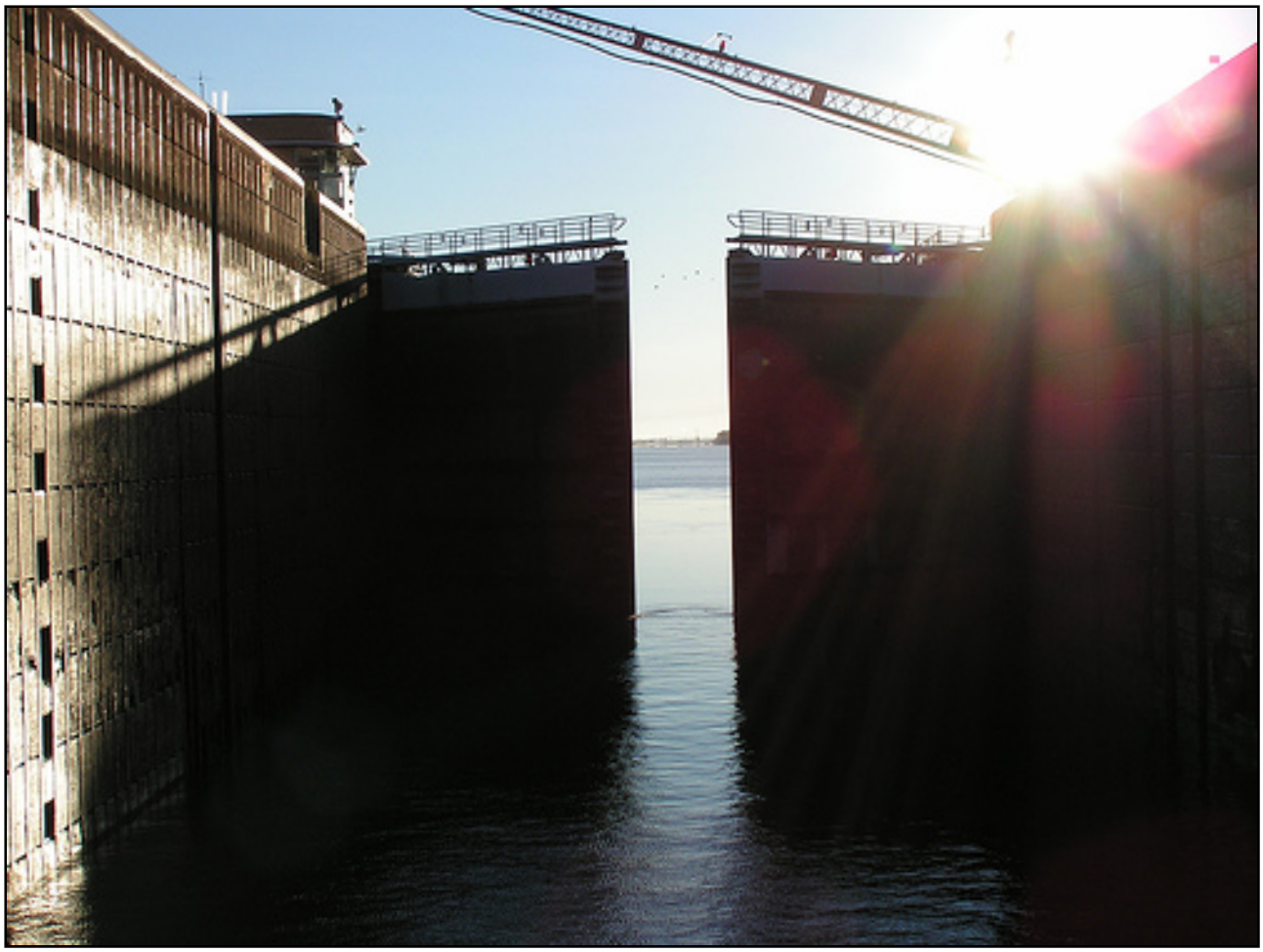
Saint Lawrence Seaway Development Corporation

Seaway Asset Renewal Program (ARP)
Annual Report to Congress



September 30, 2012

TABLE OF CONTENTS

Background and Summary

As directed in the Senate Report of S. 1596 (Transportation, Housing and Urban Development, and Related Agencies Appropriations Act, 2012), 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 multi-year capital 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 the 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 reinvest and 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 facilities and assets located in Upstate New York. None of the ARP projects increases the authorized depth or width of the navigation channel or the size of the lock facilities.

In the first four years of ARP funding (FYs 2009-2012), the SLSDC obligated $65.5 million on 40 separate ARP projects *(see page 27)*. These projects included maintenance dredging in the U.S. portion of the Seaway navigation channel, lock culvert valve machinery upgrade to hydraulic operation, structural rehabilitation and corrosion prevention work on the Seaway International Bridge, gatelifter upgrades, and miter gate rehabilitation, as well as various other structural and equipment repairs and/or replacement.

In FY 2012, the SLSDC completed its first year of large-scale ARP winter work projects. SLSDC employees, as well as eight contractor firms, seven of which were from Upstate New York, completed six ARP projects at the two U.S. locks. The number of workers represented the largest number to work on the Seaway locks since their construction in the 1950s. Major ARP projects completed included the upstream Snell Lock miter gate rehabilitation, the vertical lift gate improvements at the Eisenhower Lock, and the upstream culvert valve machinery hydraulic upgrades at both locks. The total number of work man-hours lost due to safety-related incidents represented only one-quarter of 1 percent (0.272%) for work spanning three months and comprising over 50,000 documented work man-hours.

Although the majority of ARP work is completed by contractors, the SLSDC federal workforce is directly responsible for completing maintenance-related activities as well as pre-contract work for the ARP, including preparation of designs, specifications, and drawings, and ongoing contract management. In FY 2012, the SLSDC expended an additional $672,000 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 totals $2.5 million.

Unlike many other lock-based waterway systems, the St. Lawrence Seaway is primarily a single-lock system and not a twinned lock system that more readily ensures continued operations in the even of a lock failure. A delay or shutdown at any one of the 15 U.S. or Canadian Seaway locks would cause system-wide delays. An economic analysis completed in 2007 concluded that the

economic impact of a shutdown of either of the two U.S. locks would result in a loss of approximately $1.3-$2.3 million in productivity per day, depending on cargo and the length of the delay. In 1985, a lock wall failure at the Canadian Welland Canal caused 53 commercial vessels to be trapped in the Seaway System for 24 days at a cost to shippers of more than $24 million, an approximate value of $52 million in 2012 dollars. The ARP program is vital to ensuring the continuous operation of the U.S. Seaway locks and that the system remains available for the flow of goods across North America in the future.

