

Great Lakes St. Lawrence Seaway Development Corporation

## Seaway Infrastructure Program (SIP) Annual Report to Congress



Fiscal Year 2023

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### **Background and Summary**

As requested in the Senate Report (S. Rept. 118-70) of Senate Bill 2437 (Transportation, Housing and Urban Development, and Related Agencies Appropriations Act, 2024), the Great Lakes St. Lawrence Seaway Development Corporation (GLS or Corporation) is providing this annual report to the House and Senate Committees on Appropriations on the status of its Seaway Infrastructure Program (SIP).

The St. Lawrence Seaway is comprised of perpetual assets (locks, channels, an international bridge, highway tunnel, and accompanying facilities and equipment), which require capital reinvestment to continue to operate safely, reliably, and efficiently. Without sufficient investment in GLS's perpetual assets, the future availability and reliability of the U.S. section of the St. Lawrence Seaway would be at risk. Although the GLS has maintained a 99 percent reliability rate over its history, the SIP is currently necessary to continue accomplishing this level in the future.

The start of the GLS's infrastructure program in 2009 represented the first time in the GLS's history that a comprehensive effort had been undertaken to modernize the Seaway infrastructure, including rehabilitation of and improvements to the U.S.-operated locks, the navigation channels, and other Corporation-owned facilities and assets located in Upstate New York. None of the infrastructure projects increases the authorized depth or width of the navigation channel or the size of the lock facilities.

Over its history, more than 3 billion metric tons of cargo valued at more than \$500 billion have moved through the St. Lawrence Seaway. This binational commercial transportation route impacts 241,000 U.S. and Canadian jobs and generates annual binational economic benefits of \$36 billion in economic activity, \$17.8 billion in personal income and local consumption expenditures, and \$6.3 billion in Federal, state/provincial, and local tax revenue.<sup>1</sup>

In Fiscal Year (FY) 2023, the GLS obligated \$15.9 million using contracts for 24 SIP projects, including \$7.6 million to replace the diffusers at Snell Lock, \$1.8 million for all-season navigational aids, \$1.2 million for concrete rehabilitation at Eisenhower Lock, and \$1.1 million to upgrade electrical distribution equipment. Additionally, the GLS obligated and expended \$731,000 in personnel costs in FY 2023 for SIP-related staff activities. As of September 30, 2023, the GLS's unobligated balance for SIP projects was \$12.8 million.

Through the first 15 years of dedicated Seaway infrastructure funding (FYs 2009-2023), the GLS has obligated \$225 million on 65 separate infrastructure-related projects (*see pages 17-18*). These projects included maintenance dredging in the U.S. portion of the Seaway navigation channel, lock miter gate and culvert valve machinery upgrades, culvert valve replacements, hands-free mooring installation at the locks, gatelifter upgrades, capital improvements at the Seaway International Bridge, miter gate rehabilitation, and tugboat replacements, as well as various other structural and equipment repairs and/or replacements.

<sup>&</sup>lt;sup>1</sup> Economic Impacts of Maritime Shipping in the Great Lakes-St. Lawrence Region, Martin Associates, July 2023.

The GLS's SIP has resulted in not only modernized infrastructure and new equipment to ensure the long-term reliability of the St. Lawrence Seaway, but it is also having a positive and significant impact on the Upstate New York economy. In fact, more than 55 percent of the SIP funds obligated during the program's first 15 years, totaling nearly \$125 million, were awarded within the region.

These significant investments clearly demonstrate the Federal commitment to the long-term health and vitality of the binational waterway, complementing infrastructure investments being made by other Great Lakes Seaway System stakeholders, including ports, terminals, and carriers.

During the 2023 navigation season, the GLS recorded 5 hours, 16 minutes of lock-related disruptions to navigation, resulting in a lock availability rate of 99.97 percent for the 289-day 2023 season, exceeding the GLS's performance goal of 99.75 percent. The successful planning and execution of the SIP, which began in FY 2009, is a key reason for the achievement of the near-perfect reliability rate.

In October 2023, a Canadian Seaway labor dispute led to the temporary shutdown of the 13 Canadian-owned and operated Seaway locks. As a single lock system, this Canadian event warranted the closure of the two U.S. Seaway locks as well. GLS employees remained on the job and were able to conduct SIP-related maintenance work, including projects funded in FY 2023, during the 7.5-day closure.

SIP projects and estimates focus on eight infrastructure categories:

- <u>Locks and Associated Structures</u> Includes the structures at Eisenhower and Snell Locks and those structures that are required for the operation and/or maintenance of the locks.
- <u>Lock Equipment</u> Includes the equipment at Eisenhower and Snell Locks that is used to transit vessels through the locks and the controls for that equipment.
- <u>Utilities</u> Includes utilities infrastructure for electricity, fuel, potable water, raw water, and compressed air.
- <u>O&M Equipment and Work Vehicles</u> Includes mobile heavy and light equipment, shop equipment, and Massena-based work vehicles.
- <u>Buildings and Grounds</u> Includes construction of and improvements to GLS-owned buildings, roadways, work areas, parking areas, and grounds.
- <u>Dredging, Navigation Aids, and Floating Plant</u> Includes projects that improve the safety and efficiency of navigation, as well as improvements to and replacement of the GLS's floating plant.
- <u>Seaway International Bridge</u> Includes capital improvements to the South Channel Span of the Seaway International Bridge. (GLS owns 68 percent of the South Channel Span.)
- <u>Information Technology (IT) and Communications</u> Includes improvements to the GLS's non-Common Operating Environment (COE) IT network and systems as well as CCTV, cameras, and communication improvements.

In FY 2023, the GLS, through its SIP, addressed many of its core infrastructure asset needs related to moving commercial trade safely and efficiently as well as began work on a multi-year effort to rebuild and/or rehabilitate its aging buildings and work areas in Massena, N.Y. Most of these buildings/facilities, owned and operated by the GLS and built at the time of the Seaway's construction in the 1950s, have reached the end of their useful life and do not meet the Americans with Disabilities Act (ADA) or current energy standards.

To address these concerns, the GLS contracted in FY 2022 with an architectural/engineering firm for a Facility Master Plan (FMP) to include a review of the entire GLS's Massena building/ workplace inventory to assess current conditions, address needed maintenance and/or rehabilitation to meet current workplace and energy standards, and provide cost estimates for new, more energy and space-efficient workspace. The FMP identified 20 capital improvement projects with a current projected cost of \$50 million. The first FMP project contract, expected to be awarded in late FY 2024 or early FY 2025, is for the replacement of the GLS's Administration Building to be constructed on the south side of Eisenhower Lock currently estimated at \$10 million.

The SIP five-year capital planning process ensures that aging machinery, equipment, and parts are rehabilitated/replaced; buildings, grounds, and utilities are sufficiently maintained/ refurbished; and commercial trade continues to move on the Seaway safely with a minimum of interruption or delay. The GLS's SIP is consistent with existing Office of Management and Budget (OMB) guidance and requirements regarding useful segments of a capital project and is subject to annual appropriations.

For the FY 2025-2029 timeframe, the SIP five-year estimates totaling \$84.9 million are included in this report on page 18. Dollar amounts for SIP projects are "project feasibility" estimates that can vary by an industry-recognized 20-30 percent. While many SIP projects have received funding over several years, the GLS uses a multi-phased approach in developing each project to ensure annual funding produces distinct and useful segments, in accordance with OMB Circular A-11.

### FY 2023 Seaway Infrastructure Program (SIP) Project Updates

The following information provides an update on the 20 SIP projects with respective obligations totaling more than \$25,000 in FY 2023.<sup>2</sup> The GLS continues to use contracts that promote the Buy American Act and small and disadvantaged businesses, as well as Federal contract programs offered by the General Services Administration (GSA), including e-Buy, AutoChoice, and the Federal Supply Schedule, whenever possible. Of the GLS's FY 2023 SIP contracts, 82 percent were awarded to small businesses and 8 percent to small disadvantaged businesses.

