



**Saint Lawrence Seaway Development Corporation**

**Seaway Asset Renewal Program (ARP)  
Annual Report to Congress**



**Fiscal Year 2017**

## **TABLE OF CONTENTS**

	<u>Page</u>
Background and Summary .....	1
FY 2017 ARP Project Updates .....	4
ARP Obligations (FYs 2009-2017) ( <i>Table</i> ) .....	13
ARP Funding Summary (FYs 2009-2017) ( <i>Table</i> ) .....	14

## **Background and Summary**

As directed in the Senate Report (S. Rept. 115-138) of S. 1655 (Transportation, Housing and Urban Development, and Related Agencies Appropriations Act, 2018), the Saint Lawrence Seaway Development Corporation (SLSDC or Corporation) is providing an annual report to the House and Senate Appropriations Committees on the status of its infrastructure Asset Renewal Program (ARP). Annual reports are expected to be sent to the Committees over the life of the program. In addition, Committee staff will be updated throughout each year, as needed and upon request, on any significant changes to the plan's schedule, estimates, or execution.

The start of the ARP in 2009 represented the first time in the SLSDC's 50-year 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, the Seaway International Bridge, and other Corporation-owned facilities and assets located in Upstate New York. None of the ARP projects increase the authorized depth or width of the navigation channel or the size of the lock facilities.

The Seaway is comprised of perpetual assets (locks, channels, an international bridge, highway tunnel, vessel traffic control system, and accompanying facilities and equipment), which require capital reinvestment in order to continue to operate safely, reliably, and efficiently. The U.S. portion of the St. Lawrence Seaway was built in the late 1950s at an original cost of approximately \$130 million. Prior to the start of the ARP in FY 2009, only \$47 million in capital expenditures had been cumulatively invested in the U.S. Seaway locks since they opened in 1959. Without sufficient investment in the SLSDC's perpetual assets, the future availability and reliability of the U.S. section of the St. Lawrence Seaway would be at risk. Although the SLSDC has maintained a 99 percent reliability rate over its history, the ARP is necessary to accomplish this level in the future.

In FY 2017, the SLSDC obligated \$27.9 million on 11 ARP projects, including \$18.1 million for the SLSDC's tugboat replacement project (included \$9.2 million in recovered funds from FY 2016) and \$8.1 million for civil construction work as part of the installation of hands-free mooring system technology at Snell Lock.

Each year following enactment of the SLSDC's appropriation, Corporation engineering, maintenance, and program officials finalize its ARP internal spending plan to re-allocate funding, deferring and accelerating projects as needed. In addition, SLSDC officials are continually making on-going internal budget adjustments throughout each fiscal year to ensure that current priority projects are funded. The flexibility to make the appropriate project and/or funding adjustments has been a major factor in the SLSDC's success in managing and implementing the program.

Through the first nine years of ARP funding (FYs 2009-2017), the SLSDC has obligated \$139 million on 48 separate projects (*see page 13*). These projects included maintenance dredging in the U.S. portion of the Seaway navigation channel, lock miter gate and culvert valve machinery upgrades, structural rehabilitation and corrosion prevention work on the Seaway International Bridge, hands-free mooring at the locks, gatelifter upgrades, miter gate rehabilitation, and the start of the tugboat replacement project, as well as various other structural and equipment repairs and/or replacement.

Although the majority of ARP work is completed by contractors, the SLSDC's federal workforce is directly responsible for completing several of the maintenance-related projects as well as pre-contract work, including preparation of designs, specifications, and drawings. In FY 2017, the SLSDC expended \$423,000 in personnel compensation from its "Operations and Maintenance" program budget for ARP-related staff time. Since the start of the program in FY 2009, SLSDC personnel compensation associated with the ARP has totaled \$5.6 million.

The SLSDC's ARP is resulting 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, approximately \$65 million of ARP funds obligated during the program's first nine years were awarded within the Upstate New York region.

In addition to these contracts, the ARP is producing \$1-2 million in additional economic benefits to the region (local permanent and temporary hires, local spending on supplies and equipment, lodging, meals, etc.) each year.

On a larger scale, maritime commerce on the Great Lakes Seaway System annually sustains more than 225,000 U.S. and Canadian jobs, \$35 billion in transportation-related business revenue, and \$5 billion in federal, state, provincial, and local taxes. The binational waterway also provides approximately \$4 billion in annual transportation cost savings compared to competing rail and highway routes.<sup>1</sup>

The SLSDC's ARP closely coordinates with infrastructure renewal work completed or planned by the Canadian St. Lawrence Seaway Management Corporation (SLSMC) and supports the engineering considerations highlighted in the November 2007 binational *Great Lakes St. Lawrence Seaway Study*.<sup>2</sup> The study evaluated the infrastructure needs of the U.S. and Canadian Great Lakes Seaway System and assessed the economic, environmental, and engineering implications of those needs pertaining to commercial navigation. As part of its ARP planning and implementation processes, the SLSDC is working closely with the SLSMC and U.S. Army Corps of Engineers (USACE) to leverage their expertise.

The Canadian Seaway locks along the St. Lawrence River are identical in age and design to those owned by the U.S. SLSDC. In the past decade prior to the SLSDC's ARP, the Canadian Government began addressing its own Seaway asset capital reinvestment needs. Together, the SLSDC and SLSMC have spent more than \$500 million over the past five years (2013-2017) on asset renewal projects. Many of the lock-related ARP improvements at the U.S. locks will parallel activities either completed, underway, or planned at the Canadian Seaway locks.

These significant investments clearly demonstrate the commitment of the United States and Canada to the long-term health and vitality of the Great Lakes Seaway System, complementing similar investments being made by many other Seaway System stakeholders, including ports, terminals, and carriers.

---

<sup>1</sup> *Great Lakes Navigation System: Economic Strength to the Nation*, U.S. Army Corps of Engineers, January 2009.

<sup>2</sup> [www.greatlakes-seaway.com/en/pdf/GLSL-Final-Report-En.pdf](http://www.greatlakes-seaway.com/en/pdf/GLSL-Final-Report-En.pdf)

In January 2015, a report was released highlighting public and private investments in the Great Lakes St. Lawrence Seaway navigation system.<sup>3</sup> The report, which was based on a survey of more than 450 U.S. and Canadian public organizations and private companies, found that \$6.9 billion is being spent on asset renewal and infrastructure improvements in the Great Lakes St. Lawrence Seaway navigation system by both the public and private sectors. Between 2009 and 2013 more than \$4.7 billion was invested in ships, ports and terminals, and waterway infrastructure, while an additional \$2.2 billion in capital spending has been committed for infrastructure investments in the system by companies and governments.

In order to help ensure that the St. Lawrence Seaway opens each spring for navigation as scheduled, the SLSDC includes monetary incentives and disincentives for ARP contractors working on lock structures and operating components during the off-season winter months. In addition, the SLSDC reserves the right to place additional personnel and/or equipment necessary to complete the winter work at the expense of the contractor. In FY 2017, no incentives were awarded or disincentives assessed.

Since the ARP's inception, the SLSDC's procurement division, in working with the agency's engineering team, recognized the need to be able to award ARP-related support contracts quickly. Pursuant to Federal Acquisition Regulation (FAR), Subpart 16.5, the SLSDC advertised on Federal Business Opportunities (FedBizOpps.gov) in FY 2015 for qualified architecture/engineering (A/E) firms to support the ARP under an Indefinite Delivery Contract (IDC) for a base year with options for four additional years. Three firms received IDC awards in FY 2016 for these services – Bergmann Associates, Rochester, N.Y., WSP USA, Inc. (formerly Parsons Brinckerhoff), Buffalo, N.Y., and NKB & RAM-TECH JV, Syracuse N.Y. The SLSDC currently plans to use these A/E contractors to receive design support and expert advice on project plans, specifications, and drawings for those ARP projects that require such planning. As support work is needed, the SLSDC plans to request proposals from the three firms in a streamlined process, with negotiations, as required, limited to only those firms. The SLSDC has maintained IDCs with A/E firms since the start of the ARP in FY 2009.

ARP baseline project estimates developed by the SLSDC used one or more of four estimation methods, as applicable: (1) historical costs for similar work completed previously by the SLSDC, (2) consultation with the U.S. Army Corps of Engineers (USACE) for similar work it completed at other U.S. locks, (3) consultation with the SLSMC for similar work it completed at the Canadian Seaway locks, and/or (4) utilization of data from RSMeans®, which serves as North America's leading supplier of construction cost information. Estimates also consider final contract totals for similar ARP work awarded during the programs first eight years (FYs 2009-2016).