At the onset of the program, the SLSDC created an ARP Internal Working Group that meets regularly to review the status of on-going projects and to collectively discuss ways to improve the overall management, execution, and reporting of the program. The Internal Working Group is made up of SLSDC managers and staff in engineering, procurement, financial management, budget, counsel, and policy. The Working Group reviews project plans and milestones, troubleshoots concerns, and reports progress to SLSDC senior executives.

Each year following the enactment of the SLSDC's annual appropriation, the Internal Working Group develops a revised internal ARP 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 and the overall enacted ARP budget level is met.

As part of the FY 2012 President's Budget request, the SLSDC proposed 23 different ARP projects for funding. The 26 projects funded in FY 2012 included 11 projects that were not proposed in the FY 2012 President's Budget request. These projects received funding in FY 2012 either based on immediate or emergency needs and/or as part of the internal spending plan process. In some cases, new ARP projects were developed while, in other instances, existing outyear ARP projects were re-prioritized to receive funding. A table summarizing the various decision points in the funding of ARP projects from FY 2009-2012 can be found on pages 28-30.

FY 2012 ARP obligations were dedicated primarily to two large-scale projects: ARP Project No. 12 – Buoy Barge Improvements and Floating Plant Upgrades ($2.2 million or 14 percent of total FY 2012 ARP obligations) and ARP Project No. 41 – Snell Lock Ice Flushing System ($11.5 million or 72 percent). Several lower priority ARP projects were deferred to future years in order to fund these two projects and several other higher priority projects.

The SLSDC's multi-year ARP supports the engineering considerations highlighted in the 2007 *Great Lakes St. Lawrence Seaway Study* and complements the asset renewal activities currently underway at the Canadian Seaway locks. The Canadian portion of the St. Lawrence Seaway is managed and operated by the St. Lawrence Seaway Management Corporation (SLSMC). Beginning with the passage of the Canada Marine Act in 1998, the Canadian government started to address the asset renewal needs of its 13 Seaway locks, including the 8 Welland Canal locks that are over 75 years old.

Over the past seven years, the SLSDC and SLSMC have cumulatively spent nearly $500 million on asset renewal efforts. 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, encouraging similar investments being made by many other Seaway System stakeholders, including ports, terminals, and carriers. Many of the ARP improvements at the U.S. locks will parallel activities either completed, underway, or planned at the Canadian Seaway locks.

In order to ensure that the St. Lawrence Seaway opens each spring for navigation as scheduled, the SLSDC includes monetary incentives and penalties for contractors working on lock 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 2012, SLSDC awarded two monetary incentives for $20,000 each — Hohl Industrial Services for the culvert valve project (ARP Project No. 4) and Kubricky Construction for the upstream miter gate rehabilitation project at Snell Lock (ARP Project No. 31). No performance-related penalties were assessed against any ARP contractor.

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 without the time constraints of more traditional federal contract vehicles.

To that end, the SLSDC awarded indefinite delivery contracts in early FY 2009 to three A/E firms to support the ARP (Hatch Mott MacDonald, Buffalo, N.Y., Parsons Brinckerhoff, Inc., Buffalo, N.Y., and Aubertine and Currier, Watertown, N.Y.). The SLSDC uses these architecture/engineering (A/E) contractors to receive design support and expert advice on project plans, specifications, and drawings. As support work is needed, the SLSDC requests proposals from the three firms in a streamlined process, with negotiations, as required, limited to only those firms. The policies and procedures for awarding indefinite delivery contracts are contained in Federal Acquisition Regulation (FAR), Subpart 16.5.

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 (4) utilization of data from RSMeans, which serves as North America's leading supplier of construction cost information. Estimates used in developing ARP spending plans and out-year estimates also considered final contract totals for similar ARP work awarded during the program's first four years (FYs 2009-2012).

Of the 62 current ARP projects, 20 are complete and require no planned additional funding ("completed"), 23 have been started and have additional out-year funding needs ("on-going"), 16 have not received any funding ("not started"), 1 has been cancelled (ARP Project No. 30), and 1 has been combined with another similar project (ARP Project No. 36 combined with ARP Project No. 29) (all through FY 2013). Of the 60 active projects, 10 are single-year funded projects while the remaining 50 projects are multi-year funded *(see pages 28-30 for more details)*.

This annual report provides the Appropriations Committees with updates on (1) ARP economic impacts to Upstate New York; (2) ARP Capital Investment Plan summary (FYs 2014-2018); (3) ARP obligations by project for FYs 2009-2012; (4) ARP funding summary for FYs 2009-2013; and (5) the latest five-year estimates for ARP projects in FYs 2014-2018.

ARP Economic Impacts to Upstate New York

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, 73 percent of the ARP funds obligated during the program's first four years (FYs 2009-2012), totaling nearly $47.5 million, were awarded to firms within the Upstate New York region.

In addition to these contracts, the ARP is producing approximately $2.5 million in additional economic benefits to the region each year (e.g., local permanent and temporary hires by contractors, contractor spending locally on supplies and equipment, lodging, meals, etc.).

ARP Capital Investment Plan Summary (FYs 2014-2018)

As highlighted in the *U.S. St. Lawrence Seaway ARP Capital Investment Plan (CIP), 2014-2018*[1], which was included in the SLSDC's FY 2014 President's Budget request, the SLSDC provided estimates for executing the next five years of the ARP *(see pages 31-32)*. For the FY 2014-2018 time frame, the Seaway ARP/CIP includes 36 separate ARP projects. This includes projects and equipment estimated at $92.2 million.

Dollar amounts for future ARP projects are "project feasibility" estimates that can vary by an industry-recognized 20-30 percent. Project estimates and schedules may fluctuate at various points in the lifespan of the ARP. Estimates will be revised as needed and on a continuing basis throughout the length of the ARP. The SLSDC's ARP Internal Working Group has successfully worked to ensure that the program's schedule is maintained and that projects are administered in a timely and cost-effective way.

FY 2012 ARP Project Updates *(as of September 30, 2012)*

The following information provides an update on the 24 ARP projects that were funded in FY 2012 with obligations in excess of $1,000[2]. 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.

