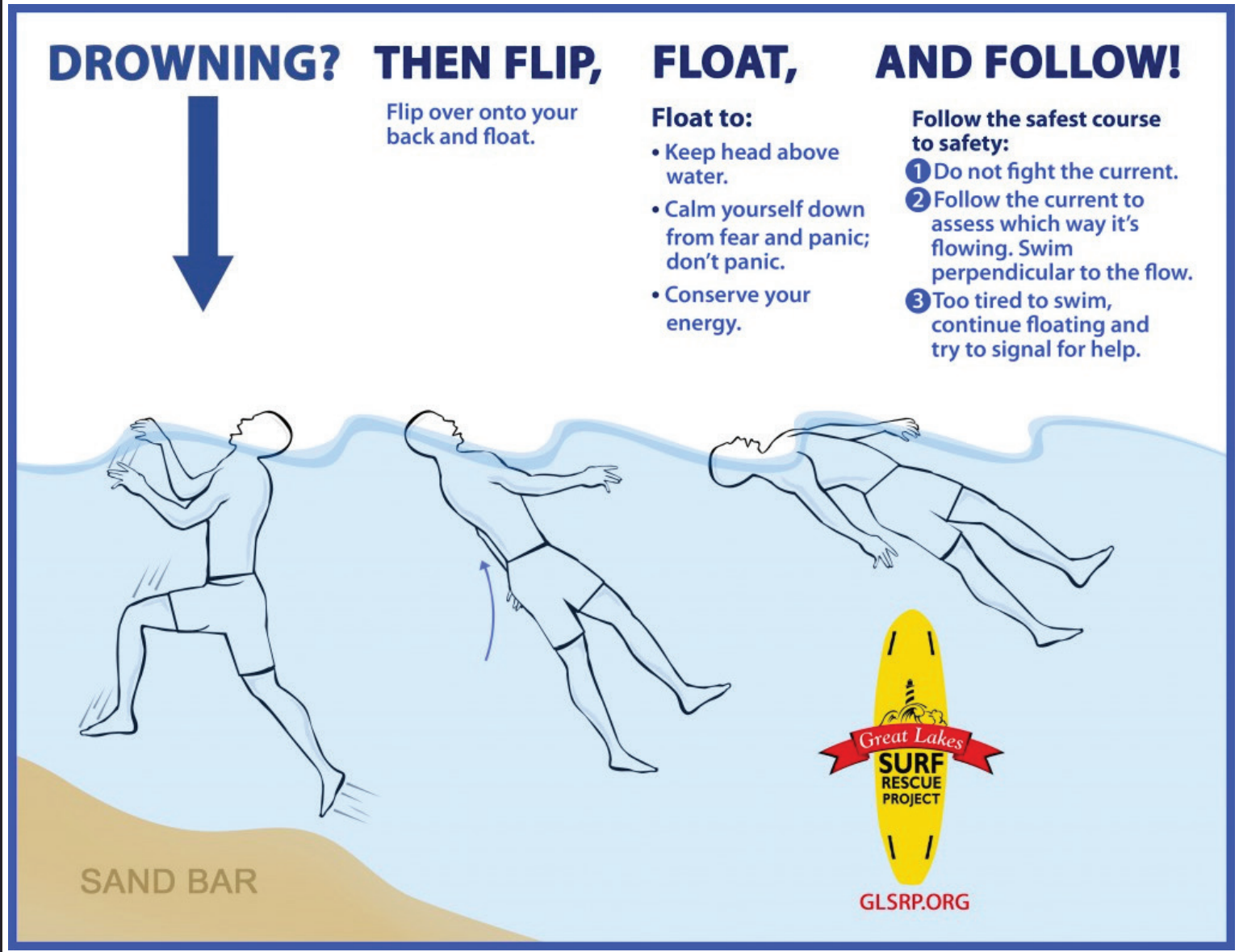


Recognize the signs of drowning

Most drownings happen quickly and quietly. Victims may be panicked, focused on trying to breathe and unable to call for help. To an observer it may look like they are treading water. If you see someone exhibiting the signs of drowning, ask if they need help, if they are unable to answer they probably do need help. Throw a flotation device, call for help and never enter the water to rescue someone with out a lifejacket. On the Great Lakes in the past five years, 12 people drowned trying to rescue others.