This annual report provides the Appropriations Committees with updates on: (1) FY 2017 ARP project updates; (2) ARP obligations by project for FYs 2009-2017; and (3) ARP funding summary for FYs 2009-2017.

---

<sup>3</sup> *Infrastructure Investment of the Great Lakes St. Lawrence Seaway System*, Martin Associates, January 2015.

## **FY 2017 ARP Project Updates**

The following information provides an update on the seven ARP projects that were funded in FY 2017 with obligations in excess of the micro-purchase threshold level of \$3,500.<sup>4</sup> The final selection of projects was based on those identified either during the ARP's initial baseline plan development or during on-going program review.

In addition, the SLSDC continues to use contract vehicles that promote 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.

**(1) Project No. 9: Corporation Equipment – Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment**

General Description: This is an ongoing program 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. Motor vehicles will be replaced with alternative fuel vehicles whenever possible.

Type of Project: Capital Equipment / Capital Project / Non-Capital Maintenance Project

Mission Objective: Lock Operation Upgrade and Maintenance / Waterway Management

FY 2017 President's Budget (February 2016): \$100,000

FY 2017 Adjustments Based on Enacted Level (May 2017): \$100,000

FY 2017 Obligations: \$117,162

Total Obligations (FYs 2009-2017): \$2,886,533

Project Update (as of September 30, 2017): In September 2017, the SLSDC purchased five work-related vehicles for its Massena, N.Y. operations through the GSA Heartland Finance Center, Kansas City, Mo. (GSA AutoChoice), for \$117,162. The vehicles purchased were a 2018 GM C2500HD Crew Cab, 2018 Ford Transit Connect 4x2 Van Wagon, and three 2018 Ford Transit 250 4x2 Cargo Vans. These new vehicles replace work-related trucks that are no longer serviceable for use by SLSDC maintenance crews.

---

<sup>4</sup> There were four ARP projects with FY 2017 obligations below the micro-purchase threshold of \$3,500 that are not reported in the project update section: Project No. 8: Floating Navigation Aids – Replace (\$2,198); Project No. 22: Both Locks – Install Vessel Self Spotting System (\$2,587); Project No. 41: Snell Lock – Install Ice Flushing System Technologies (\$299); and Project No. 59: Corporation Facilities – Communications Improvements (\$2,287).

(2) **Project No. 10: Both Locks – Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities**

General Description: This project is for upgrading the infrastructure that supplies power to Eisenhower and Snell Locks and to the Corporation's Maintenance Facility. The power is furnished directly from the Moses-Saunders Power Dam over infrastructure that is over 50 years old. The loss of power from the Moses-Saunders Power Dam makes it necessary to use diesel generators, which are expensive to operate, to continue operation of Eisenhower and Snell Locks and the Maintenance Facility. Additionally, the diesel generators will not provide enough power to support all lock and maintenance operations.

Type of Project: Non-Capital Maintenance Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2017 President's Budget (February 2016): \$0

FY 2017 Adjustments Based on Enacted Level (May 2017): \$0

FY 2017 Obligations: \$7,572

Total Obligations (FYs 2009-2017): \$436,912

Project Update (as of September 30, 2017): In FY 2017, the New York Power Authority (NYPA) continued its on-going rehabilitation of the infrastructure that supplies power to the SLSDC for operations and maintenance activities. This is a recurring annual ARP project with expenditures dependent on NYPA plans and work completed. In September 2017, the SLSDC paid NYPA \$7,572 (sole source) for its work on SLSDC power-related infrastructure rehabilitation.

---

(3) **Project No. 12: Corporation Equipment – Upgrade/Replace Floating Plant/Tugs**

General Description: This project is for rehabilitating and/or replacing the Corporation's floating plant that is utilized for maintaining the locks and navigation channels. This multi-year project includes: replacing the SLSDC'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 response; purchasing small boats for navigation aid maintenance; purchasing a spud barge/scow for work on navigational aids and for emergency/spot dredging; and rehabilitating the SLSDC's crane barge/gatelifter *Grasse River*, which would have to be utilized if a miter gate were damaged and had to be replaced.

Type of Project: Capital Equipment / Capital Project / Non-Capital Maintenance Project

Mission Objective: Lock Operation Upgrade and Maintenance / Waterway Management

FY 2017 President's Budget (February 2016): \$10,000,000

FY 2017 Adjustments Based on Enacted Level (May 2017): \$10,000,000

FY 2017 Obligations: \$9,765,267

Total Obligations (FYs 2009-2017): \$27,101,681

Project Update (as of September 30, 2017): During FY 2017, the SLSDC awarded contracts related to a new ice-class tugboat, a replacement crane for its buoy barge, and upgrades to its 300-ton gatelifter *Grasse River*.

In September 2017, the SLSDC awarded a contract to Gulf Islands Shipyards, LLC, Houma, La. (small business; fixed price contract using lowest price, technically acceptable procedures), for \$18.1 million (\$8.9 million from FY 2017 funds) for construction of an ice-class tugboat to replace the nearly 60-year-old *Robinson Bay*. The contract to Gulf Island Shipyards is for the production engineering, engines, drive units, and construction of the hull for the new tug. In FY 2018, the SLSDC anticipates funding the purchase and installation of the majority of the equipment and systems on the new tugboat with delivery of the new tug in 2019 at a total estimated cost of \$23-24 million.

In addition to the tugboat replacement contract, the SLSDC awarded a contract in September 2017 to TechCrane International LLC, Covington, La. (small business; negotiated procurement; awarded at a fixed price using trade-off procedures), for \$520,000 for a replacement crane for the Corporation's buoy barge.

Finally, the SLSDC awarded two new contracts and modified an existing contract related to its gatelifter. In May 2017, a contract was awarded to Burke Excavation Demolition, Inc., Massena, N.Y. (small business; simplified acquisition; awarded at a fixed price based on lowest price), for asbestos abatement and new floor covering for the gatelifter control deck. In August 2017, a contract was awarded to NKB & RAM-TECH JV, Syracuse, N.Y. (small business; task order with A/E firm; negotiated price; time and materials contract), for \$236,300 to perform an inspection of the gatelifter's hoist and rigging systems. Finally, in August 2017, a contract modification was issued for \$10,000 to Electronic Marine Systems, Rahway, N.J. (small business), to perform additional work on the gatelifter's ballast control equipment.

---

(4) **Project No. 20: Both Locks – Upgrade Lock Status/Controls**

General Description: This project is for upgrading the lock/equipment status systems and the lock operating controls at both Eisenhower and Snell Locks. At present, all of the major components are monitored and controlled by the new computerized system.

Adding control of some of the less critical components and more in depth monitoring of the status of all components will improve the effectiveness of preventive maintenance activities and result in increased reliability.

Type of Project: Capital Project / Non-Capital Maintenance Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2017 President's Budget (*February 2016*): \$0

FY 2017 Adjustments Based on Enacted Level (*May 2017*): \$50,000

FY 2017 Obligations: \$48,750

Total Obligations (FYs 2009-2017): \$535,908

Project Update (as of September 30, 2017): In FY 2017, the SLSDC awarded a contract to Optimization Technology, Rush, N.Y. (small business; sole source contract; fixed price), for data logging software, servers, and licensing for the lock control and monitoring systems.

---

**(5) Project No. 23: Both Locks – Install Hands-Free Mooring System**

General Description: This project is for installing the hands-free mooring system at both Eisenhower and Snell Locks to hold vessels in place while they are in the lock instead of using wire ropes deployed by the vessel's crew to tie the vessel to bollards on the lock wall. In May 2015, the Seaway's hands-free mooring (HFM) technology was recognized by the Organization for Economic Cooperation and Development (OECD) with the Promising Innovation in Transport Award. Once fully implemented at the U.S. and Canadian Seaway locks, the system will produce a number of significant benefits involving workplace safety, carrier operating costs, lower emissions, transit efficiencies, and system competitiveness. The Canadian SLSMC initiated this project and began testing the new technology at their Welland Canal locks in 2007. Testing led to a fourth-generation design, which includes three units with two vacuum pads on each unit, mounted in slots in the lock chamber wall. The SLSMC completed installation at its locks and the system was fully functional early in the 2017 navigation season.