[1] http://www.greatlakes-seaway.com/en/pdf/SLSDC_Asset_Renewal_Plan2014.pdf

[2] There were two ARP projects with FY 2012 obligations below $1,000 that are not reported in the project-by-project update – Project No. 21: Both Locks – Compressed Air Systems – Upgrade/Replace ($986) and Project No. 42: Both Locks – Miter Gates – Structural Rehabilitation ($210).

To date, there have been no significant problems, delays, or cost overruns that have impacted the SLSDC's implementation of the ARP. 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. 2: Both Locks – Rehabilitate Downstream Miter Gates

General Description: This project is to completely rehabilitate the miter gates at the easternmost (downstream) end of both Eisenhower and Snell Locks. It includes replacing worn and damaged components including the miter and quoin contact blocks, pintles, and diagonals that insure proper functioning of the miter gates. These parts are critical to the safe and efficient operation of the locks. Miter and quoin contact blocks are steel blocks that are approximately 8 inches wide and 2½ inches thick. These blocks are mounted vertically on both ends of each miter gate leaf and on each wall. They transfer the load of the water against the gate into the massive concrete lock monoliths. The pintles are steel hemisphere-shaped components that are retained in a cast steel housing set in the concrete below each gate leaf. There is a bushing mounted on the bottom of the gate leaf that turns on the pintle when the lock gates open and close. The diagonals are steel straps that run diagonally from corner to corner on each gate leaf to keep the gate rigid/plumb when being moved through the water during opening and closing.

Type of Project[3]: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $4,380,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $265,000

FY 2012 Obligations *(as of September 30, 2012)*[4]: $8,384

Total Obligations to Date *(FYs 2009-2012)*: $3,548,319 (FYs 2011 and 2012)

[3] The SLSDC's ARP includes capitalized projects and equipment as well as non-capitalized, maintenance-related projects. Capital projects and equipment are defined as those of a durable nature that may be expected to have a period of service of more than a year without material impairment of its physical condition and includes equipment, improvements and modifications to existing structures. Non-capital maintenance projects include those that do not materially add to the value of the property nor appreciably prolong the life of the infrastructure but merely keeps it in an ordinarily efficient operating condition. Expenditures for these maintenance projects are recognized as operating costs.

[4] Contracts and purchases detailed in the update section for each ARP project may not add up to the total obligations listed for the project due to miscellaneous expenses across the ARP for small purchase orders, travel, supplies, etc., that are not detailed in this report.

Project Update *(as of September 30, 2012)*: Funding of the two contracts related to this project – rehabilitation of the downstream miter gate Snell Lock and the third-party construction inspection services associated with the rehabilitation – were deferred to FY 2013. Work for this project will still take place as scheduled during the winter months of 2014. Expenses totaling $8,384 were incurred for miter gate components that were taken from SLSDC warehouse stock for project installation (lock spare parts – bushings).

---

(2) Project No. 4: Both Locks – Culvert Valve Machinery – Upgrade to Hydraulic Operation

General Description: This project is for replacing the operating machinery for the culvert valves at both locks, which are utilized for filling and emptying the locks. This machinery is over 50 years old and the open gearing is exhibiting macropitting, a type of fatigue failure where the stresses in the gear teeth cause surface cracks and the detachment of metal fragments. This equipment needs to be upgraded to insure its continued reliability. Failure of this equipment will cause delays to shipping while repairs are made. Due to the fact that this machinery was custom made and spare parts are limited, repairs to multiple pieces of machinery using on-hand spare parts is not possible. The upgrade will include new hydraulic operating machinery to match the upgrades made at the Canadian Seaway locks and other similar locks in the United States.

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

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $455,000

FY 2012 Obligations *(as of September 30, 2012)*: $539,889

Total Obligations to Date *(FYs 2009-2012)*: $8,966,859 (FYs 2009, 2010, 2011, and 2012)

The SLSDC's new hydraulic-based culvert valve machinery unit. A total of eight units have been or will be installed at the two U.S. Seaway locks.

Project Update *(as of September 30, 2012)*: As reported in last year's report, the SLSDC deferred the installation of the new culvert valve machinery to the winter months of 2012 and 2013 due to delivery delays in FY 2011 by the equipment manufacturer, Bosch Rexroth. The deferment of this project had no financial or operational implications for the SLSDC.

The SLSDC's contractor, Hohl Industrial Services, Tonawanda, N.Y. (small business), began work on the installation on the north side valve machinery in January 2012, and the south side machinery is scheduled for installation in January 2013. Following installation and testing of the north side equipment, a design error was discovered that resulted in the valves opening 23.5 inches short. The source of the problem was identified as an error in the U.S. Army Corps of Engineers' (Corps) design calculations.

The SLSDC, Corps, Hohl Industrial Services, and a third-party consulting engineering firm worked collaboratively to identify a solution. Necessary modifications to the equipment were made to the north valve machinery during the 2012 navigation season without disruption to commercial shipping. The south side valve operating equipment, which will be installed in early 2013, will include these modifications to ensure that the valves open and close properly.

In order to fund this corrective action, the SLSDC issued contract modifications in FY 2012 totaling $454,758 to Hohl Industrial Services to correct the north side valve operating equipment problem at both U.S. Seaway locks so that the valves fully open.

The SLSDC awarded a $20,000 monetary incentive to Hohl Industrial Services for completing its work and demobilizing its equipment ahead of the March 9, 2012 deadline. The deadline was established to provide the SLSDC with ample time to prepare the locks for the commercial shipping season opening on March 22, 2012.

As part of this project's FY 2012 obligations, the SLSDC also contracted local part-time security guard services in December 2011 for the two major winter work projects that were completed in FY 2012 (Project Nos. 4 and 31). Each project was charged $7,216.

---

(3) Project No. 5: Both Locks – Rehabilitate and Modify Winter Maintenance Lock Covers

General Description: This project is for rehabilitating and modifying the roof cover and curtain wall modules utilized to enclose Eisenhower and Snell Locks during winter maintenance months. The roof cover and curtain wall modules are over 40 years old and require rehabilitation. Modifications to the roof covers will provide SLSDC personnel and contractors with better access to work areas in the locks and modifications to the curtain walls will improve employee safety when installing and removing them. In addition, the modified covers will eliminate the need to temporarily remove the roof

sections when larger access is required, thus saving heating costs when temperature-sensitive projects are underway in the lock.