### 1) <u>LOCK AND ASSOCIATED STRUCTURES</u> – UPGRADE OF FENDERING ON APPROACH WALLS AT BOTH LOCKS



GLS work crews perform fendering replacement along the lower guidewall at Eisenhower Lock.

<u>General Description</u>: This project is to replace wood fendering on the approach walls at both locks with rubber fenders to protect both transiting vessels and the approach walls. The cost of the wood fenders is increasing such that the rubber fenders have become cost competitive. The rubber fenders that have been installed to date have performed well.

FY 2023 Obligations:<sup>3</sup> \$278,907

Total Obligations (FYs 2009-2023): \$1,375,409

<u>Project Update (as of September 30, 2023)</u>: In FY 2023, the GLS made purchases for supplies and equipment necessary for the GLS workforce to complete repairs to damaged ship fendering at the two U.S. Seaway locks. Purchases included 600 linear feet of rubber trapezoidal approach wall fendering

and 300 linear feet of rubber gate fendering from DS Imports LLC, Galveston, Texas, for \$230,244 and fender steel hardware from HF Fabrication, LLC, Phoenix, Ariz., for \$19,097. Additionally, the GLS purchased installation supplies and hardware required for the fendering installation from Fastenal Co., Winona, Minn. (\$9,900). The fendering work is completed by the GLS maintenance workforce and this is a regular and recurring project based on fendering damage. Most of the fendering purchased in FY 2023 was installed during FY 2023.

<sup>&</sup>lt;sup>2</sup> There were four SIP projects with FY 2023 obligations below \$25,000 that are not reported in the project update section: (1) <u>Lock and Associated Structures</u> – Rehabilitation of Concrete at Snell Lock (\$1,900); (2) <u>Lock</u> <u>Equipment</u> – Upgrade of Ship Arrestor Machinery at Both Locks (\$6,855); (3) <u>Lock Equipment</u> – Repair/ Replacement of Piping and Valves at Both Locks (\$10,928); and (4) <u>IT and Communications</u> – Upgrade of Communications Systems (\$13,075).

<sup>&</sup>lt;sup>3</sup> The "FY 2023 Obligations" amount includes all GLS obligations incurred related to the project during FY 2023. It includes contracts, labor hours, and warehouse inventory drawdowns.

### 2) <u>LOCKS AND ASSOCIATED STRUCTURES</u> – REHABILITATION OF CONCRETE AT EISENHOWER LOCK

<u>General Description</u>: This project is to replace deteriorated/ damaged concrete at the Eisenhower Lock in all areas except the diffusers. This includes concrete that was of poor quality when placed during original construction and concrete that has been damaged by freeze-thaw cycles and by vessel impacts. This deteriorated/damaged concrete includes mass concrete that forms the walls inside the lock chambers as well as the walls, floors, and ceilings of the filling and emptying culverts, and the gate sills.

FY 2023 Obligations: \$1,211,983

Total Obligations (FYs 2009-2023): \$8,119,820



Contractor crews perform concrete rehabilitation work along the stop log sills at Eisenhower Lock to allow additional contractors to complete diffuser replacement work.

### Project Update (as of September 30, 2023): In early FY 2023,

the GLS awarded a contract to Patterson-Stevens Inc., Tonawanda, N.Y., related to concrete restoration work in the stop log sill at Eisenhower Lock for \$1.15 million. Additionally, a contract was awarded to WSP USA, Inc., Buffalo, N.Y., for \$25,215 for inspection and quality assurance services. The work was completed in FY 2023 following the completion of the 2022 navigation season and included the demolition as well as restoration of approximately 40 cubic yards of concrete at the Eisenhower Lock.



During the winter of 2023, contractors completed the replacement of the three upstream diffusers at Snell Lock.

### 3) <u>LOCKS AND ASSOCIATED STRUCTURES</u> – REHABILITATION OF DIFFUSERS AT SNELL LOCK

<u>General Description</u>: This project is to replace deteriorated/ damaged concrete in the diffusers at the Snell Lock. This includes poor-quality concrete used during original construction of the locks as well as concrete that was damaged by freeze-thaw cycles. The diffusers are the outlet structures used to dampen the flow of water when the lock is emptied.

FY 2023 Obligations: \$7,628,677

Total Obligations (FYs 2009-2023): \$7,706,312

<u>Project Update (as of September 30, 2023)</u>: In FY 2023, the GLS awarded a contract for \$7.5 million to Kubricky Construction Corp., Gansevoort, N.Y., related to the concrete diffusers replacement project at Snell Lock. Additionally, the GLS

awarded a contract for \$43,957 to WSP USA, Inc., Buffalo, N.Y., for technical oversight and

inspection of the FY 2023 winter work for this project. Finally, the GLS awarded a contract to AOK Engineering, PLLC, Gouverneur, N.Y., for \$11,050 to provide temporary sealing of the stop logs area of Snell Lock for the diffuser work to commence. The work for this project began in FY 2023 following the completion of the 2022 navigation season and is expected to be completed in the winter of FY 2024.

### 4) <u>LOCKS AND ASSOCIATED STRUCTURES</u> – REHABILITATION OF STOP LOGS AT BOTH LOCKS

<u>General Description</u>: This multi-year project is for rehabilitating the GLS's 34 stop logs, which are truss-framed steel structures that span the 80-foot-wide locks and have steel plates installed on one vertical side. The stop logs are stacked at each end of both locks to create temporary dams allowing the locks to be dewatered for inspection and/or repair of the underwater surfaces and components during the winter maintenance season. These structures are more than 60 years old and need to be rehabilitated on a regular basis to ensure continued reliability.

FY 2023 Obligations: \$151,129

Total Obligations (FYs 2009-2023): \$274,144

<u>Project Update (as of September 30, 2023)</u>: The GLS awarded five contracts for supplies totaling \$50,512 related to the ongoing rehabilitation work of the stop logs at the two locks. GLS crews completed the work that included blasting and painting of the stop logs, replacement of seals and hardware, and structural repairs. The GLS expects to complete 2-3 stop golog rehabilitations each year.

### 5) <u>LOCKS AND ASSOCIATED STRUCTURES</u> – REPLACEMENT OF RECESS COVERS AT BOTH LOCKS

<u>General Description</u>: This is a multi-year project to replace steel and steel/concrete composite covers that are used to access the lock operating machinery located in the galleries and recesses at both locks. Many of these recess covers are the original covers and will be over 60 years old when they are replaced. They have deteriorated due to the use of salt to keep covered areas clear of ice, and they have been further damaged by trucks and heavy equipment driving over them. The GLS will replace the covers with more durable/maintainable materials designed for greater loads.



An example of one of the new personnel access hatches along the lock wall to keep water out of recesses and provide improved safety for GLS personnel.

FY 2023 Obligations: \$536,175

Total Obligations (FYs 2009-2023): \$1,498,367

<u>Project Update (as of September 30, 2023)</u>: The GLS awarded a contract to Dow Electric, Inc., Malone, N.Y., in FY 2023 for \$319,000 for the purchase and installation of 25 personnel access hatches (3-foot by 3-foot) at both locks along the walls to keep water out of recesses and provide improved safety for GLS personnel going in and out of the lock recesses for inspections and maintenance. Additionally, a contract was awarded to LaVack's Custom Builders, Inc., Massena, N.Y., for \$26,300 for one bullgear cover at north downstream Snell Lock. GLS personnel built the cover and LaVack completed the demo, prep, and installation of the covers.

### 6) <u>LOCKS AND ASSOCIATED STRUCTURES</u> – UPGRADE OF LIGHTING AT BOTH LOCKS

<u>General Description</u>: This project is to replace stringed incandescent lighting with fixed brighter and more energy-efficient LED lighting below grade at both locks in the cable galleries and other work areas.

FY 2023 Obligations: \$96,341

Total Obligations (FYs 2009-2023): \$200,699

<u>Project Update (as of September 30, 2023)</u>: The GLS awarded several contracts totaling \$15,627 for LED lighting and installation equipment and supplies for lighting. GLS crews began installation of the lighting in the riser sections at both ends of both locks, which is expected over the next two years.