Type of Project: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2017 President's Budget (*February 2016*): \$6,650,000

FY 2017 Adjustments Based on Enacted Level (*May 2017*): \$6,725,000

FY 2017 Obligations: \$8,092,757

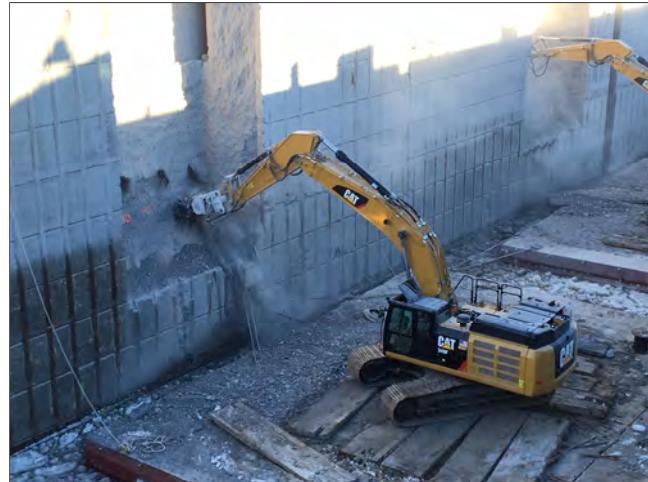
Total Obligations (FYs 2009-2017): \$21,121,918

Project Update (as of September 30, 2017): The SLSDC continues to successfully work toward meeting its goals of operating the new hands-free mooring technology at Eisenhower Lock during the 2018 navigation season and at Snell Lock during the 2019 season.

In FY 2017, the winter work included the construction at Eisenhower Lock of three slots in the lock wall and the installation of the system's rails was completed. The process took two winter seasons to complete.

In FY 2017, the SLSDC also awarded three contracts and six contract modifications related to the hands-free mooring project:

- A contract to Tioga Construction Company, Inc, Herkimer, N.Y. (small business; negotiated price; fixed price contract using trade-off procedures), for \$6.3 million for the slot construction and rail installation at Snell Lock over two winter seasons (FY 2018 and 2019).
- A contract to Loran Construction Inc., Hogansburg, N.Y. (small, self-certified small disadvantaged business; sealed bid; fixed price contract based on lowest price), for \$1.3 million for the construction of the hands-free mooring system utility building on the grounds of Snell Lock. A similar building was under construction in FY 2017 for the system at Eisenhower Lock.
- A contract to USA Construction Company, Omaha, Neb. (small business; simplified acquisition; fixed price contract based on lowest price), for \$38,000 for asbestos abatement at Snell Lock related to the construction.
- Two contract modifications totaling \$154,066 to Cavotec Canada Inc., Markham, Ontario, Canada (large business; sole source; fixed price contract), to purchase additional open top containers to store the hands-free mooring units for both U.S. locks until their installation and to address a U.S./Canadian dollar currency exchange discrepancy from the original purchase of the units in FY 2015.



*Concrete removal along the north wall of Snell Lock to prepare the wall for the hands-free mooring system.*

- Two contract modifications totaling \$200,000 to Bergmann Associates Inc., Rochester, N.Y. (large business), related to engineering services to support the design and construction phases of the project. The original contract was awarded in FY 2014.
  - Two contract modifications totaling \$119,761 to Quality Control Services LLC, Cleveland, Ohio (8(a) sole source), for inspection and testing services for the system installation at Eisenhower Lock. The original contract was awarded in FY 2015.
- 

**(6) Project No. 29: Eisenhower Lock – Walls, Sills, and Culverts – Rehabilitate Concrete**

General Description: This project is to replace deteriorated/damaged concrete at Eisenhower Lock. 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 the mass concrete that forms the locks walls, the walls, floors and ceilings of the filling and emptying culverts and the gate sills. This project includes replacing concrete to depths ranging between approximately 8 inches and 24 inches.



*SLSDC crews working on demolition of deteriorated/damaged concrete for replacement by a contractor in the south filling and emptying culvert at Eisenhower Lock during the winter months of 2017.*

contracts and issued two contract modifications related to Eisenhower Lock concrete rehabilitation performed in the south filling and emptying culvert in 2017 winter season and the north culvert during the 2018 winter season.

Type of Project: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2017 President's Budget (February 2016): \$0

FY 2017 Adjustments Based on Enacted Level (May 2017): \$600,000

FY 2017 Obligations: \$648,151

Total Obligations (FYs 2009-2017): \$857,546

Project Update (as of September 30, 2017): The SLSDC awarded three

- A contract to Shotcrete Montana LLC, Billings, Mont. (small, woman-owned business; simplified acquisition; fixed price contract based on lowest price) for \$226,163 to perform the concrete rehabilitation work at the south filling and emptying culvert at Eisenhower Lock following the conclusion of the 2016 navigation season. Two contract modifications were issued during the work period totaling \$123,258 for additional concrete replaced. A total of 185 cubic yards was replaced in the south culvert.
  - A contract to Patterson-Stevens Inc., Tonawanda, N.Y. (small business; sealed bidding; fixed price contract based on lowest price), for \$272,500 for concrete rehabilitation work at the north filling and emptying culvert at Eisenhower Lock that was completed during the January-March 2018 timeframe. A total of 165 cubic yards was replaced in the north culvert.
  - A contract to Precision Concrete Pumping Inc., Albany, N.Y. (small business; simplified acquisition; fixed price contract based on lowest price), for \$4,183 to lease a concrete pumper truck for Eisenhower Lock concrete rehabilitation performed by SLSDC staff.
- 

(7) **Project No. 61: Both Locks – Replace Recess Covers on Lock Walls**

General Description: 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 original and will be almost 60 years old when replaced. They have deteriorated due to the use of salt to keep the areas in which these covers are located clear of ice and they have been damaged by trucks and heavy equipment driving over them. The SLSDC will replace them with more durable/maintainable materials designed for greater loads.

Type of Project: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance / Facility-Equipment Upgrade and Maintenance

FY 2017 President's Budget (February 2016): \$100,000

FY 2017 Adjustments Based on Enacted Level (May 2017): \$25,000

FY 2017 Obligations: \$19,350

Total Obligations (FYs 2009-2017): \$33,082

Project Update (as of September 30, 2017): The SLSDC awarded two contracts in FY 2017 to procure supplies and materials to fabricate recess covers for installation on the lock walls to keep water from damaging the lock operating equipment below. SLSDC staff fabricated and installed the covers. The two contracts were awarded to J&S Steel LLC, Plattsburgh, N.Y. (small business; simplified acquisition; fixed price contract based on lowest price), totaled \$18,082, and provided enough materials to fabricate four steel recess covers for the two U.S. Seaway locks ranging in size from 8 feet by 13 feet to 11 feet by 17 feet. In addition, SLSDC staff built a 24-foot by 24-foot aluminum cover that will be used during the winter season to cover the bullgear recesses for weather protection when working in those recesses.