Type of Project: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $258,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $5,000

FY 2012 Obligations *(as of September 30, 2012)*: $28,335

Total Obligations to Date *(FYs 2009-2012)*: $105,452 (FYs 2009, 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the SLSDC awarded a contract in September 2012 for $22,853 to Contractors and Industrial Supply, Nashville, Tenn. (small business; simplified acquisition, lowest price), for two automatic remote-controlled 10-ton capacity hook devices. The new hooks will allow SLSDC crane operators to more efficiently and safely position and remove curtain wall modules before and after winter work each year. In addition to this obligation, there were additional small purchases and drawdowns on inventory associated with this project totaling $5,482.

SLSDC personnel completed the rehabilitation/modification of two roof cover modules during FY 2012. This work required disassembling and modifying two of the roof cover modules used over the miter gates as well as adding supplementary and larger lift-out panels. The refurbished panels provide better access to work on lock miter gates during the winter months.

---

(4) Project No. 7: Both Locks – Culvert Valves – Replace with Single Skin Valves

General Description: This project is for replacing the double skin culvert valves utilized for filling and emptying the locks with single skin valves. Cracking of major structural members has occurred with the double skin construction and the structural members are no longer accessible for inspection, blast cleaning, and painting. The culvert valves are more than 50 years old and are corroding from the inside. The new single skin valves will provide access to the structural members for inspection and maintenance. The failure of a culvert valve would cause a delay to shipping as the damaged valve would be removed and replaced. Depending on the type of failure, other lock operating components and equipment could be damaged, causing the lock to be out of service for an extended period of time.

Type of Project: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $405,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $300,000

FY 2012 Obligations *(as of September 30, 2012)*: $302,468

Total Obligations to Date *(FYs 2009-2012)*: $694,957 (FYs 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the SLSDC continued its multi-year work for modernizing the valves used to fill and empty the locks during every vessel transit. Prior year efforts included design and fabrication of single-skin valves. To date, the SLSDC has two new valves on site at the Seaway locks in Massena, N.Y., including one in use at Snell Lock, and continues to work on design modifications to ensure long-term reliability.

In December 2011, the SLSDC entered into a reimbursable agreement with the U.S. Army Corps of Engineers, Vicksburg, Miss. (government), for an amount not-to-exceed $300,000 to perform hydraulic design review and modeling for new single-skin valves. The plan is to modify the two previously purchased single skin valves and to develop a revised design for the purchase of an additional six valves in the future. During FY 2012, the Corps began performing its contracted work with final deliverables expected in the first half of FY 2013.

---

(5) 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, including vehicles and shop equipment as they become worn out and unserviceable. Heavy and light equipment includes items such as a crane, dump truck, motor vehicles, snow plow, backhoe, grader, front end loader and shop equipment, including a lathe, milling machine, and drill press. Motor vehicles will be replaced with alternative fuel vehicles where possible.

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

Mission Objective: Lock Operation Upgrade and Maintenance / Waterway Management

FY 2012 Request Estimate *(February 2011)*: $255,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $80,000

FY 2012 Obligations *(as of September 30, 2012)*: $81,623

Total Obligations to Date *(FYs 2009-2012)*: $2,245,217 (FYs 2009, 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the SLSDC awarded two contracts for this project:

(1) Forklift for SLSDC Maintenance staff
$69,183 awarded in May 2012 to American Material Handling, Inc., Watkinsville, Ga. (small business; simplified acquisition, lowest price)

(2) Two four-wheel electric light vehicles (ELVs) for SLSDC Lock Operations staff
$12,440 awarded in March 2012 to Taylor Dunn Manufacturing, Anaheim, Calif. (small business; GSA e-Buy, Federal Supply Schedule, lowest price)

---

(6) 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/Marine Base Facility. The power is furnished directly from the Moses-Saunders Power Dam via infrastructure that is over 50 years old. Loss of power from the Moses-Saunders Power Dam requires the SLSDC to utilize back-up diesel generators to continue operation of Eisenhower and Snell Locks and the Maintenance/Marine Base Facility, at significant expense to the Corporation.

Type of Project: Non-Capital Maintenance Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $20,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $40,000

FY 2012 Obligations *(as of September 30, 2012)*: $28,003

Total Obligations to Date *(FYs 2009-2012)*: $372,479 (FYs 2009, 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: The New York Power Authority (NYPA) is continuing to rehabilitate the infrastructure that supplies power to SLSDC for operations and maintenance activities. This work has to be coordinated with the SLSDC so that generators can be installed and/or operated while power is interrupted for work as it is completed. This is a recurring annual ARP project with expenditures dependent on NYPA plans and work completed. In September 2012, the SLSDC paid NYPA $28,003 (sole source) for its work on SLSDC power-related infrastructure rehabilitation.

---

(7) Project No. 11: Fixed Navigational Aids – Rehabilitate

Description: This project is for rehabilitating fixed navigational aids in the Seaway. Many of the structures are over 50 years old, have concrete bases that are eroding and cracking, and are in need of more than routine repairs. Failure to rehabilitate fixed aids would make it necessary to replace them at a significantly higher cost.

SLSDC's fixed navigation aid No. 165, located at Superior Shoal, near Hammond, N.Y. An underwater inspection and repairs were performed during FY 2012.

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

Mission Objective: Waterway Management

FY 2012 Request Estimate *(February 2011)*: $100,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $30,000

FY 2012 Obligations *(as of September 30, 2012)*: $21,048

Total Obligations to Date *(FYs 2009-2012)*: $48,263 (FYs 2010, 2011, and 2012)

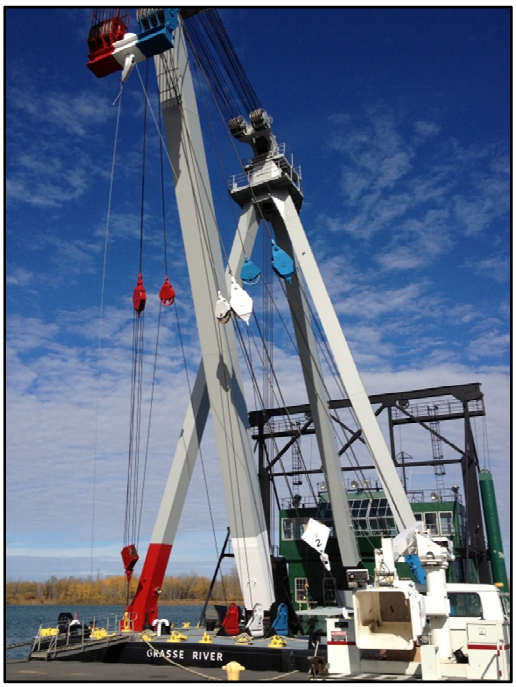
Project Update *(as of September 30, 2012)*: The SLSDC did not have any significant obligations for this project in FY 2012. Diver reports in FY 2009 noted that the SLSDC's fixed navigational aids are not in need of significant immediate rehabilitation. In April 2012, the SLSDC awarded a contract for $7,132 to Sealite USA, Gilford, N.H. (large business; sole source), for solar marine lanterns to be added to SLSDC fixed aids. In addition, the SLSDC awarded a contract for $10,642 to Finger Lakes Industrial Contracting Corporation, Seneca Falls, N.Y. (small woman-owned, Small Business Administration (SBA) HUBZone[5] business; simplified acquisition, lowest price), for underwater inspection and repairs to SLSDC fixed navigation aid No. 165 located at Superior Shoal, near Hammond, N.Y.