### 7) <u>LOCKS EQUIPMENT</u> – UPGRADE OF DEWATERING PUMPS AT BOTH LOCKS

<u>General Description</u>: This project is for repairing/replacing several smaller pumps used for dewatering both Eisenhower and Snell Locks during maintenance of their underwater components. These pumps are almost 60 years old and parts for these units are no longer available. In recent years, the GLS began the replacement and/or repair of these pumps.

FY 2023 Obligations: \$62,805

Total Obligations (FYs 2009-2023): \$833,493

<u>Project Update (as of September 30, 2023)</u>: In FY 2023, the GLS awarded a contract to Dow Electric, Inc., Malone, N.Y., for \$38,800 related to the installation of plugging devices to allow for the installation of new valves to allow for future maintenance on the dewatering pumps at each of the two locks. The project also included the replacement of electrical feeds to the pumps.

### 8) <u>LOCK EQUIPMENT</u> – REHABILITATE HANDS-FREE MOORING SYSTEM UNITS



GLS crews perform rehabilitation maintenance on an out-of-service unit of the hands-free mooring system in Massena, N.Y.

<u>General Description</u>: In June 2019, Hands Free Mooring (HFM) technology became fully operational at GLS's locks in Massena, N.Y., with the commissioning of HFM technology at Snell Lock. The Seaway's HFM project was the first use of this technology for an inland waterway to move commercial vessels through a lock system in the United States. The new technology allows commercial ships to transit safely and more efficiently without the use of mooring lines while also enhancing workplace safety and improving operational efficiency. Each year, the GLS removes one of the six operating units used at the two locks and replaces various parts including seals, hydraulic cylinders, bushings, and

bearings. A fully operational spare unit is used in place of the unit pulled for maintenance.

FY 2023 Obligations: \$79,524

Total Obligations (FYs 2009-2023): \$113,762

<u>Project Update (as of September 30, 2023)</u>: The GLS continued its HFM maintenance program in FY 2023 with multiple contracts totaling \$31,031 for parts, equipment, and supplies to proactively repair and replace worn parts and repaint one of the GLS's six operating HFM units. GLS crews completed the inspection and rebuild work.

### 9) <u>UTILITIES</u> – UPGRADE OF POWER SUPPLY INFRASTRUCTURE FROM MOSES-SAUNDERS DAM TO BOTH LOCKS AND ADJACENT FACILITIES

<u>General Description</u>: This project is for upgrading the infrastructure that supplies power to the Eisenhower and Snell Locks and to the Corporation's Maintenance Facility. The power is provided directly from the Moses-Saunders Power Dam over infrastructure that is 60 years old.

FY 2023 Obligations: \$51,437

Total Obligations (FYs 2009-2023): \$780,304

<u>Project Update (as of September 30, 2023)</u>: In FY 2023, the New York Power Authority (NYPA) continued its ongoing rehabilitation of the infrastructure that supplies power to the GLS for operations and maintenance activities. This is a recurring annual SIP project with expenditures dependent on NYPA plans. In FY 2023, the GLS paid \$40,081 to NYPA, White Plains, N.Y., for its work on GLS power-related infrastructure rehabilitation, which included work to make upgrades on the transmission lines connected to GLS facilities.

### 10) <u>UTILITIES</u> – UPGRADE OF ELECTRICAL **DISTRIBUTION EQUIPMENT**

General Description: This project is for upgrading electrical distribution equipment at both Eisenhower and Snell Locks and at the Maintenance Facility to ensure continued reliability. Much of this equipment is 60 years old.

FY 2023 Obligations: \$1,054,095

Total Obligations (FYs 2009-2023): \$4,700,397

Project Update (as of September 30, 2023): In FY 2023, the GLS awarded a contract, including several modifications, to Collins Hammond Electrical Contractors, Inc., Ogdensburg, N.Y., totaling located at Snell Lock. \$875,243 for the new buried high voltage power cables at



power New high voltage cables

Eisenhower and Snell Locks, conduit repairs at Eisenhower Lock, and emergency repairs to the GLS's power infrastructure to restore normal power at the GLS's Maintenance Base.

### 11) **O&M EQUIPMENT AND WORK VEHICLES – REPLACEMENT OF HEAVY** AND LIGHT EQUIPMENT AND VEHICLES

General Description: This is an ongoing project to replace heavy and light equipment, vehicles, and shop equipment as they become worn out and unserviceable. Heavy and light equipment include such items as a crane, dump truck, snowplow, backhoe, grader, front end loader, air compressor, forklift, and welder. Shop equipment includes such items as a lathe, drill press, vehicle hoist, and milling machine. Equipment and vehicles are inspected regularly, and their replacement is prioritized based on the results of those inspections.



GLS's new all-electric Ford Transit work van used by maintenance crews in Massena, N.Y.

FY 2023 Obligations: \$381,582

Total Obligations (FYs 2009-2023): \$5,525,564

Project Update (as of September 30, 2023): In FY 2023, the GLS purchased work-related heavy and light equipment and motor vehicles for its Massena, N.Y., operations.



GLS's cantilever man basket for use in performing maintenance on the handsfree mooring system at both U.S. Seaway locks.

The GLS purchased five new 2023 work vehicles for its Massena operations for \$200,432 from GSA Heartland Finance Center, Kansas City, Mo., including three all-electric work vehicles (two Hyundai Kona Electric SUVs and a Ford Transit work van) and two hybrid electric work vehicles (a Ford Maverick pickup truck and a Chrysler Pacifica van wagon). The GLS also awarded a contract for \$10,612 to John M. Ellsworth Co., Inc., Milwaukee, Wis., for two electric vehicle charging stations to be installed at GLS locations to power the new electric vehicle purchases.

Additionally, the GLS purchased a Toro Groundmaster 4500 industrial mower with cab for \$116,786 from Grassland Equipment and Irrigation Corporation, Liverpool, N.Y., to mow acres of grass fields owned by the GLS in the Massena area. Finally, the GLS purchased a cantilever man basket for \$18,735 from Lakeshore Industrial, LLC, Two Rivers, Wis., to be used by GLS crews in addressing maintenance to hands free mooring units in operation at both locks.

### 12) <u>BUILDING AND GROUNDS</u> – REPLACEMENT OF PAVING AND DRAINAGE INFRASTRUCTURE

<u>General Description</u>: This project is for improving the pavement and drainage along lock approach walls as well as the roadways, public parking, and work areas at all Corporation facilities. In Upstate New York, the damage to pavements caused by winter conditions is significant.

FY 2023 Obligations: \$305,809

Total Obligations (FYs 2009-2023): \$4,164,879

<u>Project Update (as of September 30, 2023)</u>: The GLS awarded a contract in FY 2023 to LaVack's Custom Builders, Inc., Massena, N.Y., for \$287,138 for paving and drainage replacement and improvements. Completed areas of the work were at the GLS's Maintenance and Marine Base.

### 13) <u>BUILDING AND GROUNDS</u> – REHABILITATION OF EISENHOWER LOCK HIGHWAY TUNNEL

<u>General Description</u>: This is an ongoing project to maintain and upgrade the highway tunnel which goes through the upper sill area of Eisenhower Lock, providing the only access to the north sides of both Eisenhower and Snell Locks, to the New York Power Authority's Robert Moses Power Project, and to the New York State Park on Barnhart Island.

This project includes grouting to limit the water leaking into the tunnel, improving the drainage and replacing the roadway surface, replacing deteriorated/damaged gratings and railings, and routinely clearing tunnel drains. Since this tunnel is the only means of access to the facilities noted previously, any problems that would make it necessary to close the tunnel for repair would have very significant impacts, including closure of the Robert Moses State Park, and limited to no access for New York Power Authority staff and contractors working at the Moses-Saunders Power Dam.