# # # # #

*This page has been intentionally left blank*

## SLSDC Asset Renewal Program (ARP) Obligations (FYs 2009-2017)

ARP#	ARP Project Description	FY 2009		FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		FY 2016		FY 2017		TOTAL	
		Project	Amount	Project	Amount	Project	Amount	Project	Amount	Project	Amount	Project	Amount	Project	Amount	Project	Amount	Project	Amount	Project	Amount
1	Both Locks - Replace Fendering on Approach Walls	\$241,600	\$8,091	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,556
2	Both Locks - Rehabilitation Downstream Miter Gates	\$0	\$0	\$3,539,935	\$8,384	\$3,009,954	\$203,606	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,761,839
3	Both Locks - Rehabilitation Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	\$0	\$0	\$35,422	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,422
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	\$41,117,050	\$344,915	\$3,965,005	\$539,889	\$203,678	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,170,537
5	Both Locks - Rehabilitation Winter Maintenance Lock Covers	\$46,698	\$6,638	\$23,781	\$28,355	\$27,906	\$34,2454	\$1,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$169,312
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	\$3,102,878	\$5,680,707	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,783,585
7	Both Locks - Culvert Valves - Replace With Single Skin Valves	\$0	\$0	\$326,898	\$65,591	\$302,468	\$1,622	\$1,370,028	\$102,091	\$22,641	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,189,879
8	Floating Navigation Aids - Replace	\$61,254	\$4,576	\$0	\$0	\$33,134	\$68,149	\$125,562	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,198
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles, and Shop Equipment	\$1,574,504	\$481,052	\$108,038	\$81,623	\$137,393	\$227,151	\$141,124	\$18,486	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,896,533
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	\$19,594	\$231,269	\$93,613	\$28,003	\$17,999	\$38,320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$436,912
11	Fixed Navigation Aids - Rehabilitate	\$0	\$10,998	\$16,048	\$21,217	\$29,210	\$14,199	\$22,456	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$114,128
12	Navigation Equipment - Upgrade/Replace Floating Plant	\$670,745	\$1,627,792	\$1,908,563	\$21,601,69	\$860,413	\$55,2622	\$313,398	\$92,145,79	\$97,65,267	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,101,681
13	Corporation Facilities - Replace Roof	\$143,949	\$0	\$3,348	\$89,024	\$17,820	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$564,907
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	\$921,837	\$1,829,621	\$85,481	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,856,939
15	Eisenhower Lock - Highway Tunnel - Rehabilitation	\$26,636	\$271,804	\$99,459	\$1,523	\$0	\$1,143,224	\$33,583	\$10,747	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,586,976
16	Corporation Technologies - Upgrade GPS/AIS/TMS	\$100,997	\$76,451	<b>(\$3,28)</b>	\$10,000	\$6,350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$190,470
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	\$4,279,556	\$0	\$3,662,267	\$99,714	\$100	\$100	\$19,542	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,061,279
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	\$0	\$487,750	\$108,490	\$268,549	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$865,789
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	\$0	\$753,400	\$30,647	\$41,304	\$1,465	\$420	\$78,342	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$564,907
20	Both Locks - Upgrade Lock Stans/Controls	\$88,558	\$9,705	\$89,507	\$77,549	\$75,722	\$22,570	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$525,908
21	Both Locks - Compressed Air Systems - Upgrade/Replace	\$19,878	\$767,549	\$3,381	\$986	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$815,948
22	Both Locks - Install Vessel Self Splicing Wire System	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$42,279
23	Both Locks - Install Hand Free Moving System	\$37,561	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,211,918
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	\$4,148	\$0	\$4,007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,561
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	\$0	\$418,000	\$12,144	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,155
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	\$0	\$33,776	\$5,337	\$8,070	\$167	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,586,362
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	\$0	\$209,395	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,361
29	Eisenhower Lock - Walks, Sills, and Culverts - Rehabilitate Concrete	\$2,201,585	\$2,478,896	\$347,662	\$14,961	<b>(\$750)</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$648,151
31	Both Locks - Rehabilitation Upstream Miter Gates	\$0	\$2,1734	\$346,600	\$0	\$2,099,334	\$42,445	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,501,713
32	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$308,827
34	Both Locks - Improve Ice Control	\$0	\$57,462	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,462
38	Both Locks - Upgrade/Replace Emergency Generators	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,141,095
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	\$0	\$0	\$0	\$0	\$189,763	\$25,721	\$32,538	\$17,936	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$236,988
41	Snell Lock - Install Ice Flushing System Technologies	\$0	\$272,000	\$11,477,293	\$1,577,272	\$90,045	\$28,144	\$498	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,545,551
42	Both Locks - Miter Gates - Structural Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,39,642
43	Both Locks - Miter Gates, Machinery - Upgrade/Replace	\$0	\$0	\$13,364	\$1,207	\$505	\$3,740,933	\$1,568,778	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,449,932	
51	Corporation Facilities - Upgrade Physical Security to Meet HSHPD-12 Requirements	\$0	\$24,183	\$21,097	\$33,243,07	\$20,143	\$5,985	\$977	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$424,732
52	Corporation Facilities - Eisenhower Lock Visitors' Center - Replace	\$0	\$0	\$13,042	\$0	\$298,391	\$794,473	\$5,631	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,111,537	
54	Corporation Facilities - Administration Building - Replace Elevator	\$0	\$0	\$140,346	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$140,346
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	\$0	\$0	\$18,350	\$2,350	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,700
56	Corporation Facilities - Duty Free Store Property - Upgrade Security	\$0	\$0	\$15,025	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,025
57	Corporation Technologies - Upgrade Network Security	\$0	\$0	\$15,536	\$1,6998	\$8,887	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$184,221
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	\$0	\$0	\$47,511	\$57,036	\$8,180	\$22,140	\$8,405	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$146,836	
59	Corporation Facilities - Communications Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,283
60	Both Locks - Improve Access to and Rehabilitation Machinery in Crossovers and Recesses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$716,448
61	Both Locks - Replace Recess Covers on Lock Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,350
65	Both Locks - Install Lock Wall Guardrails	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$563,104
-	Miscellaneous Expenses	\$0	\$0	\$443	\$1,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,143
	Asset Renewal Program Total	<b>\$17,587,028</b>	<b>\$16,339,760</b>	<b>\$15,783,116</b>	<b>\$15,838,803</b>	<b>\$14,242,887</b>	<b>\$14,912,825</b>	<b>\$10,921,470</b>	<b>\$18,706,380</b>	<b>\$138,521,796</b>											

NOTES:

(1) Rounding may affect the addition of rows and columns in the table.

(2) In FY 2009, ARP Project Nos. 3 and 14 were contractually combined.

(3) The SLSDC expended an additional \$474,000, \$535,000, \$783,000, \$672,000, \$674,000, \$970,000, \$620,000, \$478,000, and \$23,000 in personnel compensation for staff time associated with ARP work in FYs 2009-2017.

respectively.

(4) The miscellaneous expenses of \$443 in FY 2010 and \$1,700 in FY 2011 were for ARP-related travel costs by SLSDC personnel that could not be linked to a specific ARP project.

## ARP Funding Summary (FYS 2009-2017)

ARP Project No.	ARP Project Title	FY 2009			FY 2010		
		Total Obligations Through FY 2017	FY 2009 President's Budget	FY 2009 Adjustments Based on Enacted Level	FY 2009 Obligations (Actual)	FY 2010 President's Budget	FY 2010 Adjustments Based on Enacted Level
1	Both Locks - Replace Fendering on Approach Walls	\$438,356	\$300,000	\$300,000	\$241,600	---	\$10,000
2	Both Locks - Rehabilitation Miter Gates	\$6,761,839	\$1,500,000	---	\$1,508,000	---	---
3	Both Locks - Rehabilitation Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	\$35,422	\$250,000	(Comb. w/ No. 14)	\$251,000	---	\$35,422
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	\$9,170,537	\$2,000,000	\$2,000,000	\$4,117,050	---	\$34,491
5	Both Locks - Rehabilitation Winter Maintenance Lock Covers	\$169,312	\$250,000	\$250,000	\$46,398	---	\$6,632
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	\$8,783,985	\$2,000,000	\$2,000,000	\$3,102,378	\$5,773,000	\$4,500,000
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	\$2,189,879	\$600,000	\$600,000	---	\$603,000	\$297,000
8	Floating Navigational Aids - Replace	\$343,173	\$60,000	\$60,000	\$61,254	\$60,000	\$54,576
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	\$2,886,533	\$1,750,000	\$1,750,000	\$1,574,504	\$251,000	\$481,052
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	\$436,912	\$75,000	\$75,000	\$19,594	\$75,000	\$100,000
11	Fixed Navigational Aids - Rehabilitate	\$114,128	\$100,000	\$100,000	---	\$201,000	\$10,000
12	Corporation Equipment - Upgrade/Replace Floating Plant/Tugs	\$27,101,681	\$2,000,000	\$2,000,000	\$678,745	\$203,000	\$1,845,000
13	Corporation Facilities - Replace Roofs	\$564,907	\$50,000	\$50,000	\$143,949	---	---
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	\$2,836,339	\$950,000	\$1,200,000	\$921,837	\$1,508,000	\$1,000,000
15	Eisenhower Lock - Highway Tunnel - Rehabilitation	\$1,586,976	\$250,000	\$250,000	\$26,636	---	\$271,804
16	Corporation Technologies - Upgrade GPS/AIS/TIMS	\$190,470	\$100,000	\$100,000	\$100,987	---	\$76,451
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	\$8,061,279	\$55,000,000	\$55,000,000	\$4,279,556	---	---
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	\$865,789	---	---	---	\$503,000	\$50,000
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	\$1,110,820	---	---	---	\$151,000	\$150,000
20	Both Locks - Upgrade Lock Status/Controls	\$535,908	---	---	\$8,558	\$151,000	\$200,000
21	Both Locks - Compressed Air Systems - Upgrade/Replace	\$815,948	---	---	\$19,878	\$1,508,000	\$1,500,000
22	Both Locks - Install Vessel Self Spotting Equipment	\$424,279	---	---	---	\$251,000	---
23	Both Locks - Install Hands-Free Mooring System	\$2,121,918	---	---	---	---	---
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	\$37,561	---	---	\$37,561	\$201,000	---
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	\$8,155	---	---	\$4,148	\$101,000	\$5,000
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	\$1,566,362	---	---	---	\$201,000	\$200,000
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	\$48,361	---	---	---	\$201,000	\$200,000
28	Snell Lock - Walls, Sills and Culverts - Rehabilitation Concrete	\$0	---	---	---	---	---
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitation Concrete	\$857,546	---	---	---	---	---
30	Eisenhower Lock - Ice Flushing System - Upgrade	\$0	---	---	---	---	---
31	Both Locks - Rehabilitation Upstream Miter Gards	\$5,042,354	---	---	\$1,500,000	\$2,201,535	\$2,800,000
32	Snell Harbor - Rehabilitate Spare Gate Storage and Assembly Area	\$2,501,713	---	---	---	---	\$12,734
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	\$308,827	---	---	---	---	---
34	Both Locks - Improve Ice Control	\$7,462	---	---	---	---	\$7,462
35	Vessel Mooring Cells - Rehabilitation and Extend	\$0	---	---	---	---	---
36	Eisenhower Lock - Diffusers - Replace	\$0	---	---	---	---	---
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	\$13,545,351	---	---	---	---	---
38	Both Locks - Upgrade/Replace Emergency Generators	\$6,639,642	---	---	---	---	---
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	\$5,449,332	---	---	---	---	---
40	Both Locks - Extend Guidewalls in Pool	\$0	---	---	---	---	---
41	Snell Lock - Install Ice Flushing System Technologies	\$10,000	---	---	---	---	---
42	Both Locks - Miter Gates - Structural Rehabilitation	---	---	---	---	---	---
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	---	---	---	---	---	---