---

[5] The Small Business Administration's (SBA) Historically Underutilized Business Zones (HUBZone) program helps small businesses in urban and rural communities gain preferential access to federal procurement opportunities. These preferences go to small businesses that obtain SBA HUBZone certification in part by employing staff who live in a HUBZone.

(8) Project No. 12: Corporation Equipment – Upgrade/Replace Floating Plant

General Description: This is an ongoing program to rehabilitate and/or replace the Corporation's floating plant that is utilized for maintaining the locks and navigation channels. This multi-year project includes: refitting or replacing the SLSDC's tug *Robinson Bay*; upgrading the buoy tender barge; purchasing a smaller tug for more efficient and dynamic marine operations; purchasing a boat to be used for hydrographic surveying with upgraded surveying equipment and software; purchasing a small boat for emergency response; purchasing a spud barge/scow for work on navigational aids and for emergency/spot dredging; and rehabilitating the Corporation's crane barge/gatelifter *Grasse River*, which would have to be utilized if a miter gate was damaged and had to be replaced.



The SLSDC's 300-ton gatelifter Grasse River after drydocking in FY 2011.

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

Mission Objective: Lock Operation Upgrade and Maintenance / Waterway Management

FY 2012 Request Estimate *(February 2011)*: $1,524,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $2,350,000

FY 2012 Obligations *(as of September 30, 2012)*: $2,160,169

Total Obligations to Date *(FYs 2009-2012)*: $6,375,402 (FYs 2009, 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: FY 2012 work related to this project focused on the rehabilitation of the SLSDC's buoy barge, which is a crane barge used to remove the floating aids to navigation at the end of each navigation season and to reposition them at the beginning of the next navigation season. This barge was first put into operation in 1967 and is in need of significant modifications.

In late FY 2010, the SLSDC awarded a contract to Marine Systems Corporation, Boston, Mass. (small, service-disabled veteran-owned business), to provide marine design services for the buoy barge modernization project. FY 2012 modifications to that contract totaled $13,473 for additional work to provide designs, specifications, and estimates for work to insulate and heat below-deck compartments.

Following the completion of Marine Systems' design work, the SLSDC awarded a contract in September 2012 to Basic Marine, Inc., Escanaba, Mich. (small business; sealed bid, lowest price), for $2,125,375. This work will take place at Basic Marine's facilities in Escanaba following the 2013 spring buoy run and will include: replacing the deck crane, bow thruster engine, and generator; upgrading the bow thruster controls, heating system, points of access and egress, fire suppression system, and fuel system; and adding 80 tons of permanent ballast.

Finally, the SLSDC modified an FY 2011 contract with Continental Construction, LLC (small business), Gouverneur, N.Y., to address additional onboard improvements to the SLSDC's 300-ton gatelifter *Grasse River*. Continental Construction began work on the gatelifter in early FY 2012 and replaced the deck winches, air compressor, oil furnaces with electric heaters, and ballast and bilge pumps and valves, and upgraded the bathroom/sanitary system, below deck egress, and oil containments. FY 2012 modifications to the contract totaled $11,523 for additional work required.

---

(9) Project No. 13: Corporation Facilities – Replace Roofs

General Description: This project supports the replacement of roofs on the Corporation's various buildings and facilities in Massena, N.Y., as required. Most of the roofs are currently made with insulated ethylene propylene diene monomer (EPDM) and have reached the end of their 10-15 year service life. Throughout the ARP, the SLSDC includes funding for roofing projects based on age, warranty status, and annual inspections.

Type of Project: Capital Project

Mission Objective: Facility/Equipment Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $230,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $105,000

FY 2012 Obligations *(as of September 30, 2012)*: $89,024

Total Obligations to Date *(FYs 2009-2012)*: $236,321 (FYs 2009, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the SLSDC awarded a contract in June 2012 for $104,593 to Premier Roof Systems, Inc., Harrisville, N.Y. (small business; simplified acquisition, lowest price), for the installation of new roofs at the Eisenhower Lock and Snell Lock Compressor Buildings. The original contract solicitation only called for the replacement of the Snell Lock Compressor Building roof. However, after strong winds damaged the roof at the Eisenhower Lock Compressor Building, the decision was made to re-advertise the project to replace both roofs. The

contract price included a 30-year warranty for wind speeds of up to 100 miles per hour. The installation of both roofs was completed in September 2012.

---

(10) Project No. 15: Eisenhower Lock Highway Tunnel – Rehabilitate

General Description: This is an ongoing project to maintain the highway tunnel that passes under the upper sill area of Eisenhower Lock. The tunnel provides the only access to the north sides of both Eisenhower and Snell Locks, to NYPA's Robert Moses Power Project, and to the New York State Park on Barnhart Island.

This project includes: a tunnel lighting upgrade; grouting to limit water leaking into the tunnel, replacing damaged/missing tiles from the walls and ceiling; replacing damaged/ deteriorated gratings and railings; stabilizing/repairing wingwalls at the tunnel approaches; and clearing tunnel drains that are plugged with concrete leachate products. This tunnel is the only means of accessing the facilities noted above, and any problems requiring a repair-related tunnel closure would have very significant impacts to the area.