Know how to save yourself

Accidents happen, but knowing a few basics can keep you alive until you can be rescued or make your way to shore.



**Water safety goody bags are available, while they last, for children and adults. Tell the park ranger at the desk you want to take the water safety pledge to get yours!*



Who's building the New Lock at the Soo?

Construction Teams

A variety of specialized contractors take on the hands-on construction aspects of building the new lock. Scope of work documents describe various parts of the project in detail. These projects are posted on the website beta.sam.gov for contractors to bid on. To be awarded the work, contractors must meet strict requirements regarding their experience and ability to complete the task.



Contractors move dredged materials from a barge to a dump truck. The truck will bring it to the disposal area on the Northwest Pier.

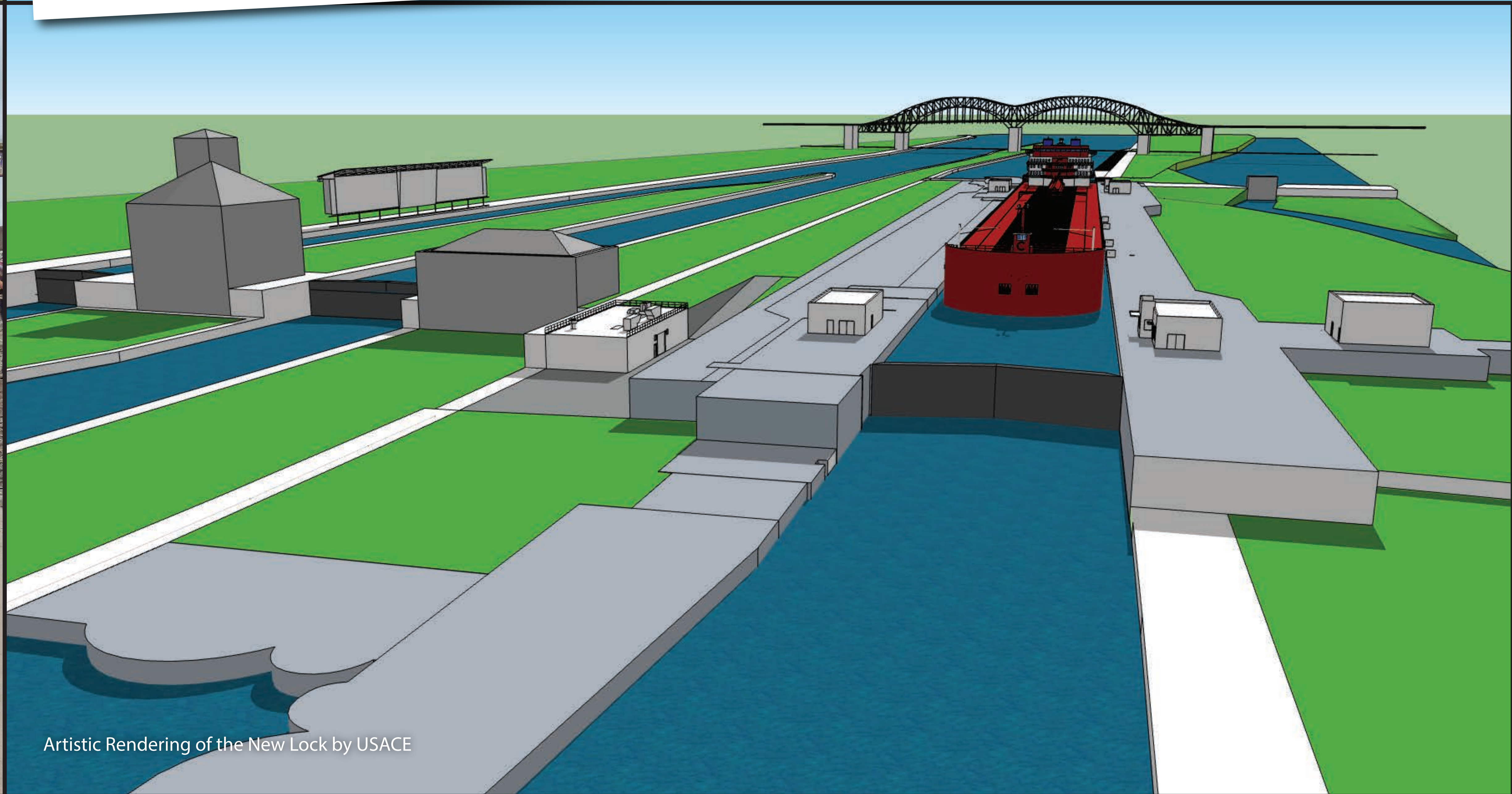


The Corps Team

The skilled team formed for this project oversees all aspects of the work. Engineers, quality control managers, contracting representatives, safety officers, communications specialists, and others plan, manage and publicize every phase of the project. Open positions are posted on USAJobs.gov



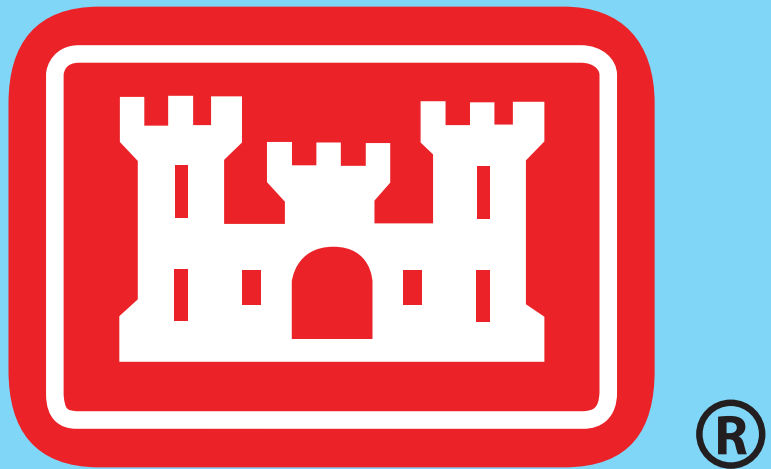
Contractors build stone filled cells along the original approach wall to the Sabin Lock. These cells will be capped with concrete and form the approach wall for the new lock.



Artistic Rendering of the New Lock by USACE

Work this year

The new lock is being built in stages over seven to ten years. This year contractors will finish deepening the upper approach canal and continue work on the approach walls on the western end of the facility.