## ARP Funding Summary (FYS 2009-2017)

ARP Project No.	ARP Project Title	FY 2009			FY 2010		
		FY 2009 President's Budget	Total Obligations Through FY 2017	FY 2009 Adjustments Based on Enacted Level	FY 2009 Obligations (Actual)	FY 2010 President's Budget	FY 2010 Adjustments Based on Enacted Level
44	Both Locks - Ship Arrestor Machinery - Upgrade/Replace	\$0	---	---	---	---	---
45	Flow Control Dikes - Rehabilitation	\$0	---	---	---	---	---
46	Both Locks - Guidewall Extensions - Rehabilitation	\$0	---	---	---	---	---
47	Eisenhower Lock - Vertical Lift Gate - Structural Rehabilitation	\$0	---	---	---	---	---
48	Both Locks - Shifting Derricks - Replace	\$0	---	---	---	---	---
49	Seaway International Bridge - Replace Deck	\$0	---	---	---	---	---
50	Seal Lock - Diffusers - Replace	\$0	---	---	---	---	---
51	Corporation Facilities - Upgrade Physical Security to Meet HSPD-12 Requirements	\$424,732	---	---	---	---	\$24,183
52	Corporation Facilities - Eisenhower Lock Visitors Center - Replace	\$1,111,537	---	---	---	---	---
53	Corporation Technologies - Financial Management System - Upgrade/Replace	\$0	---	---	---	---	---
54	Corporation Facilities - Administration Building - Replace Elevator	\$140,346	---	---	---	---	---
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	\$191,700	---	---	---	---	---
56	Corporation Facilities - Duty Free Store Property - Security Upgrades	\$13,025	---	---	---	---	---
57	Corporation Technologies - Upgrade Network Security	\$184,221	---	---	---	---	---
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	\$146,836	---	---	---	---	---
59	Corporation Facilities - Communications Improvements	\$35,283	---	---	---	---	---
60	Both Locks - Improve Access to and Rehabilitation Machinery in Crossovers and Recesses	\$716,448	---	---	---	---	---
61	Both Locks - Replace Recess Covers on Lock Walls	\$33,082	---	---	---	---	---
62	Both Locks - Install/Upgrade Air Curtains	\$14,325	---	---	---	---	---
63	Both Locks - Install Electric Pleasure Craft Toll Collection Facility	\$0	---	---	---	---	---
64	Corporation Facilities - Upgrade Lock Structures Maintenance Building	\$0	---	---	---	---	---
65	Both Locks - Install Lock Wall Guardrails	\$548,679	---	---	---	---	---
---	Miscellaneous Expenses	\$2,143	---	---	---	---	\$443
---	Engineering Design, Construction Inspection, Contracting Support, and Project Management (non-add)	---	\$300,000	---	\$608,769	\$206,000	---
---	Personnel Related Expenses (non-add)	\$5,629,000	---	---	\$474,000	---	\$535,000
	Total	\$138,521,796	\$17,535,000	\$17,535,000	\$17,587,028	\$16,317,000	\$16,340,203

## ARP Funding Summary (FYS 2009-2017)

ARP Project No.	ARP Project Title	FY 2011			FY 2012		
		Total Obligations Through FY 2017	FY 2011 President's Budget	FY 2011 Adjustments Based on Enacted Level	FY 2011 Obligations (Actual)	FY 2012 President's Budget	FY 2012 Adjustments Based on Enacted Level
1	Both Locks - Replace Fendering on Approach Walls	\$438,356	\$10,000	---	---	---	---
2	Both Locks - Rehabilitation Miter Gates	\$6,761,839	\$4,250,000	\$4,250,000	\$3,539,935	\$4,380,000	\$2,700,000 \$8,384
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	\$35,422	---	---	---	\$200,000	---
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	\$9,170,537	\$4,500,000	\$4,500,000	\$3,965,005	\$180,000	\$539,889
5	Both Locks - Rehabilitate Winter Maintenance Lock Covers	\$169,312	---	---	\$23,781	\$256,000	\$28,335
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	\$8,783,985	\$2,466,000	\$2,066,000	---	---	---
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	\$2,189,879	\$30,000	\$30,000	\$65,591	\$405,000	\$300,000 \$302,468
8	Floating Navigational Aids - Replace	\$343,173	\$61,000	\$61,000	---	\$61,000	\$60,000
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	\$2,886,533	\$100,000	\$100,000	\$108,038	\$255,000	\$100,000 \$81,623
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	\$436,912	\$50,000	\$50,000	\$93,613	\$20,000	\$40,000
11	Fixed Navigational Aids - Rehabilitate	\$114,128	\$100,000	\$100,000	\$16,217	\$100,000	\$100,000 \$21,048
12	Corporation Equipment - Upgrade/Replace Floating Plant/Tugs	\$27,101,681	\$505,000	\$505,000	\$1,908,563	\$1,524,000	\$2,335,000 \$2,160,169
13	Corporation Facilities - Replace Roofs	\$564,907	\$130,000	\$130,000	\$3,348	\$230,000	\$40,000 \$89,024
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	\$2,836,339	\$750,000	---	\$85,481	---	---
15	Eisenhower Lock - Highway Tunnel - Rehabilitation	\$1,586,976	\$650,000	\$650,000	\$59,459	---	\$1,523
16	Corporation Technologies - Upgrade GPS/ATIS/TMS	\$190,470	\$50,000	\$50,000	\$3,328	---	\$10,000
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	\$8,061,279	---	\$770,000	\$3,662,267	---	\$99,714
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	\$665,789	---	---	\$109,490	---	\$260,000 \$268,549
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	\$1,110,820	\$150,000	---	\$306,847	\$400,000	\$400,000 \$41,304
20	Both Locks - Upgrade Lock Status/Controls	\$535,908	\$75,000	\$75,000	\$89,507	---	\$27,549
21	Both Locks - Compressed Air Systems - Upgrade/Replace	\$815,948	---	---	\$3,381	---	\$15,000 \$986
22	Both Locks - Install Vessel Self Spotting Equipment	\$424,279	---	---	---	---	---
23	Both Locks - Install Hands-Free Mooring System	\$2,121,918	---	---	---	---	---
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	\$37,561	---	---	---	\$203,000	\$100,000
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	\$8,155	---	---	\$4,007	---	---
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	\$1,566,362	---	---	\$12,144	\$203,000	---
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	\$49,361	---	---	\$5,537	\$203,000	\$50,000 \$8,070
28	Snell Lock - Walls, Sills and Culverts - Rehabilitate Concrete	\$0	---	---	---	---	---
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitate Concrete	\$857,546	---	---	---	---	---
30	Eisenhower Lock - Ice Flushing System - Upgrade	\$0	---	---	---	---	---
31	Both Locks - Rehabilitate Upstream Miter Gards	\$5,042,354	---	---	\$347,652	---	\$14,961
32	Snug Harbor - Rehabilitate Spare Gate Storage and Assembly Area	\$2,501,713	\$253,000	\$253,000	\$346,600	\$254,000	\$250,000
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	\$308,827	---	---	---	\$152,000	\$100,000
34	Both Locks - Improve Ice Control	\$7,462	\$100,000	\$100,000	---	\$228,000	---
35	Vessel Mating Cells - Rehabilitate and Extend	\$0	\$100,000	\$100,000	---	---	---
36	Eisenhower Lock - Diffusers - Replace	\$0	---	---	---	\$3,045,000	---
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	\$0	---	---	---	---	---
38	Both Locks - Upgrade/Replace Emergency Generators	\$2,141,095	---	---	---	\$508,000	\$100,000
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	\$256,988	---	---	---	\$203,000	\$200,000
40	Both Locks - Extend Guidewalls in Pool	\$0	---	---	---	\$3,045,000	---
41	Snell Lock - Install Ice Flushing System Technologies	\$13,545,351	\$400,000	\$272,000	\$2,000,000	\$6,705,000	\$11,477,233
42	Both Locks - Miter Gates - Structural Rehabilitation	\$6,639,642	---	---	---	\$761,000	\$750,000
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	\$5,449,932	---	---	\$133,384	\$1,632,000	\$1,207