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

Mission Objective: Tunnel and Bridge Maintenance

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $0

FY 2012 Obligations *(as of September 30, 2012)*: $1,523

Total Obligations to Date *(FYs 2009-2012)*: $399,422 (FYs 2009, 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: The SLSDC did not have any significant obligations for this project in FY 2012. Based on a tunnel lighting study performed for the SLSDC in FY 2011, several light-emitting diode (LED) fixtures were installed by SLSDC personnel in early FY 2012 at the north end of the tunnel. These fixtures are not specifically designed for tunnels and will be monitored for performance and durability. As reported last year, the SLSDC has decided to defer the full implementation of this project for 2-3 years while LED technology becomes more advanced and more cost effective. Additionally, the Canadian SLSMC has agreed to share project information related to similar lighting upgrades at its tunnel at the Welland Canal, once completed.

---

(11) Project No. 16: Corporation Technologies – Upgrade GPS/AIS/TMS

General Description: This project is to expand the use of the Seaway's Global Positioning System (GPS) and 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 of vessels transiting the Seaway. Use of these technologies particularly enables vessels to better identify hazards at times of limited visibility.

Type of Project: Capital Project / Capital Equipment

Mission Objective: Waterway Management

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $10,000

FY 2012 Obligations *(as of September 30, 2012)*: $10,000

Total Obligations to Date *(FYs 2009-2012)*: $184,120 (FYs 2009, 2010, and 2012)

Project Update *(as of September 30, 2012)*: In February 2012, the SLSDC entered into an interagency agreement with the Volpe National Transportation Systems Center, Cambridge, Mass. (government), for $10,000 for technical support to upgrade the AIS and differential GPS equipment on the SLSDC tug *Robinson Bay* used to position floating aids to navigation in the Seaway. The SLSDC and Volpe Center have partnered for more than 20 years on advancing AIS and GPS technologies to further enhance Seaway safety and efficiency.

---

(12) Project No. 17: Navigation Channels – Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments

General Description: This project is for the SLSDC's ongoing efforts to dredge the navigation channel, to remove sediment, and to maintain the design grade of the channel bottom. The Corporation does not have the expertise or equipment to complete dredging activities with its own personnel; therefore, dredging must be completed by contractors. Project costs are significant because of the requirement for environmental dredging and for the disposal of contaminated sediments. If the navigation channel bottom is not maintained to the design grade, the maximum permissible draft in the Seaway would have to be reduced. Draft reductions would make it necessary for vessels to carry less cargo thereby impacting the competitiveness of the Seaway System and the North American economy. Each inch of Seaway draft equates to approximately 100 additional metric tons of cargo that can be carried by commercial vessels.

Type of Project: Non-Capital Maintenance Project

Mission Objective: Waterway Management

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $105,000

FY 2012 Obligations *(as of September 30, 2012)*: $99,714

Total Obligations to Date *(FYs 2009-2012)*: $8,041,537 (FYs 2009, 2011, and 2012)

Project Update *(as of September 30, 2012)*: Based on the results of an earlier survey, the SLSDC's dredging contractor, White Lake Dock and Dredge (small business), Montague, Mich., performed additional maintenance dredging around both the international tangent area east of Snell Lock as well as the intermediate pool between Eisenhower and Snell Locks. This additional work was funded by contract modification in FY 2011, and the dredging took place from October to December 2011.

During this three-year dredging effort, White Lake removed 202,595 cubic yards of sediment in the intermediate pool area and 7,851 cubic yards in the international tangent area. Third-party post-dredge surveys were completed and the results confirmed the amount of removed sediment. Final payment was made by the SLSDC based on the survey results.

The surveys also identified some "high spots" that remain in both the intermediate pool and international tangent areas requiring additional dredging in the future. In the fourth quarter of FY 2012, the SLSDC awarded two contracts to support this effort, together totaling nearly $100,000. The first contract awarded to SJB Services, Inc. (small business), Ballston Spa, N.Y. (request for quotation; lowest price) for $8,880 supports a geotechnical investigation of the remaining high spots to determine their composition. The second contract for $90,456 was awarded to the Canadian St. Lawrence Seaway Management Corporation (SLSMC) (large foreign business) to perform hydrographic surveys in U.S. waters of the navigation channels to determine future dredging needs. The survey was performed by the Canadian Hydrographic Service.

In addition to providing critical technical information for future dredging projects and for updating navigational charts, the survey results were also used to provide high density bathymetric data for use with the latest technology being used in the Seaway – the Draft Information System (DIS). In July 2012, the SLSDC and Canadian SLSMC jointly authorized use of the DIS consistent with joint regulations in both countries. These updated requirements enhance safety and increase cargo-carrying efficiency on the St. Lawrence Seaway by providing mariners with real-time information on current and projected distances between a vessel's keel and the river bottom. Utilization of DIS will reduce the potential for groundings and will allow ships to carry more cargo by taking

advantage of the available water levels. The St. Lawrence Seaway is the first inland waterway in the world to implement this technology.

---

(13) Project No. 18: Eisenhower Lock – Vertical Lift Gate – Replace Wire Ropes

General Description: This project is for replacing the wire rope cables as well as rehabilitating the sheaves and embedded steel components that raise and lower the vertical lift gate at Eisenhower Lock. These cables were last replaced in 1979 and are exhibiting strand breakage and corrosion. The vertical lift gate is an emergency closure designed to hold back the St. Lawrence River upstream of Eisenhower Lock in the event a miter gate is compromised.

Type of Project: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $270,000

FY 2012 Obligations *(as of September 30, 2012)*: $268,549

Total Obligations to Date *(FYs 2009-2012)*: $865,789 (FYs 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the SLSDC continued the work it began in FY 2010 to replace the wire cable ropes for the vertical lift gate at Eisenhower Lock. In December 2011 and January 2012, the SLSDC issued two modifications to its contract with B.S. Industrial Contractors, Inc., Gouverneur, N.Y. (small, woman-owned business), to replace sheave shafts and work on dogging mechanisms. These modifications resulted in FY 2012 obligations of $236,700.

In addition, the SLSDC awarded a contract for $23,760 to Jefford's Steel and Engineering, Potsdam, N.Y. (small business; simplified acquisition, lowest price), for round steel used by SLSDC personnel to make new sheave shafts.

---

(14) Project No. 19: Corporation Facilities – Upgrade Electrical Distribution Equipment

General Description: This project is for upgrading electrical distribution equipment at Eisenhower Lock, Snell Lock, and at the Maintenance/Marine Base Facility to insure continued reliability. The majority of this equipment is more than 50 years old.