Work crews perform demolition of one lane in the GLS's Eisenhower Lock highway tunnel. FY 2023 work included improvements to the drainage structure and replaced concrete.

FY 2023 Obligations: \$85,109

Total Obligations (FYs 2009-2023): \$1,858,285

<u>Project Update (as of September 30, 2023)</u>: As part of the GLS's on-going improvements to its Eisenhower Lock Highway Tunnel, the GLS awarded a contract to Dow Electric, Inc., Buffalo, N.Y., for \$80,000 for the installation of new steel for the drainage structure and concrete roadway repairs in the tunnel. The work was completed in late FY 2023. The tunnel and its roadway are used by the public and is an important transportation infrastructure asset for Upstate New York tourism, GLS operations, and New York Power Authority employees.

### 14) <u>BUILDING AND GROUNDS</u> – REPLACEMENT OF WINDOWS AND DOORS AND REPAIR BUILDING FACADES

<u>General Description</u>: This project is for replacing corroded/worn windows and doors with more energy efficient units and for repairing the brick and stone facades.

FY 2023 Obligations: \$34,176

Total Obligations (FYs 2009-2023): \$120,827

<u>Project Update (as of September 30, 2023)</u>: The GLS awarded two contracts in FY 2023 to make improvements to existing GLS facilities in Massena, N.Y. The GLS awarded a contract to Structural Wood Corporation, St. Paul, Minn., for \$12,060 for glass and flush doors for multiple Maintenance Base facilities. Additionally, the GLS awarded a contract to Triple A Lumber, Inc., Canton, N.Y., for \$4,841 for 37 windows for installation at Eisenhower Lock. All installation work is expected to be completed by GLS crews in FY 2024.

### 15) <u>BUILDINGS AND GROUNDS</u> – REPLACEMENT OF SEAWAY VISITOR CENTER AT EISENHOWER LOCK

<u>General Description</u>: In FY 2019, the U.S. Department of Transportation announced that a new Seaway Visitor Center at Eisenhower Lock in Massena, N.Y., would be constructed to replace the original center built in the early 1960s. The old center, with only observation decks open, attracted more than 60,000 people each year and was an important attraction for Upstate New York tourism. The new facility will build upon those successes and address many of the shortcomings of the old center, including energy efficiency and accessibility for people with disabilities.



The GLS's Seaway Visitor Center at Eisenhower Lock was completed in early FY 2024 and opened to the public in May 2024.

FY 2023 Obligations: \$257,206

Total Obligations (FYs 2009-2023): \$10,751,494

<u>Project Update (as of September 30, 2023)</u>: In FY 2023, the GLS awarded several contract modifications totaling \$207,915 to Con Tech Building Systems, Inc., Gouverneur, N.Y., for the completion of the construction of the new 7,500-square-foot Seaway Visitor Center at Eisenhower Lock. The construction was completed by Con Tech in early FY 2024 at a final cost of \$8.7 million and the grand opening took place in May 2024.

### 16) <u>BUILDINGS AND GROUNDS</u> – REHABILITATION/REPLACEMENT OF MASSENA, N.Y. FACILITIES

<u>General Description</u>: This is a multi-year project to replace and rehabilitate GLS buildings and structures in Massena, N.Y., that need modernization. As a Federal government corporation, the GLS owns and is responsible for 34 operational, administrative, maintenance, and storage buildings. Many of these buildings include workspace for GLS employees. Nearly every GLS building in Massena was built during the Seaway's construction in the 1950s and needs some modernization.

FY 2023 Obligations: \$941,914

Total Obligations (FYs 2009-2023): \$1,401,952

<u>Project Update (as of September 30, 2023)</u>: The GLS awarded a contract for \$935,182 to WSP USA, Inc., Buffalo, N.Y., for the conceptual design, construction design, and the construction administration and oversight of the GLS's new Administration Building to be constructed on the south side of Eisenhower Lock. The current 30,800-square-foot building constructed in the late 1950s will be vacated with the construction of a new, smaller 13,000-square-foot facility utilizing clean hydroelectric power on the south side of Eisenhower Lock. This new construction contract is expected to be awarded in late FY 2024/early FY 2025 and is currently estimated at \$10 million.



Engineering drawings (top image is front of building; bottom image is rear of building) of the new GLS Administration Building to be located on the south side of Eisenhower Lock.

The new GLS Administration Building is the first project of a multi-year effort to rehabilitate and/or replace its various buildings and facilities in Massena, N.Y., that are used for employee workspace and storage. They were built during the construction of the U.S. assets of the St. Lawrence Seaway in the 1950s. All these facilities/buildings are owned and operated by the GLS.

Most of these buildings/facilities have reached the end of their useful life and do not meet the ADA or current energy standards.

In FY 2022, the GLS contracted with an architectural/engineering firm for a Facility Master Plan (FMP) to include a review of the entire GLS's Massena building/workplace inventory to assess current conditions, address needed maintenance and/or rehabilitation to meet current workplace and energy standards, and provide cost estimates for new, more energy- and space-efficient workspace. The FMP identified 20 capital improvement projects with a current projected cost of \$50 million.

### 17) <u>DREDGING, NAVIGATION AIDS, AND FLOATING PLANT</u> – REPLACEMENT OF FLOATING NAVIGATION AIDS / UPGRADE TO ALL-SEASON BUOYS

<u>General Description</u>: This is an ongoing program to replace floating navigational aids/buoys and winter markers that have been damaged over the years and to upgrade the lights on the buoys. This project also includes testing all-season buoys to determine if they will be effective for use in the Seaway. The GLS is responsible for 101 buoys (with one light per unit) and 59 winter markers along a 120-mile portion of the Seaway.

### FY 2023 Obligations: \$1,840,189

### Total Obligations (FYs 2009-2023): \$2,898,812

<u>Project Update (as of September 30, 2023)</u>: In FY 2023, the GLS awarded a contract to the UMS Metal Fabricators, Inc., Mobile, Ala., for \$1.8 million to purchase 72 all-season buoys to be fabricated and delivered over four years between FY 2023 and FY 2026. This purchase completes the GLS's needs to convert all of its navigation aids to all-season buoys.

Unlike traditional Seaway navigation aids, each all-season buoy will not have to be lifted out of the water except if it is found off-station or for a mooring inspection. This reduces the number of conventional buoys that must be commissioned and decommissioned, thus saving the GLS time and money. Additionally, all-season buoys will provide economic savings to the Seaway's commercial users by eliminating double pilotage costs for several weeks at the beginning and end of each navigation season when traditional navigation aids are not in the water.

### 18) <u>DREDGING, NAVIGATION AIDS, AND FLOATING PLANT</u> – UPGRADE/ REPLACEMENT OF FLOATING PLANT/TUGS

<u>General Description</u>: This project is for rehabilitating and/or replacing the Corporation's floating plant that is used for maintaining the locks and navigation channels. This multi-year project

includes: replacing the GLS's tugboats *ROBINSON BAY* and *PERFORMANCE*; upgrading the buoy tender barge; purchasing a boat to be used for hydrographic surveying with upgraded surveying equipment; purchasing a small boat for emergency responses; purchasing small boats for navigation aid maintenance; purchasing a spud barge for work on navigational aids and for emergency/spot dredging; and rehabilitating the GLS's crane barge/gatelifter *GRASSE RIVER*, which would be utilized if a lock miter gate were damaged and had to be replaced.



GLS's new 60-foot tugboat SEAWAY TRIDENT following its delivery to Massena, N.Y., in May 2023.

### FY 2023 Obligations: \$338,340

### Total Obligations (FYs 2009-2023): \$42,038,474

<u>Project Update (as of September 30, 2023)</u>: In FY 2023, the GLS awarded several contract modifications to Washburn & Doughty Associates, Inc., East Boothbay, Maine, totaling \$10,428 to complete the construction of the ice-class, 60-foot tugboat *SEAWAY TRIDENT*. This tugboat will carry out a variety of construction and maintenance duties for the U.S. portion of the St. Lawrence Seaway, including routine maintenance of lock structures, maintenance and positioning of aids to navigation, ice management, and removal of accumulated ice from lock walls. Additionally, the GLS awarded a contract to Glosten, Inc., Seattle, Wash., for \$111,411 for inspection and oversight services of the *SEAWAY TRIDENT* construction.