## ARP Funding Summary (FYS 2009-2017)

ARP Project No.	ARP Project Title	FY 2011			FY 2012			
		Total Obligations Through FY 2011	FY 2011 President's Budget	FY 2011 Adjustments Based on Enacted Level	FY 2011 Obligations (Actual)	FY 2012 President's Budget	FY 2012 Adjustments Based on Enacted Level	FY 2012 Obligations (Actual)
44	Both Locks - Ship Arrestor Machinery - Upgrade/Replace	\$0	---	---	---	---	---	---
45	Flow Control Dikes - Rehabilitation	\$0	---	---	---	---	---	---
46	Both Locks - Guidewall Extensions - Rehabilitation	\$0	---	---	---	---	---	---
47	Eisenhower Lock - Vertical Lift Gate - Structural Rehabilitation	\$0	---	---	---	---	---	---
48	Both Locks - Shifting Derricks - Replace	\$0	---	---	---	---	---	---
49	Seaway International Bridge - Replace Deck	\$0	---	---	---	---	---	---
50	Small Lock - Diffusers - Replace	\$0	---	---	---	---	---	---
51	Corporation Facilities - Upgrade Physical Security to Meet HSPD-12 Requirements	\$424,732	\$100,000	\$100,000	\$21,097	\$50,000	\$30,000	\$352,347
52	Corporation Facilities - Eisenhower Lock Visitors Center - Replace	\$1,111,537	---	---	---	\$13,042	---	---
53	Corporation Technologies - Financial Management System - Upgrade/Replace	\$0	---	---	---	---	---	---
54	Corporation Facilities - Administration Building - Replace Elevator	\$140,346	---	---	\$140,346	---	---	---
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	\$191,700	---	---	\$189,350	---	---	\$2,350
56	Corporation Facilities - Duty Free Store Property - Security Upgrades	\$13,025	---	---	\$13,025	---	---	---
57	Corporation Technologies - Upgrade Network Security	\$184,221	---	---	\$158,536	---	\$250,000	\$16,998
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	\$146,836	---	---	\$47,511	---	\$50,000	\$57,036
59	Corporation Facilities - Communications Improvements	\$35,283	---	---	---	---	---	---
60	Both Locks - Improve Access to and Rehabilitation Machinery in Crossovers and Recesses	\$716,448	---	---	---	---	---	---
61	Both Locks - Replace Recess Covers on Lock Walls	\$33,082	---	---	---	---	---	---
62	Both Locks - Install/Upgrade Air Curtains	\$14,325	---	---	---	---	---	---
63	Both Locks - Install Electric Pressure Craft Toll Collection Facility	\$0	---	---	---	---	---	---
64	Corporation Facilities - Upgrade Lock Structures Maintenance Building	\$0	---	---	---	---	---	---
65	Both Locks - Install Lock Wall Guardrails	\$548,879	---	---	---	---	---	---
---	Miscellaneous Expenses	\$2,143	---	---	\$1,700	---	---	---
---	Engineering Design, Construction Inspection, Contracting Support, and Project Management (non-add)	---	---	---	---	---	---	---
---	Personnel Related Expenses (non-add)	\$5,629,000	---	---	\$783,000	---	---	\$672,000
	Total	\$138,521,796	\$15,700,000	\$15,700,000	\$15,784,816	\$17,075,000	\$15,600,000	\$15,838,803

## ARP Funding Summary (FYS 2009-2017)

ARP Project No.	ARP Project Title	FY 2013			FY 2014			
		Total Project Obligations Through FY 2017	FY 2013 President's Budget	FY 2013 Adjustments Based on Enacted Level	FY 2013 Obligations (Actual)	FY 2014 President's Budget	FY 2014 Adjustments Based on Enacted Level	FY 2014 Obligations (Actual)
1	Both Locks - Replace Fendering on Approach Walls	\$438,356	---	---	\$3,009,854	---	---	\$188,725
2	Both Locks - Rehabilitation Miter Gates	\$6,761,839	\$230,000	\$3,032,500	\$204,000	---	---	\$203,666
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	\$35,422	\$100,000	\$100,000	---	---	---	---
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	\$9,170,537	---	\$207,000	\$203,678	---	---	---
5	Both Locks - Rehabilitate Winter Maintenance Lock Covers	\$6,169,312	\$200,000	\$150,000	\$27,906	---	\$20,000	\$24,254
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	\$8,783,585	---	---	---	---	---	---
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	\$2,189,879	\$40,200	\$350,000	\$162	---	\$380,000	\$1,370,038
8	Floating Navigational Aids - Replace	\$543,173	\$65,000	\$30,000	\$31,134	\$65,000	\$48,000	\$68,149
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	\$2,886,533	\$260,000	\$492,000	\$137,593	\$260,000	\$223,000	\$227,151
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	\$436,912	\$20,000	\$20,000	\$17,098	\$20,000	\$40,000	\$8,320
11	Fixed Navigational Aids - Rehabilitate	\$114,128	\$200,000	\$35,000	\$29,210	\$200,000	\$15,000	\$14,199
12	Corporation Equipment - Upgrade/Replace Floating Plant/Tugs	\$27,101,681	\$400,000	\$575,000	\$860,413	---	\$587,000	\$572,622
13	Corporation Facilities - Replace Roofs	\$564,907	\$300,000	\$555,000	\$17,820	\$500,000	---	---
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	\$2,836,339	\$800,000	\$323,600	---	\$1,300,000	---	---
15	Eisenhower Lock - Highway Tunnel - Rehabilitation	\$1,586,976	\$750,000	---	---	---	\$1,411,000	\$1,143,224
16	Corporation Technologies - Upgrade GPS/ATIS/TMS	\$190,470	\$100,000	\$6,500	\$6,350	---	---	---
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	\$8,061,279	---	\$50,000	\$100	\$5,150,000	---	\$100
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	\$865,789	---	---	---	---	---	---
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	\$1,110,820	---	\$1,500	\$1,465	---	---	\$420
20	Both Locks - Upgrade Lock Status/Controls	\$535,908	---	\$65,000	\$76,722	---	\$30,000	\$32,570
21	Both Locks - Compressed Air Systems - Upgrade/Replace	\$815,948	---	\$15,000	---	---	---	---
22	Both Locks - Install Vessel Self Spotting Equipment	\$424,279	\$500,000	\$400,000	---	\$300,000	\$500,000	\$485,201
23	Both Locks - Install Hands-Free Mooring System	\$2,121,918	---	---	---	---	\$2,975,000	\$686,074
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	\$37,561	---	\$100,000	---	---	---	---
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	\$8,155	---	---	---	---	---	---
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	\$1,566,362	\$750,000	\$450,000	\$1,115,266	\$200,000	\$15,000	\$18,572
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	\$49,361	---	---	\$167	\$200,000	---	---
28	Snell Lock - Walls, Sills and Culverts - Rehabilitation Concrete	\$0	---	---	---	---	---	---
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitation Concrete	\$857,546	\$2,000,000	\$1,700,000	---	\$1,500,000	---	---
30	Eisenhower Lock - Ice Flushing System - Upgrade	\$0	---	---	---	---	---	---
31	Both Locks - Rehabilitation Upstream Miter Gards	\$5,042,354	---	---	-\$750	---	---	---
32	Snug Harbor - Rehabilitate Spare Gate Storage and Assembly Area	\$2,501,713	\$300,000	\$1,000,000	\$2,089,934	---	\$35,000	\$42,445
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	\$308,827	\$160,000	\$150,000	\$6,938	\$150,000	\$300,000	\$301,737
34	Both Locks - Improve Ice Control	\$7,462	\$230,000	---	---	\$230,000	---	---
35	Vessel Mooring Cells - Rehabilitation and Extend	\$0	\$500,000	\$200,000	---	\$1,020,000	---	---
36	Eisenhower Lock - Diffusers - Replace	\$0	---	---	---	---	---	---
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	\$0	---	---	---	---	---	---
38	Both Locks - Upgrade/Replace Emergency Generators	\$2,141,095	\$500,000	\$500,000	\$1,764,008	---	\$343,000	\$344,313
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	\$256,988	\$200,000	\$5,000	\$25,721	---	\$24,000	\$23,568
40	Both Locks - Extend Guidewalls in Pool	\$0	---	---	---	---	---	---
41	Snell Lock - Install Ice Flushing System Technologies	\$13,545,351	\$3,000,000	\$1,100,000	\$1,577,272	---	\$95,000	\$90,045
42	Both Locks - Miter Gates - Structural Rehabilitation	\$6,639,642	\$765,000	\$2,000,000	\$2,898,819	\$1,295,000	\$3,740,613	\$3,740,933
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	\$5,449,332	\$2,600,000	---	\$505	\$1,750,000	\$2,360,000	\$3,740,933