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

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

FY 2012 Request Estimate *(February 2011)*: $400,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $40,000

FY 2012 Obligations *(as of September 30, 2012)*: $41,304

Total Obligations to Date *(FYs 2009-2012)*: $1,101,551 (FYs 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the SLSDC continued to upgrade its electric distribution equipment at the two U.S. locks. S&L Electric, Inc., Colton, N.Y. (small SBA HUBZone business), was awarded a contract in FY 2010 to perform the upgrade and much of the work was performed during FY 2011. In FY 2012, the SLSDC issued an additional modification to the contract to install additional arc flash labels on the equipment. This modification totaled $1,818.

In addition, the SLSDC awarded a contract for $15,825 in November 2011 to Transtector System, Inc., Hayden, Ind. (small business; simplified acquisition, best value using trade-off procedures), to perform power, grounding, and lightning protection inspections of the electric distribution equipment at Eisenhower Lock where voltage spikes were causing problems with equipment reliability. This inspection work was completed in FY 2012 with final expenditures totaling $14,868. Based on the recommendations in the inspection report, a separate contract was awarded to Transtector System in February 2012 for $11,075 to purchase surge suppression devices that were installed by SLSDC maintenance personnel at Eisenhower and Snell Locks. This work was completed in March 2012.

---

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

General Description: This project is for upgrading the lock/equipment status systems and lock operating controls at both Eisenhower and Snell Locks. At present, only the most critical components are monitored and controlled by modernized and automated computerized systems and a redundant system to replace the hard-wired backup controls must be developed. Adding control of all critical components will lead to more in-depth status monitoring and, as a result, improve the effectiveness of preventive maintenance activities and increase reliability.

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

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $30,000

FY 2012 Obligations *(as of September 30, 2012)*: $37,549

Total Obligations to Date *(FYs 2009-2012)*: $275,419 (FYs 2009, 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In its continued efforts on this multi-year project, the SLSDC modified its existing contract with Optimation Technology, Inc., Rush, N.Y. (large business; sole source), for $4,800 for upgrades to the lock status and control software to meet HSPD-12 and other information technology (IT)/ security-related requirements. Optimation Technology is the firm that assisted the SLSDC in the development of the modernized lock status and control program. In addition to this obligation, there were additional small purchases and drawdowns on inventory associated with this project totaling $32,749.

SLSDC's new lock controls enclosure, located at both the U.S. Eisenhower and Snell Locks.

During FY 2012, two climate-controlled enclosures purchased in FY 2011 were installed and put into operation for localized lock wall control. These enclosures will allow lock control operators to have a closer view of the vessels in the lock chamber and will also protect the new computerized lock control system from the weather.

---

(16) Project No. 27: Corporation Facilities – Replace Windows and Doors and Repair Building Facades

General Description: This project supports replacing corroded and worn windows and doors at SLSDC buildings and facilities in Upstate New York with more energy efficient units. Aged brick and stone facades especially require repair.

Type of Project: Capital Project

Mission Objective: Facility/Equipment Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $203,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $10,000

FY 2012 Obligations *(as of September 30, 2012)*: $8,070

Total Obligations to Date *(FYs 2009-2012)*: $47,383 (FYs 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the SLSDC purchased and installed eight new doors with frames and hardware to replace severely corroded door unites with more energy efficient doors. New door locations included those most in need of replacement at Eisenhower Lock, Snell Lock, and the SLSDC Maintenance Building.

---

(17) Project No. 31: Both Locks – Rehabilitate Upstream Miter Gates

General Description: This project is to completely rehabilitate the miter gates at the westernmost (upstream) end of both Eisenhower and Snell Locks. It includes replacing worn and/or damaged components including the miter and quoin contact blocks, pintles, and diagonals to insure proper functioning of the miter gates. These parts are critical to the safe and efficient operation of the locks. Miter and quoin contact blocks are steel blocks that are approximately 8 inches wide and 2½ inches thick. These blocks are mounted vertically on each end of each miter gate leaf and on each wall. They transfer the load of the water against the gate into the massive concrete monoliths/walls. The pintles are steel hemisphere-shaped components that are retained in a cast steel housing set in the concrete below each gate leaf. There is a bushing mounted on the bottom of the gate leaf that turns on the pintle when the lock gates open and close. The diagonals are steel straps that run diagonally from corner to corner on each gate leaf to keep the gate rigid/plumb when being moved through the water during opening and closing.

Type of Project: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $10,000

FY 2012 Obligations *(as of September 30, 2012)*: $14,961

Total Obligations to Date *(FYs 2009-2012)*: $5,043,104 (FYs 2009, 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In FY 2010, the SLSDC awarded a contract for $1,729,000 to Kubricky Construction, Glen Falls, N.Y. (large business), to complete the rehabilitation of the upstream miter gate at Snell Lock during the 2012 winter work period.

Kubricky Construction began its on-site work prior to the closing of the Seaway's 2012 season, as did C&S Companies, Inc., Syracuse, N.Y. (large business), which was awarded a contract in FY 2011 to perform construction inspection services.

Kubricky Construction crew members work on the rehabilitation project for the upstream miter gate at Snell Lock in February 2012.

Rehabilitation work completed during the winter months of 2012 included replacement of: the embedded wall quoin and miter gate quoin and miter contact blocks with blocks made from a more corrosion-resistant material; the pintles and pintle bushings with refurbished units; diagonals with diagonals fabricated from strong steel; gate anchorages with refurbished units; and the rubber seals with new seals.

The SLSDC awarded a $20,000 monetary incentive to Kubricky Construction for completing its work and removing its equipment from the lock ahead of the March 9, 2012 deadline. The deadline was established to provide the SLSDC with ample time to prepare the locks for the commercial shipping season opening on March 22, 2012.

As part of this project's FY 2012 obligations, the SLSDC also contracted local part-time security guard services (small businesses) in December 2011 for the two major winter work projects that were completed in FY 2012 (ARP Project Nos. 4 and 31). Each project was charged $7,216.

---

(18) <u>Project No. 39</u>: Both Locks – Dewatering Pumps – Upgrade Outdated Equipment

<u>General Description</u>: This project replaces the pumps used for dewatering both Eisenhower and Snell Locks when maintenance of their underwater components is required. These pumps are over 50 years old and parts for these units are no longer available.