The tug construction was completed in FY 2023 and the tug was delivered to the GLS in May 2023. The GLS also awarded many small business purchases to outfit the *SEAWAY TRIDENT* for day-to-day operations and workplace safety measures.

The GLS also awarded a contract for \$30,000 to Bergmann Associates, Architects, Engineers, Landscape Architects & Surveyors, D.P.C., Rochester, N.Y., for a general condition assessment with recommendations related to the operations of the GLS's 300-ton gatelifter vessel *GRASSE RIVER*.

### 19) <u>IT AND COMMUNICATIONS</u> – UPGRADE OF SEAWAY VESSEL TRAFFIC MANAGEMENT SYSTEM

<u>General Description</u>: This project is to expand use of the Seaway's Global Positioning System (GPS)/ Automatic Identification System (AIS) navigation technologies, which are incorporated into the Seaway's binational Traffic Management System (TMS). Future upgrades will further improve the safety for vessels transiting the Seaway and improved time management efficiencies for Great Lakes Seaway System commercial users and stakeholders.

FY 2023 Obligations: \$460,340

Total Obligations (FYs 2009-2023): \$1,515,516

<u>Project Update (as of September 30, 2023)</u>: In FY 2023, the GLS entered into an agreement with the Canadian St. Lawrence Seaway Management Corporation (SLSMC) and agreed to contribute up to \$650,000 for the continued work on the development and design of the Seaway's Voyage Information System (VIS). VIS will serve as the next generation of vessel traffic control and will greatly enhance the safety and efficiency of maritime navigation in the St. Lawrence Seaway and ultimately the Great Lakes. The GLS and SLSMC continue to collaborate with the Volpe National Transportation Systems Center, Cambridge, Mass., on the VIS project.

The U.S. and Canadian Seaway corporations intend to pursue additional phases for the VIS project, resulting in, at a minimum, a new system to improve the safety and efficiency of Seaway vessel traffic management, including transits and lockages. The system could be further enhanced to incorporate port, carrier, and pilot data to better inform and improve efficiencies in extended Seaway stakeholder groups.

### 20) <u>IT AND COMMUNICATIONS</u> – UPGRADE OF LOCK CONTROLS

<u>General Description</u>: This project enhances and improves the GLS's IT network infrastructure and security in Massena, N.Y. The growth of more technology-based improvements is resulting in an increased need to expand and refine the GLS's network environment, including cybersecurity preparedness. The GLS is working closely with DOT's Office of the Chief Information Officer (OCIO) to coordinate and make these improvements.

### FY 2023 Obligations: \$114,769

### Total Obligations (FYs 2009-2023): \$1,354,779

<u>Project Update (as of September 30, 2023)</u>: The GLS continues to make systematic improvements to its IT network environment in Massena, N.Y. In FY 2023, the GLS awarded a contract to Re:Build Optimation Technology, LLC, Buffalo, N.Y., for \$102,410 for hardware upgrades, installation, and training for Massena-based IT operations. The upgrades were coordinated with DOT's OCIO officials to ensure conformity with Federal and Departmental IT security and networking configurations and protocols.