Still to come



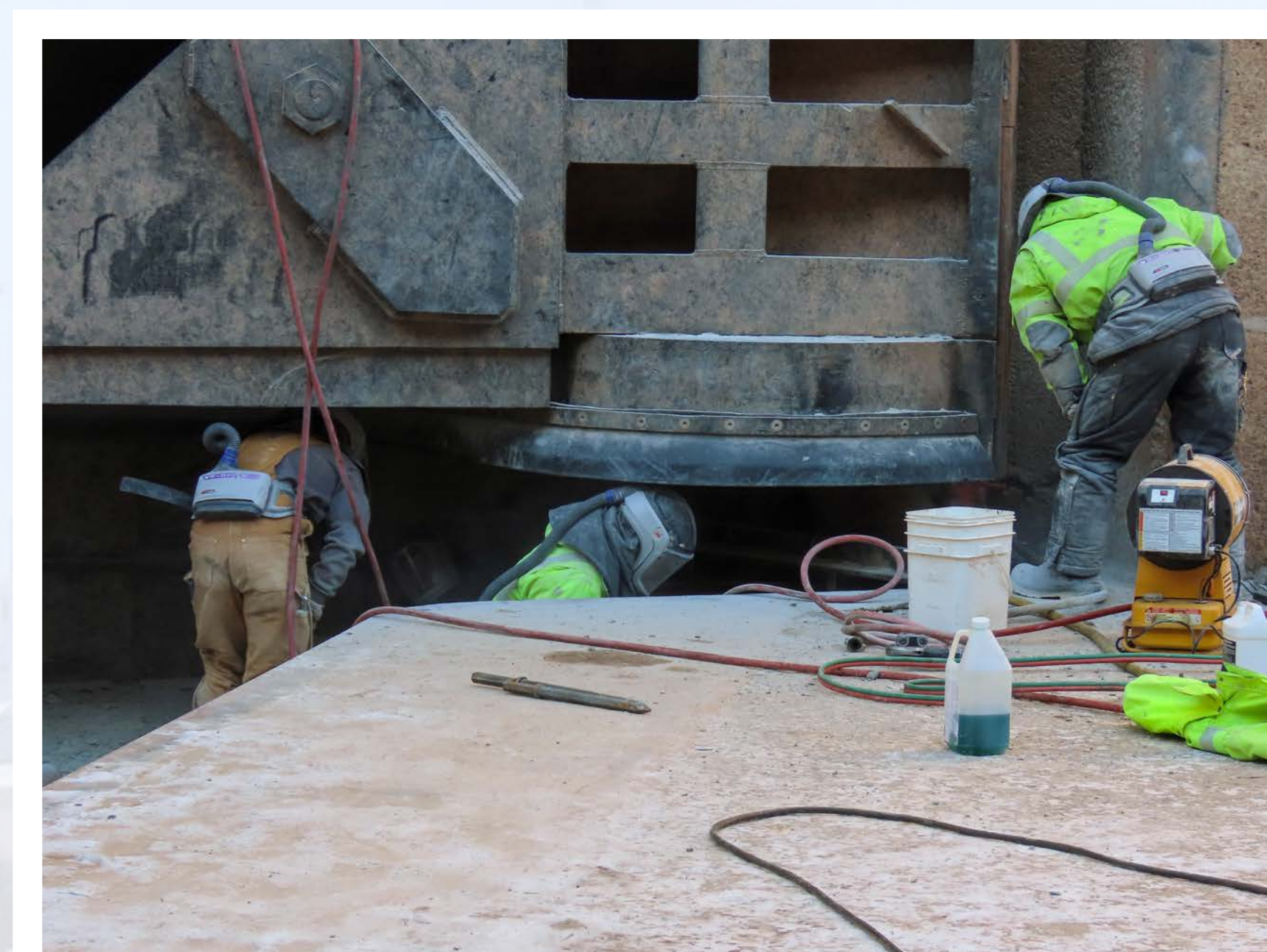
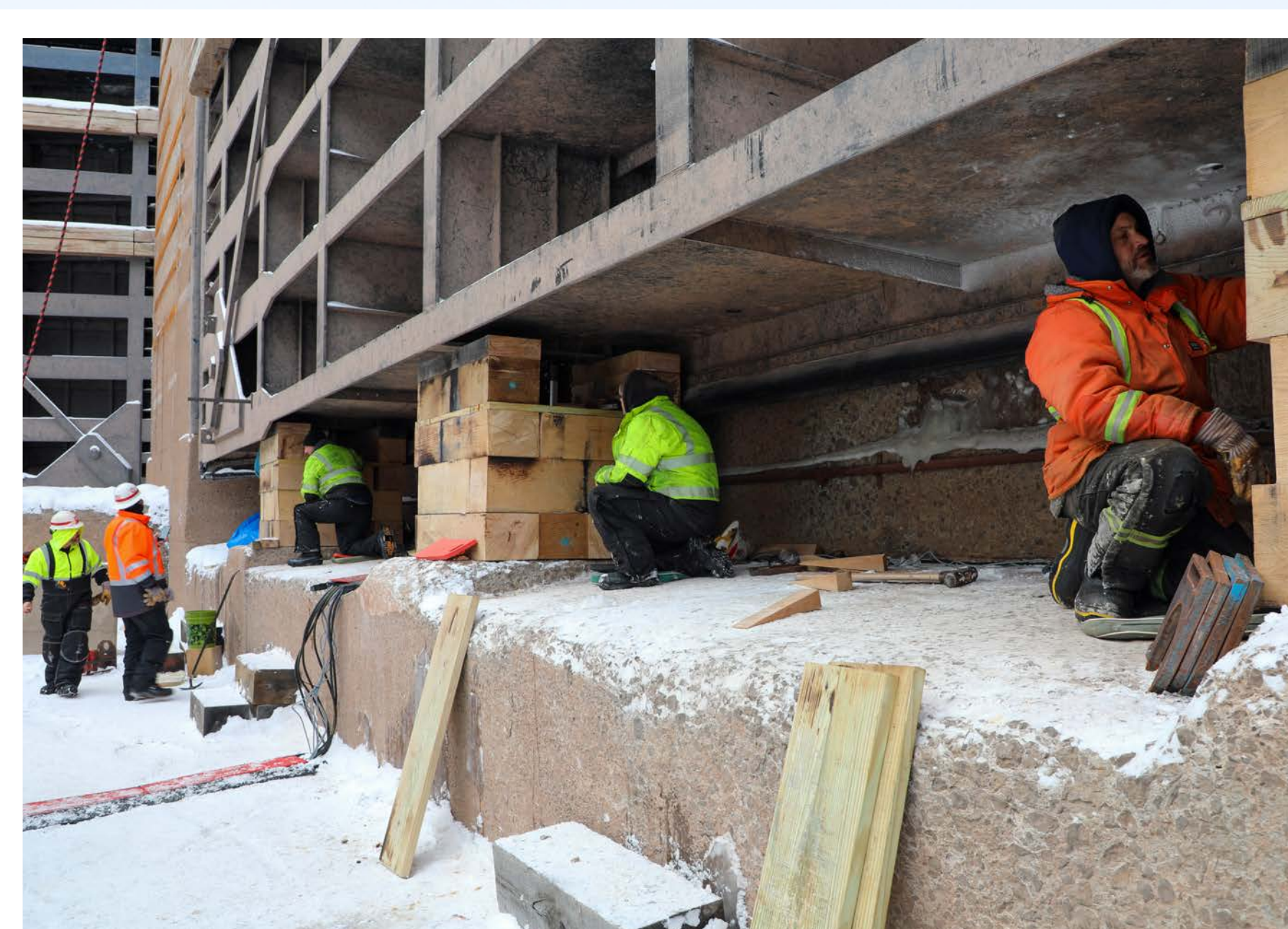
Work on the new chamber will begin with demolition of the upstream and downstream nose piers. Much is to be done during the last phase of construction to include filling the Davis Lock, constructing the new chamber, installing operating machinery and building operating shelters.