## ARP Funding Summary (FYS 2009-2017)

ARP Project No.	ARP Project Title	FY 2013		FY 2014	
		Total Obligations Through FY 2017	FY 2013 Adjustments Based on Enacted Level	FY 2013 Obligations (Actual)	FY 2014 President's Budget
44	Both Locks - Ship Arrestor Machinery - Upgrade/Replace	\$0	---	---	\$410,000
45	Flow Control Dikes - Rehabilitation	\$0	---	---	---
46	Both Locks - Guidewall Extensions - Rehabilitation	\$0	---	---	---
47	Eisenhower Lock - Vertical Lift Gate - Structural Rehabilitation	\$0	---	---	---
48	Both Locks - Stiffing Derricks - Replace	\$0	---	---	---
49	Seaway International Bridge - Replace Deck	\$0	---	---	---
50	Small Lock - Diffusers - Replace	\$0	---	---	---
51	Corporation Facilities - Upgrade Physical Security to Meet HSPD-12 Requirements	\$424,732	\$50,000	\$25,000	\$20,143
52	Corporation Facilities - Eisenhower Lock Visitors Center - Replace	\$1,111,537	\$300,000	\$280,000	\$298,391
53	Corporation Technologies - Financial Management System - Upgrade/Replace	\$0	---	---	---
54	Corporation Facilities - Administration Building - Replace Elevator	\$140,346	---	---	---
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	\$191,700	---	---	---
56	Corporation Facilities - Duty Free Store Property - Security Upgrades	\$13,025	---	---	---
57	Corporation Technologies - Upgrade Network Security	\$184,221	---	\$8,500	\$8,687
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	\$146,836	\$200,000	\$53,400	\$8,180
59	Corporation Facilities - Communications Improvements	\$35,283	---	---	---
60	Both Locks - Improve Access to and Rehabilitation Machinery in Crossovers and Recesses	\$716,448	---	---	---
61	Both Locks - Replace Recess Covers on Lock Walls	\$33,082	---	---	\$100,000
62	Both Locks - Install/Upgrade Air Curtains	\$14,325	---	---	---
63	Both Locks - Install Electric Pressure Craft Toll Collection Facility	\$0	---	---	---
64	Corporation Facilities - Upgrade Lock Structures Maintenance Building	\$0	---	---	---
65	Both Locks - Install Lock Wall Guardrails	\$548,879	---	---	---
---	Miscellaneous Expenses	\$2,143	---	---	---
---	Engineering Design, Construction Inspection, Contracting Support, and Project Management (non-add)	---	---	---	---
---	Personnel Related Expenses (non-add)	\$5,629,000	---	\$674,000	---
	Total	\$138,521,796	\$16,000,000	\$14,000,000	\$14,242,887
				\$16,850,000	\$14,150,000
					\$14,189,527

## ARP Funding Summary (FYS 2009-2017)

ARP Project No.	ARP Project Title	FY 2015			FY 2016			
		Total Obligations Through FY 2017	FY 2015 President's Budget	FY 2015 Adjustments Based on Enacted Level	FY 2015 Obligations (Actual)	FY 2016 President's Budget	FY 2016 Adjustments Based on Enacted Level	FY 2016 Obligations (Actual)
1	Both Locks - Replace Fendering on Approach Walls	\$438,356	\$250,000	---	\$140	---	---	---
2	Both Locks - Rehabilitation Miter Gates	\$6,761,839	---	---	---	---	---	---
3	Both Locks - Rehabilitation Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	\$35,422	---	---	---	---	---	---
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	\$9,170,537	---	---	---	---	---	---
5	Both Locks - Rehabilitation Winter Maintenance Lock Covers	\$169,312	\$25,000	---	\$1,700	---	---	---
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	\$8,783,585	---	---	---	---	---	---
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	\$2,189,879	---	---	\$100,000	\$102,091	---	\$22,641
8	Floating Navigational Aids - Replace	\$343,173	\$65,000	\$125,000	\$125,562	---	---	---
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	\$2,886,533	\$200,000	\$125,000	\$141,124	---	---	\$18,486
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	\$436,912	\$20,000	---	---	\$50,000	\$50,000	\$1,442
11	Fixed Navigational Aids - Rehabilitate	\$114,128	\$100,000	\$25,000	\$22,456	\$50,000	\$50,000	---
12	Corporation Equipment - Upgrade/Replace Floating Plant/Tugs	\$27,101,681	\$750,000	\$330,000	\$313,398	\$10,000,000	\$10,000,000	\$9,214,579
13	Corporation Facilities - Replace Roofs	\$564,907	\$200,000	\$400,000	\$283,426	---	---	\$27,340
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	\$2,836,339	---	---	---	---	---	---
15	Eisenhower Lock - Highway Tunnel - Rehabilitation	\$1,586,976	---	---	\$35,000	\$33,553	---	\$10,747
16	Corporation Technologies - Upgrade GPS/ATIS/TMS	\$190,470	\$100,000	---	---	---	---	---
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	\$8,061,279	---	---	\$19,542	---	---	---
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	\$865,789	---	---	---	---	---	---
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	\$1,110,820	\$450,000	\$10,000	\$7,384	---	---	---
20	Both Locks - Upgrade Lock Status/Controls	\$535,908	\$50,000	\$40,000	\$37,998	---	---	\$64,749
21	Both Locks - Compressed Air Systems - Upgrade/Replace	\$815,948	\$100,000	\$10,000	\$4,154	---	---	---
22	Both Locks - Install Vessel Self Spotting Equipment	\$424,279	---	---	\$1,491	---	---	-\$65,000
23	Both Locks - Install Hands-Free Mooring System	\$21,121,918	\$81,000,000	\$10,800,000	\$10,756,839	\$8,000,000	---	\$1,596,248
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	\$37,561	\$100,000	---	---	---	---	---
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	\$81,155	---	---	---	---	---	---
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	\$1,566,362	---	---	\$2,380	---	---	---
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	\$49,361	---	---	\$1,811	---	---	---
28	Snell Lock - Walls, Sills and Culverts - Rehabilitation Concrete	\$0	---	---	---	---	---	---
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitation Concrete	\$857,546	---	---	---	---	---	---
30	Eisenhower Lock - Ice Flushing System - Upgrade	\$0	---	---	---	---	---	---
31	Both Locks - Rehabilitation Upstream Miter Gards	\$5,042,354	---	---	---	---	---	---
32	Snug Harbor - Rehabilitation Spare Gate Storage and Assembly Area	\$2,501,713	---	---	---	---	---	---
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	\$308,827	---	---	\$152	---	---	---
34	Both Locks - Improve Ice Control	\$7,462	---	---	---	---	---	---
35	Vessel Mooring Cells - Rehabilitation and Extend	\$0	---	---	---	---	---	---
36	Eisenhower Lock - Diffusers - Replace	\$0	---	---	---	---	---	---
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	\$0	---	---	---	---	---	---
38	Both Locks - Upgrade/Replace Emergency Generators	\$2,141,095	---	---	\$30,000	\$32,774	---	---
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	\$256,988	---	---	\$20,000	\$17,336	---	---
40	Both Locks - Extend Guidewalls in Pool	\$0	---	---	---	---	---	---
41	Snell Lock - Install Ice Flushing System Technologies	\$13,545,351	---	---	\$130,000	\$128,144	---	\$498
42	Both Locks - Miter Gates - Structural Rehabilitation	\$6,639,642	\$800,000	---	---	---	---	---
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	\$5,449,932	\$1,800,000	\$1,500,000	\$1,568,096	---	---	\$5,827