Infrastructure Calegory	SIP Project Description	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Locks and Associated Structures	Upgrade of 7 endering on Approach Walls at B oth Looks	\$245,494	\$34,930	\$0	\$C	\$0	\$188,725	\$140	\$0
Locks and Associated Structures	Rehatilitation of Downstream Miter Gates at Both Locks Detectivity of Remain Bustone Disco and Concerts Afrance Children's modernitions Back Locks	\$0 \$050.015	\$1 501	\$3,548,985	\$17,542	\$3,023,060 *n	\$223,730	20	20
Lucks and Associated Structures Locks and Associated Structures	Refactionation of Colvert Varye Machinew Hivitanifics at Birth Locks	\$4 135 107	\$441150	\$4 010 108	\$600 071	\$767 687	\$4 60.2	04	00
Locks and Associated Structures	Rehabilitation of Winter Maintemance Lock Covers at B oth Locks	\$66.362	\$19.470	\$77,446	\$69.380	\$68,470	\$88.636	\$12.127	\$0
Lucks and Associated Structures	Regularement of Cultrent Values with Single Skin Values at Eoth Locks	\$2,155	\$331,356	\$111,050	\$306,805	\$8,745	\$1,385,140	\$177,157	\$44 ,634
Locks and Associated Structures	Structural Repairs to Grout Leaks it. Galleries and Recesses at Both Locks	\$38,799	\$0	\$0	\$2,812	\$0	0\$	\$0	\$0
Locks and Associated Structures	Rehabilitation of Concrete at Shell Lock	6	0\$	\$0	5	0\$	0\$	\$0	0\$
Locks and A sociated Structures	Rehatilitation of Concrete at Eisenhower Lock	\$1 107 532	\$214,227	\$201.013	13	\$452		20	20
Louks and Associated Standares	Detection and of Upper Fairt Points' dates at Dout LOCKS	(7C, 1U2, 24	PC 2, 15 + 2 4	000	4r/,112	17.04	04	04	04
Louis and Associated Structures Locks and Associated Structures	Renaturidation of Diffusers at Electronic Borks Structured Rehabilitation of Mitner Gates at Both Locks	14 14	04	0\$	40 04L	\$2 GF6 116	04	\$8 377	0\$
Locks and Associated Structures	Rehatilitation of Diffusers at Shell Lock	3	\$0	\$0	\$	\$0	\$0	\$0	\$0
Locks and Associated Structures	Installation of Look Wail Guardraits at Both Locks	C\$	\$0	\$0	38	\$0	0\$	\$593,802	\$19,680
Locks and Associated Structures	Rehatilitation of Stop Logs at B oth Locks	\$3	\$0	\$0	\$C	\$0	\$0	\$0	\$0
Locks and Associated Structures	Replacement of Recess Covers at Both Locks	C\$	\$0	\$0	\$C	\$0	20	\$23,805	\$33,375
Locks and Associated Structures	Upgrade of ighting at Both Locks	C\$	\$0	0\$	J\$	0\$	0\$	\$0	\$0
Locks and Associated Structures	Installation of Marine Base Boat Launch Ramp	C\$	\$0	\$0	\$C	\$0	\$0	\$0	\$0
Lock Equipment	Upgrade/Replacement of Compressed Air Systems at Doth Locks	\$22,123	\$828,924	\$23,393	\$2,792	\$33	\$0	\$4,381	\$0
Lock Equipment	Installation of V essel Self Spetting Equipment at B oth Locks	(\$	\$483	\$0	\$562	\$3,975	\$503,659	\$8,834	(\$63,174
Lock Equipment	Installation of Hands-Firee Mooring System at Both Locks	[\$	20	20	¥	N\$	\$/U5,14U	\$10,795,599	\$1,703,212
Lock Equipment	Replacement of Ventical Lift Gate Wire Ropes at Elsenhower Lock	\$1,453	\$496,528	\$134,194	\$311,286	\$0	\$0	\$0	\$0
Lock Equipment	Upgrade of Ice Flushing System at Eisenhower Lock	[\$	\$0	\$0	5	\$0	\$0	\$0	\$0
Lock Equipment	Upgrade of Orainage Infrastructure in Galieries and Recesses at Both Locks	\$	\$0	\$0	\$542	\$15,351	\$314,642	\$743	\$0
Lock Equipment	Improvements to loe Control at B oth Locks	5	\$13,518	\$0	J¥	\$0	\$0	\$28	\$0\$
Luck Equipment	Uppgrade of Dewatering Phrops at Both Lonks	1.8	80	80	\$106,106	\$46,840	\$ 33,905	\$21,759	18
Lock Equipment	Installation of Ice Flushing System at Snell Lock	5	\$1,453	\$282,027	\$11,548,762	\$1,660,795	\$139,238	\$162,233	\$11,096
Lock Equipment	Upgrote of Miter Gate Machinery at Both Locks	5	\$0	\$133,900	12/12	\$3,256	\$3,785,656	\$1,6/1,855	\$75,166
Lock Equipment	Upgrade of Ship Arrestor Machinetry at Both Locks	[\$	\$0	\$0	3	20	0\$	20	20
Lock Equipment	Relatitiation of Suffleg Demoks a: Both Locks	C\$	\$0	\$0	÷	\$0	\$0	\$00,000	\$10
Lock Equipment	Ketha tilitation of Access to and Machinery in Unssovers and Recesses at both Locks	20	\$0	20	0.8	80	0\$	\$/24,080	\$12,01
Lock Equipment	RepartNee Jacoment of Priping and ValVes at b oth Looks	<b>F</b> \$	\$0	20	2	\$0	20	20	10
Lock Equipment	renatiniate Hands-free Mooning System Units	F\$ 040 E04	13 120 020	1\$	\$1 \$1	\$12 000	\$30 210 \$	D2	\$1 \$1
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Country up under any work y and co	<u>restructures of the region of the region of the restructs</u>	\$1477.401 \$147.401	260,0044	\$01.7770 \$0.740	001,U2-	040 244	101,1220	\$307 501	004,014
Duridangs and Counts Buildiare and Countede	replacement of forming and fractiones Performment of Doming and Doming the characture	10+'0+T¢	¢1 220 051	¢115 522	470,034 &f	43 677	04	100°007¢	7 r o, #r ¢ U\$
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Put ding and Gamade	i translational services and the statement of the service of the s	\$35.403	\$6.74	\$31.702	\$C	CC /*	0.001.01114	\$U\$	00 × 00 × 00
Buildings and Grounds	Uptrate of Storace for Lock Storace Parts and Equipment	C\$	\$421.778	\$29.188	\$143	\$1.124.640	\$32.475	\$2.751	\$0
Buildings and Grounds	Replaze of Windows and Doors and Repar Building Faca des	C\$	\$35,635	\$8,725	\$13,422	\$4.715	0\$	\$2,655	\$
Buildings and Grounds	Rehaltilitation of Spare 3 ate Storage and Assembly Area at Snug Harbor	C\$	\$13,661	\$351,644	\$16,692	\$2,115,326	\$94,340	\$4,295	\$0
Buildings and Grminds	Upgrade of Physical Security to Meet HSPD-12R equivements	L\$	\$26,656	\$ 22,775	\$365,896	\$41,979	\$ 24,852	\$4,065	\$U
Buildings and Grounds	Replacement of Staway Visitor Center at Eisenhower Lock	C\$	\$0	\$14,318	\$C	\$309,098	\$815,730	\$9,479	\$2,183
Buildings and Crounds	Replacement of Elevator at Adrianistration Building	C\$	\$0	\$145,381	\$C	\$0	\$0	\$0	\$0
Buildings and Grounds	Replazement of Fuel Tanks at Maintenance Facility	C\$	\$0	\$192,277	\$13,655	\$0	\$0	\$0	\$0
Buildings and Grounds	Upgrade of Security Fericing	C\$	\$0	\$18,489	\$C	\$0	\$0	\$0	\$0
Buildings and Grounds	Upgrades to Facilities to Meet Sustainability and Energy Goals	\$0	\$0	\$72,31:	\$82,641	\$29,976	\$28,678	\$37,414	\$12,348
pullangs and Grounds			04	0.4	J G	04	DA e	D C C	
Durlangs and Grounds Perdering Mariantics Aids and Floring Diot	rena cuitanonvicepta contentio: Ivassona J.V.Y. Facultuss Destructioned of Effortational Arided Incordia to Att Smarn Duran	10¢ 10¢	0¢ 0¢ 54 576	04		\$1 772	\$0 140	\$176 D64	00 IQ
Predeting, 14avigation Attus, and Floring Flats Predeting Mariantion Aide and Floring Blott	representation of the comparement and the part of the comparement of t	762,104 765	010, FC4 \$70, 173	00 00	¢12.211	612,212	\$14 100	\$16.638	40 4 1 A
Dredging Navigation Aids and Floating Plant	reconcident or random and	COC 8763 D61	\$1.638.737	\$1 007 002	\$7 120 054	\$863.713	\$600.450	\$318 600	50 275 567
Eredeine Nicciention Aide and Flooring Plant	Weintermonea Dreadering of EU Sectore to Meintein Decien Grade and Dreader of Sectore to Meintermore	\$4 208 605	\$13 350	\$3 675 670	\$118.885	\$1.036	\$465	\$21.771	\$605
Seaway International Bridge	Refratilitation of South Channel Span Structure and Conosion Prevention	\$3.104.251	\$5.630.775	\$0	\$C	\$0	\$0	\$0	\$0
IT and Communications	Upprade of Steaway V essel Traffic, Managements System	\$106,167	\$33,232	(\$1,730)	\$10,000	\$6,350	\$0	\$0	\$0
IT and Communications	Upgrade of Jock Controls	\$31,207	\$152,661	\$114,248	\$134,044	\$202,941	\$157,659	\$173,819	\$143,268
IT and Communications	Upgrade of timancial Management System	r\$	157,23	\$3,57.6	21	n\$	n\$	n\$	n\$
IT and Communications	Upgrade of Networks and IT Security	[\$	\$0	\$170,633	\$19,478	\$8,687	\$0	\$0	\$0
IT and Communications	Upgrade of Communications Systems	C\$	\$0	\$0	\$U	\$0	\$163	\$35,847	\$43,561
IT and Communications	Upgrade/Cepterturent of OperationsL CC.V s	3	20	200		0.9		D.9	20
	Opgrate or viasediar Date Traductic System Miscrelaneous Provenses (non-provent-system) administration PCAPR costs)	\$113 774	\$153 370	\$160384	\$110.656	\$67.762	\$110.458	\$70.158	00 878 008
	SIP - TOT AL OBLIGATIONS	\$17,951,311	\$16,874,735	\$16,565,915	\$16,510,519	\$14,917,365	\$14,908,222	\$15,570,849	\$11,399,239
	Other Than Personnal SUP Contracts inventory eminneent sundies)	\$17 587 027	\$16 330 760	\$15 783 117	\$15 838 804	\$14 242 887	912 180 526	\$14 012 827	\$10 021 460
	GLES SIP Project-Specific Personnel Compensation and B ensfits (PC&B)	\$364,284	\$534,975	\$782,798	\$671,714	\$674,478	\$718,696	\$658,022	\$477,770
	Miscellaneous SIP Costs (non project-specific expenses and administrative PC &B costs)	\$113.774	\$153,370	\$160,384	\$119,656	\$57,762	\$119,458	\$70,158	\$23.908