For the latest news on the New Lock at the Soo visit https://www.lre.usace.army.mil/About/Highlighted-Projects/New_Soo_Lock/

No Down Time at the Soo Locks

As shipping winds down during the winter months, crews at the Soo Locks move into high gear, tackling critical maintenance projects that can only be done while the locks are closed. This year, crews dewatered both the MacArthur and Poe Locks. Projects included routine inspections, replacing worn concrete, and cleaning drains in both locks. Contractors were also busy working on both the Poe and MacArthur Locks.



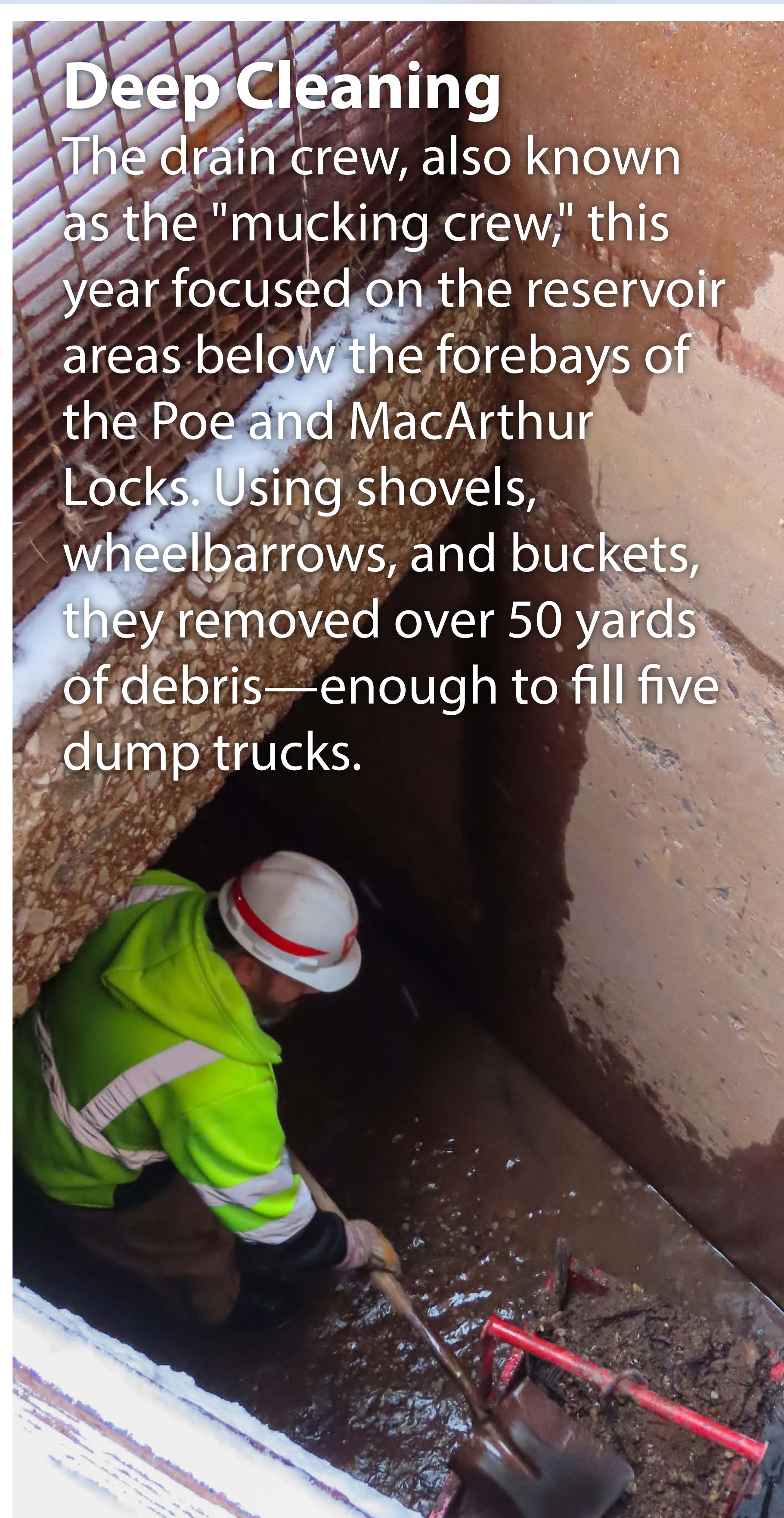
Working in Tight Spaces

This year, crews lifted one of the Poe Lock's 225-ton lower gates to replace damaged concrete below it. Using three hydraulic jacks, workers spent two days lifting the gate 1/10th–1/30th of an inch at a time. With each lift, they took measurements, built support cribbing, and ensured it remained anchored to the lock wall. Raised almost two feet above its normal position, a small workspace allowed workers to remove and replace the concrete.



Deep Cleaning

The drain crew, also known as the "mucking crew," this year focused on the reservoir areas below the forebays of the Poe and MacArthur Locks. Using shovels, wheelbarrows, and buckets, they removed over 50 yards of debris—enough to fill five dump trucks.



Gate Reconditioning

After years of planning, a major project to strip and recoat the Poe Lock's upper gates filled much of the winter work season. Contractors erected scaffolding, insulated and heated the gates, then used 220 tons of abrasive to sandblast the gates, then recoated them with 1,600 gallons of marine grade coating.