## ARP Funding Summary (FYS 2009-2017)

ARP Project No.	ARP Project Title	FY 2015		FY 2016	
		Total Obligations Through FY 2017	FY 2015 Adjustments Based on Enacted Level	FY 2015 Obligations (Actual)	FY 2016 President's Budget
44	Both Locks - Ship Arrestor Machinery - Upgrade/Replace	\$0	\$425,000	---	---
45	Flow Control Dikes - Rehabilitation	\$0	---	---	---
46	Both Locks - Guidewall Extensions - Rehabilitation	\$0	---	---	---
47	Eisenhower Lock - Vertical Lift Gate - Structural Rehabilitation	\$0	---	---	---
48	Both Locks - Stiffing Derricks - Replace	\$0	---	---	---
49	Seaway International Bridge - Replace Deck	\$0	---	---	---
50	Small Lock - Diffusers - Replace	\$0	---	---	---
51	Corporation Facilities - Upgrade Physical Security to Meet HSPD-12 Requirements	\$424,732	---	---	---
52	Corporation Facilities - Eisenhower Lock Visitors Center - Replace	\$1,111,537	---	---	---
53	Corporation Technologies - Financial Management System - Upgrade/Replace	\$0	---	---	---
54	Corporation Facilities - Administration Building - Replace Elevator	\$140,346	---	---	---
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	\$191,700	---	---	---
56	Corporation Facilities - Duty Free Store Property - Security Upgrades	\$13,025	---	---	---
57	Corporation Technologies - Upgrade Network Security	\$184,221	\$50,000	---	---
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	\$146,836	\$50,000	\$10,000	\$8,405
59	Corporation Facilities - Communications Improvements	\$35,283	\$50,000	\$40,000	\$29,000
60	Both Locks - Improve Access to and Rehabilitation Machinery in Crossovers and Recesses	\$716,448	\$260,000	\$725,000	\$716,052
61	Both Locks - Replace Recess Covers on Lock Walls	\$33,082	\$165,000	\$25,000	\$2,200
62	Both Locks - Install/Upgrade Air Curtains	\$14,325	---	---	---
63	Both Locks - Install Electric Pressure Craft Toll Collection Facility	\$0	---	---	---
64	Corporation Facilities - Upgrade Lock Structures Maintenance Building	\$0	---	---	---
65	Both Locks - Install Lock Wall Guardrails	\$548,879	---	\$550,000	\$548,679
---	Miscellaneous Expenses	\$2,143	---	---	---
---	Engineering Design, Construction Inspection, Contracting Support, and Project Management (non-add)	---	---	---	---
---	Personnel Related Expenses (non-add)	\$5,629,000	---	\$620,000	---
	Total	\$138,521,796	\$14,300,000	\$15,065,000	\$14,912,825
					\$18,150,000
					\$10,921,470

## ARP Funding Summary (FYS 2009-2017)

ARP Project No.	ARP Project Title	Project Obligations Through FY 2017	FY 2017 President's Budget	FY 2017 Adjustments Based on Enacted Level	FY 2017 Obligations (Actual)
1	Both Locks - Replace Fendering on Approach Walls	\$438,556			
2	Both Locks - Rehabilitation Downstream Miter Gates	\$6,761,839			
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	\$35,422			
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	\$9,170,537			
5	Both Locks - Rehabilitate Wiper Maintenance Lock Covers	\$6,169,312			
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	\$8,783,585			
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	\$2,189,879			
8	Floating Navigational Aids - Replace	\$343,173			
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	\$2,886,533	\$100,000	\$100,000	\$117,162
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	\$36,912			
11	Fixed Navigational Aids - Rehabilitate	\$114,128			
12	Corporation Equipment - Upgrade/Replace Floating Plant/Tugs	\$27,101,681	\$10,000,000	\$10,000,000	\$9,765,267
13	Corporation Facilities - Replace Roofs	\$564,907			
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	\$2,836,339			
15	Eisenhower Lock - Highway Tunnel - Rehabilitation	\$1,586,976			
16	Corporation Technologies - Upgrade GPS/ATM/TWS	\$190,470			
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	\$8,061,279			
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	\$665,789			
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	\$1,110,620			
20	Both Locks - Upgrade Lock Status/Controls	\$535,908			
21	Both Locks - Compressed Air Systems - Upgrade/Replace	\$815,948	\$100,000	\$100,000	\$48,750
22	Both Locks - Install Vessel Self Spotting Equipment	\$424,279			
23	Both Locks - Install Hands-Free Mooring System	\$2,121,918	\$6,650,000	\$6,725,000	\$8,092,757
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	\$37,561			
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	\$8,155			
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	\$1,566,362			
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	\$49,361			
28	Snell Lock - Walls, Sills and Culverts - Rehabilitate Concrete	\$0			
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitate Concrete	\$857,546			
30	Eisenhower Lock - Ice Flushing System - Upgrade	\$0	\$100,000	\$100,000	
31	Both Locks - Rehabilitate Upstream Miter Gards	\$5,042,354			
32	Snug Harbor - Rehabilitate Spare Gate Storage and Assembly Area	\$2,501,713			
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	\$308,627			
34	Both Locks - Improve Ice Control	\$7,462			
35	Vessel Mooring Cells - Rehabilitate and Extend	\$0			
36	Eisenhower Lock - Diffusers - Replace	\$0			
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	\$0			
38	Both Locks - Upgrade/Replace Emergency Generators	\$2,141,095	\$100,000	\$100,000	
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	\$256,988			
40	Both Locks - Extend Guidewalls in Pool	\$0			
41	Snell Lock - Install Ice Flushing System Technologies	\$13,545,351			\$239
42	Both Locks - Miter Gates - Structural Rehabilitation	\$6,639,642			
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	\$5,449,332			

## ARP Funding Summary (FYs 2009-2017)

ARP Project No.	ARP Project Title	FY 2017		
		Total Obligations Through FY 2017	FY 2017 President's Budget	FY 2017 Adjustments Based on Enacted Level
44	Both Locks - Ship Arrestor Machinery - Upgrade/Replace	\$0	---	---
45	Flow Control Dikes - Rehabilitation	\$0	---	---
46	Both Locks - Guidewall Extensions - Rehabilitation	\$0	---	---
47	Eisenhower Lock - Vertical Lift Gate - Structural Rehabilitation	\$0	---	---
48	Both Locks - Stiffing Derricks - Replace	\$0	---	---
49	Seaway International Bridge - Replace Deck	\$0	---	---
50	Small Lock - Diffusers - Replace	\$0	---	---
51	Corporation Facilities - Upgrade Physical Security to Meet HSFD-12 Requirements	\$424,732	---	---
52	Corporation Facilities - Eisenhower Lock Visitors Center - Replace	\$1,111,537	---	---
53	Corporation Technologies - Financial Management System - Upgrade/Replace	\$0	---	---
54	Corporation Facilities - Administration Building - Replace Elevator	\$140,346	---	---
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	\$191,700	---	---
56	Corporation Facilities - Duty Free Store Property - Security Upgrades	\$13,025	---	---
57	Corporation Technologies - Upgrade Network Security	\$184,221	---	---
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	\$146,836	\$100,000	---
59	Corporation Facilities - Communications Improvements	\$35,283	---	\$2,287
60	Both Locks - Improve Access to and Rehabilitate Machinery in Crossovers and Recesses	\$716,448	---	---
61	Both Locks - Replace Recess Covers on Lock Walls	\$33,082	\$100,000	\$25,000
62	Both Locks - Install/Upgrade Air Curtains	\$14,325	---	---
63	Both Locks - Install Electric Pleasure Craft Toll Collection Facility	\$0	---	---
64	Corporation Facilities - Upgrade Lock Structures Maintenance Building	\$0	\$100,000	---
65	Both Locks - Install Lock Wall Guardrails	\$548,879	---	---
---	Miscellaneous Expenses	\$2,143	---	---
---	Engineering Design, Construction Inspection, Contracting Support, and Project Management (non-add)	---	\$5,629,000	---
---	Personnel Related Expenses (non-add)	---	---	\$423,000
	Total	\$138,521,796	\$17,350,000	\$17,500,000
				\$18,706,380