# GLS Seaway Infrastructure Program (SIP) Obligations (FYs 2009-2023)

•	` ` `								
Infrastructure Category	SIP Project Description	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	15-YEAR TOTAL
Locks and Associated Structures	Upgrade of Fendering on Approach Walls at B oth Locks	\$0	\$C \$C	\$190,258	\$162,246	\$9,865	\$264,844	\$278,907	\$1,375,409
Locks and Associated Structures Locks and Associated Structures	Refraouticition of Downstream Nutter Usites at Boin Looks Rekektifistion of Manning Buttons Pins and Concrete Along Gurdemalls and Guardwalls at Buth Looks	0\$ 0	\$L \$L	\$0	\$L	\$0	\$0	20 \$0	\$1 003 C11
Lucks and Associated Structures	rendementerou a revouring de menuar, mas que vouve de raong o travvante que o vantavante et de un notace Rehabilitation a f.Chibrett Valte: Machimery Hydraulites at R nth Lanks	\$U	3ſ	U\$	J\$	s, n	\$1	\$U \$	\$9,463,715
Locks and Associated Structures	Rehabilitation of W.inter Maintenance Lock Covers at E oth Locks	\$0	\$C	\$0	\$C	\$0	\$0	\$0	\$401,891
Locks and Associated Structures	Keplacement of Cultyert Valves with Single Skin Valves at Both Locks	\$2,382	\$L #C	\$2.26,746	\$51,635	\$59,348	\$U \$0	0\$ \$	\$2,706,268
Locks and Associated Structures Tocks and Associated Structures	Situutural. Kepars to Grout Leaks in Gallenes and Recesses at Both Locks Rehebilitetion of Croneale of Shell Lock	\$0 \$0	\$L &L	\$109,110	\$244,795 \$724.795	\$505 745	\$2.125	\$1 0UD	\$450,L34 \$1.607 FSD
Locks and Associated Structures	Rehabilitation of Concrete at Eisennower Lock	\$\$17,884	\$ 604,926	\$309,217	\$864,478	\$947,560	\$3,149,293	\$1,211,983	\$8,.19,820
Locks and Associated Structures	Rehabilitation of Upstream Miter Gates at Both Locks	\$0	\$C	\$0	\$C	\$0	\$0	\$0	\$5.:43,404
Locks and Associated Structures	Rehabilitation of Diffusers at Eisenhower Lock	\$0	\$C	\$0	\$71,665	\$6,279,687	\$153,498	\$0	\$6,504,250
Locks and Associated Structures	Structural Rehabilitation of Miter Gates at Both Locks	\$0	\$C	\$0	\$C	\$0	\$0	\$0	\$6,682,765
Locks and Associated Structures Tocks and Associated Structures	Rehabilitistion of Diffusers at Shell Lock Terteriotien eft eck-Medi Curedenic et B eth Lock	\$0 \$1	\$L ¢r	\$U \$102 £17	\$55,111	B\$	\$21,524	\$/,628,6//	\$7,:00,:12
Locks and Associated Structures Locks and Associated Structures	mistalianun ui louxi wain e uz manis al d'uni luux. Refeririti: himu if Shui Lines al Buth Links	0\$	3C	\$192,017	\$12,042 \$f	\$83 524	\$ 30 49 '	\$151.29	\$010,040
Locks and Associated Structures	Replacement of Recess Covers at Both Locks	\$35,489	\$70,323	\$255,252	\$317,682	\$83,757	\$137,510	\$536,:75	\$1,498,267
Locks and Associated Structures	Upgrade of Lighting at Both Locks	\$0	\$C	\$0	\$C	\$0	\$104,358	\$96,341	\$200,699
Locks and Associated Structures	Installation of Marine Dase D out Launch Ramp	\$0	\$C	\$0	\$C	\$0	\$61,374	\$0	\$61,274
Lock Equipment	Upgrade/Replacement of Compressed Arr Systems at B oth Locks Transferrer - 2012-100 Referencement - 10 arr - 2010	000 74	\$C \$1 501	\$0	3	8	\$0	\$0	\$381,646
Lock Equipment Lock Equipment	ntstallation of Hands-Prox Monting Equipation at Dout Joues Installation of Hands-Prox Montine System at Both Looks	\$3.205.661	\$9,069.631	\$1.142.835	\$651.911	00 (\$4 949)	\$0 \$0	05	\$25.268.E41
Lock Equipment	Replacement of V extical Lift Gate Wire Ropes at Eisenhower Lock	\$0	\$C	\$0	\$0	95	\$0	80	\$943,466
Lock Equipment	Upgrade of Ice Flushing System at Eiserhower Lock	\$0	\$C	\$7,082	\$14,445	\$1,600	\$0	\$0	\$23,130
Lock Equipment	Upgrade of Drainage Infractructure in Galleries and Recesses at Both Locks	\$0	\$C	\$0	\$93,381	0\$	\$76	\$0	\$121,735
Lock Equipment	Improvements to lot Control at B oth Locks	\$0	\$C	\$0 91 5 2 5 5	]\$	\$10,200	\$0	\$0 \$0	\$13,545 ##22 #02
Lock Equipment Lock Feminment	Upgrade of Dewatering Futurgs at both Looks Installation of the Fibiobing Statemast Shell Linds	\$3 173	\$: 3.7F	\$661.764	\$2,25,16C	\$04 173	\$21.206	00°70¢	\$16 270 F45
Lock Equipment	Upgrade of Miter Gate Machinery at Both Locks	(\$270)	\$0	\$0	\$C	0\$	\$0	\$0	\$5,651,218
Lock Equipment	Upgrade of Ship Arrestor Machinery at Both Locks	\$0	\$C	\$714,604	\$713,776	\$2,987	\$0	\$6,855	\$1,438,222
Luck Equipment	Rebahilitstion of Stiffleg Derroks at Both Looks	\$U	\$ſ	\$121,786	\$893,50F	\$17,381	\$U \$	\$n	\$1,038,763
Lock Equipment	Rehabilitization of Access to and Machinery in Crossovers and Recesses at Both Locks	\$0 \$	\$[ \$[	30	35	8	\$0 *** ****	20	\$740,045
Lock Equipment	Repart/Replacement of P-pingand V aves at both Locks Detertibute thanks Terre Moning Content Thats	\$U 6U	3L 6L	\$1.24,24U	14	90	\$45,/U2	\$20,918 \$20,504	C65'017\$
Utilities	Upgrade of Power Supply Inflastructure from Moses-Scunders Dem to Bott. Locks and Adacen: Facilities	\$7.572	\$23,20C	\$147,520	\$23,000	\$33,007	\$62,652	\$51,437	\$780,204
Utilities	Upgrade of Electrical Distribution Equipment	\$0	\$75,00C	\$1 63,297	\$1,193,792	\$314,604	\$665,79.	\$1,054,095	\$4,100,297
Utilizies	UpgradeReplacement of Emergency Generators	\$0	\$C	\$0	\$C	\$0	\$0	\$0	\$2,229,547
Utilizies	improvercents to Facility and Underground Utilities	\$0	\$5:,076	\$0	\$4,585	\$	\$0	\$0	\$55,661
O&M Equipment and Work Vehicles	Replacement of Heavy and Light Equipment and Vehicles Destromment and and and structures	\$:17,162	\$150,048 er	\$1,011,510	\$1,040,321 or	\$8,409	\$16,15: *0	\$381,582 *0	\$5,525,564
butangsand orounds Buildingsand Aminds	replacement of Koots at Facilities Reglacement of Paynor and Disinage Infractinture	(\$142)	\$250 DDF	\$1 487 f03	\$75.70F	\$80 4 10	\$U (\$1 01 0)	\$305 809	\$019,140
Duildings and 3 rounds	Rehabilitetion of Eisenhower Lock Highway Tunnel	\$0	\$0	\$34,013	\$82	\$53,180	\$0	\$85,:09	\$1,858,285
Buildings and Grounds	UpgradeR eplacement of Fire Alarn/Protection Systems	\$0	\$C	\$0	\$C	\$0	\$0	\$0	\$57,532
Buildings and Grounds	Upgrade of Storage for Lock SpareParts and Equipment	\$0	\$C	\$0	\$C	\$0	\$0	\$0	\$1,610,575
Buildingsand Crounds	Replace of Windows and Doors and Repair Building Facades	\$0	\$C	\$4,176	\$17,324	00 00	\$0	\$34,:76	\$:20,527
butangsand crounds Buildingsand Gminds	. Kenaomination of spare i care storage and Assembly Arta at song riaroor Unorade of Physical Sequeity to Meet HSPD-12.R sonitrements	0\$	\$C	18	18	0,8	\$0	0\$	\$486.525
Buildings and 3rounds	Replacement of Seaway Vioitir Center at Eisenhower Lock	(\$768)	\$C	\$129	\$0	\$362,060	\$8,081,152	\$257,206	\$10,751,494
Buildings and Grounds	Replacement of Elevator at Administration Building	\$0	\$C	\$0	\$C	\$0	\$0	\$0	\$:45,281
B uildings and 3 rounds	Replacement of Fuel Tarks at Maintenance Facility	\$0	\$C	\$0	\$C	\$0	\$0	\$0	\$205,532
Buildings and Grounds	Upgrade of Security Ferraing	\$0	\$C	\$0	\$C	\$0	\$0	\$0	\$18,489
b utangsand orounds Buildingsand Sminds	Upgrades to Facturities to meets busatinacturity and Entergy Goats Unornade of Linds Structures Maintenance Building	(1/74) 8U	\$L \$L	908	\$14.015	\$297	\$0 \$1	\$0 80	\$15,512
Buildings and Grounds	Rehabilitation/Replacement of Massena, N.Y. Facilities	\$0	\$C	\$0	\$77,145	\$336,520	\$46,375	\$941,914	\$1,401,552
Dredging, Navigation Aids, and Floating Plant	Replacement of Floating Navigational Aids/Upgrade to All-Season B uoys	\$2,198	\$190,544	\$20,596	\$25,466	\$37,090	\$437,044	\$1,840,:89	\$2,898,£12
Dredging, Navigation Aids, and Floating Flant	Kehabulitiziton of Fized Navigational Aids	(\$#3)	\$4,195	\$157,760	\$528	\$2	\$U 40 400 000	20 \$	\$316,UU6
Dredging, Navigation Aids, and Floating Flant. Dredeiner Moréantion Aids, and Floating Plant.	Upgendielik epilaneement ofti in naturg Planuk Puge Ministereeneen Deedseiner ofti S. Seedseerte Ministeire Deeneen Greede med Dieneeree of Sedimente	01C,012,98	\$4, hill / 75 \$6,566	\$4.51.719 ¢0.0.527	\$0,132,201 \$3,266,016	\$444 X / II	1211/22/28	\$11X, 1411	\$42,113X,474 \$10,417,119
Preuguig, reavigation Auto, and roading ria.it Seavey International Bridge	realization of South Channel Span Structure and Concession Prevention	\$0	\$C \$C	\$0	\$C \$C	\$0000	042,102,11	\$0	\$8,785,C26
IT and Communications	Upgrade of Secway Vessal Traffic Management System	\$0	\$C	\$4 20,275	\$4,395	\$0	\$426,483	\$460.340	\$1,515,516
IT and Communications	Upgrade of Lock C cntrols	S68,326	\$C	\$11,242	\$33,142	\$0	\$2,455	\$114,769	\$1,354,779
IT and Communications	Upgrade of Firancial Maragement System	\$0	\$C ¢C	\$0	\$C \$11 32c	\$0 \$13 042	\$26.02	20	\$5,827
II and Communications IT and Communications	Upgrade ut Networks and 11 Security Historiche of Communications Systems	\$0 836 453	3L &L	\$5 704	\$31567	\$248,709	\$15 308	\$13.075	\$426.167
IT and Cummunications	UppgadeReptacement of Operational CCTVs	\$0	\$C	\$0	30	\$14,516	\$0	\$0	\$14,216
IT and Communications	Upgrade of Massence-Based Telephone System	0\$	\$C	0\$	\$C	\$16,943	\$4,229	0\$	\$21,172
	IVAISOBIARISOUS EXPERISES, JOON PROJECT-SPECIAL EXPANSES AND ARTIMUSTRALVE PULCED COSS.) SIP – TOTAL OBLIGATIONS	710,021,01\$	\$1.38,108,662	\$8,648,316	\$18,669,538	\$10,945,788	\$18,851,695	\$15,946,327	\$224,997,496
	Advo: Theorem of OTD // Adda / Americana Amilianeed - muchback	010 207 310	101 010 10	47 X1X COD	000 X X X 010	¢10.340.304	010 21E 410	\$15 21 5 31 ¢	105 232 3100
	Oute: 1 Idau r casuitta Sur Vosse (vuutause, uuveuvor), equepuzate, seepuzate, seepuzate, seepuzate GLS SIP Proiett-Specific Personnel Compensation and Benefits (PC&B)	\$422,638	\$ 260,541	\$1,031,526	\$1.012,661	\$585,584	\$536,077	\$730,611	\$9,462,175
	Miscellaneous SIP Costs (non project-specific expenses and administrative PC &B costs)	\$855	\$C	\$3,833	3\$	\$	\$0	\$3,062	\$871,220

# GLS Seaway Infrastructure Program (SIP) Obligations (FYs 2009-2023)

GLS Seaway Infrastructure Program (SIP) FY 2025 Request and FY 2026-2029 Estimates

INFRASTRUCTURE CATEGORY	PROJECT TITLE	FY 2025 REQUEST	FY 2026 ESTIMATE	FY 2027 ESTIMATE	FY 2028 ESTIMATE	FY 2029 ESTIMATE	FIVE-YEAR ESTIMATES
Locks and Associated Structures	Rehabilitation of Concrete at Eisenhower Lock	\$1,250,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,250,000
Locks and Associated Structures	Rehabilitation of Concrete at Snell Lock	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Locks and Associated Structures	Replacement of Recess Covers at Both Locks	\$50,000			-		\$50,000
Locks and Associated Structures	Rehabilitation of Stop Logs at Both Locks	\$1,000,000	\$1,000,000	\$1,500,000	-		\$3,500,000
Locks and Associated Structures	Upgrade of Fendering on Approach Walls and Mitter Gates at Both Locks	\$200,000	\$200,000	\$200,000	\$200,000	\$100,000	\$900,000
Lock Equipment	Upgrade of Miter Gate Machinery at Both Locks	-	\$500,000	\$1,000,000	\$2,000,000	\$1,000,000	\$4,500,000
Lock Equipment	Repair Replacement of Piping and Valves at Both Locks	\$50,000			-		\$50,000
Lock Equipment	Rehabilitation of Access to and Machinery in Crossovers and Recesses at Both Locks	\$100,000	1	I	I	I	\$100,000
Lock Equipment	Rehabilitation of Hands-Free Mooring Equipment at Both Locks	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
Utilities	Upgrade of Electrical Distribution Equipment	\$1,500,000	\$300,000	\$300,000	\$300,000	\$200,000	\$2,600,000
Utilities	Upgrade of Power Supply Infrastructure from Moses-Saunders D am to Both Locks and Adjacent Facilities	\$150,000	-	-	1	-	\$150,000
O&M Equipment and Work Vehicles	Replacem ent of Heavy and Light Equipment and Vehicles	\$1,500,000	\$1,000,000	\$1,000,000	\$800,000	\$700,000	\$5,000,000
Buildings and Grounds	Replacement of Paving and Drainage Infrastructure	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$7,500,000
Buildings and Grounds	Rehabilitation/Replacement of Massena, NY. Facilities	\$6,000,000	\$7,750,000	\$8,500,000	\$9,250,000	\$11,250,000	\$42,750,000
Buildings and Grounds	Rehabilitation of Eisenhower Lock Highway Tunnel	\$200,000		-	-		\$200,000
Buildings and Grounds	Repair/Replacement of Security Fencing	\$150,000	\$400,000	\$100,000	-	-	\$650,000
Seaway International Bridge	Capital Improvements at the South Channel Span	000'006\$	\$550,000	\$400,000	\$400,000	\$400,000	\$2,650,000
IT and Communications	Upgrade of Seaway Vessel Iraffic Control System	\$400,000	\$600,000	\$750,000	\$800,000	\$100,000	\$2,650,000
IT and Communications	Upgrade of Lock Controls	\$300,000		-	-		\$300,000
IT and Communications	Upgrade of Communications Systems			\$100,000	\$100,000	\$100,000	\$300,000
	TOTAL	\$16,400,000	\$15,950,000	\$17,500,000	\$17,500,000	\$17,500,000	\$84,850,000

<u>Nota</u> : Dollar amounts for SIP projects are, in most cases. ''Project feasihith,'' estimates that can vary by an industry-recognized 20-30 percent. Funding for each year of the SIP is constrained to annual funding targets as approved by the Secretary and OMB and subject to annual appropriations.