<u>Type of Project</u>: Capital Project

<u>Mission Objective</u>: Lock Operation Upgrade and Maintenance

<u>FY 2012 Request Estimate *(February 2011)*</u>: $203,000

<u>FY 2012 Adjusted Internal Spending Plan *(December 2011)*</u>: $190,000

FY 2012 Obligations *(as of September 30, 2012)*: $189,763

Total Obligations to Date *(FYs 2009-2012)*: $189,763 (FY 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the SLSDC began work rebuilding and replacing the dewatering pumps at Eisenhower and Snell Locks. There are a total of six pumps at both locks – two large and one small pump at each lock.

In September 2012, the SLSDC awarded a contract for $184,000 to Rolfe Industries, Inc., Clifton Park, N.Y. (small woman-owned business; simplified acquisition, lowest price), to rebuild the four larger pumps. This work is expected to be complete in FY 2013. The small pumps will be replaced in the future.

---

(19) Project No. 41: Snell Lock – Install Ice Flushing System Technologies

General Description: This multi-year project will result in the installation of an ice flushing system at Snell Lock somewhat similar to the one already in operation at Eisenhower Lock. The project is critical to the safe and efficient operation of Snell Lock during the waterway's opening and closing periods when ice is typically present. Due to the very limited space between the vessel and lock walls and miter gates, each lock must be flushed free of ice before a vessel can be allowed to enter. Currently, ice is flushed from the Snell Lock chamber by utilizing lock-filling valves, exposing them to very high water flow/velocity for long periods of time. This causes the valves to vibrate and, in some instances, incur damage.

Type of Project: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $2,000,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $10,845,000

FY 2012 Obligations *(as of September 30, 2012)*: $11,477,293

Total Obligations to Date *(FYs 2009-2012)*: $11,749,293 (FYs 2011 and 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the design, specifications, and drawings of the new ice flushing system at Snell Lock was completed by Parsons Brinckerhoff, Inc. (large business), Boston, Mass. This contract was awarded in FY 2011.

In late FY 2012, the SLSDC awarded a contract for $11,425,600 to Hohl Industrial Services, Inc., Tonawanda, N.Y. (small business; sealed bid, lowest price), to perform the construction and installation of the new ice flushing system. In addition, the SLSDC completed an order for $23,523 to Debrino Caulking Associates, Castleton, N.Y. (small business; simplified acquisition, award based on best value using trade-off procedures), to grout and seal fiber ducts. The majority of the work will be completed during the 2013 winter work period, with the remainder of the work being completed during the spring and summer months of 2013. It is expected that the new system will be operable during the final weeks of the 2013 navigation season when ice conditions can be present. In addition to this obligation, additional small purchases and drawdowns on inventory associated with this project totaled $21,414. Additional engineering-related services totaled $6,745.

---

(20) Project No. 43: Both Locks – Miter Gate Machinery – Upgrade/Replace

General Description: This project replaces the 50+ year old operating machinery of the miter gates at both locks to insure its continued reliability. The upgrade will include new hydraulic operating equipment to match the improvements made at the Canadian Seaway locks and other locks in the United States.

Type of Project: Capital Project

Mission Objective: Lock Operation Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $1,632,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $0

FY 2012 Obligations *(as of September 30, 2012)*: $1,207

Total Obligations to Date *(FYs 2009-2012)*: $134,571 (FYs 2011 and 2012)

Project Update *(as of September 30, 2012)*: The SLSDC did not have any significant obligations for this project in FY 2012. The SLSDC continues to work with the U.S. Army Corps of Engineers' Pittsburgh District on the design, specifications, and drawings for this project. During the fiscal year, Corps' officials visited Massena, N.Y., to inspect the existing conditions, take measurements, and meet with SLSDC officials.

---

(21) Project No. 51: Corporation Facilities – Upgrade Physical Security to Meet HSPD-12 Requirements

General Description: This project is for procuring the Personal Identity Verification (PIV) cards issued by the Department as well as the necessary card readers and other required infrastructure to meet Homeland Security Presidential Directive (HSPD)-12 requirements.

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

Mission Objective: Facility/Equipment Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $50,000

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $385,000

FY 2012 Obligations *(as of September 30, 2012)*: $352,347

Total Obligations to Date *(FYs 2009-2012)*: $397,627 (FYs 2010, 2011, and 2012)

Project Update *(as of September 30, 2012)*: In FY 2012, the SLSDC began developing a new PIV-enabled physical access system for the SLSDC's facilities in Massena, N.Y. that meets HSPD-12 requirements.

In February 2012, the SLSDC awarded a contract for $44,347 to Combs and Shearer, Inc., Huntsville, Ala. (small service-disabled, veteran-owned business; simplified acquisition, best value using trade-off procedures) to perform a feasibility study and design for a new physical access system. This work was completed in FY 2012.

In September 2012, the SLSDC awarded a contract for $308,000 to Collins-Hammond Electrical Contractors, Inc., Ogdensburg, N.Y. (small business; sealed bid, lowest price) to install the new physical access system. Installation and initial use of the new system is expected to take place in FY 2013. The SLSDC is working closely with DOT officials to ensure continuity between the new system and the Department's current PIV security and authentication systems.

---

(22) Project No. 55: Corporation Facilities – Maintenance Building – Replace Fuel Tanks

General Description: This project replaces one underground diesel fuel storage tank and one underground gasoline storage tank with above ground tanks of smaller capacities. These tanks are used to dispense fuel for use in SLSDC vehicles, light and heavy equipment, and boats that contribute to the maintenance of the locks, navigation channels, and other SLSDC facilities.

Type of Project: Capital Project

Mission Objective: Facility/Equipment Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $0

FY 2012 Obligations *(as of September 30, 2012)*: $2,350

SLSDC's new above-ground fuel tank station located at the Maintenance/Marine Base Facility.

Total Obligations to Date *(FYs 2009-2012)*: $191,700 (FYs 2011 and 2012)

Project Update *(as of September 30, 2012)*: During the fiscal year, T.R. Weniger, Green Brook, N.J. (small woman-owned business), removed the SLSDC's old below-ground fuel tanks, installed new above-ground tanks, and constructed a new building to house the new tanks at the SLSDC's Maintenance/Marine Base Facility. This work was awarded in FY 2011.

---

(23) Project No. 57: Corporation Technologies – Upgrade Network Security

General Description: This project enhances and improves the SLSDC's IT network infrastructure and security. The growth of more technology-based ARP improvements is resulting in an increased need to expand and refine the SLSDC's network environment. The SLSDC is working closely with DOT's Office of the Chief Information Officer to coordinate and make these improvements.

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

Mission Objective: Facility/Equipment Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $20,000

FY 2012 Obligations *(as of September 30, 2012)*: $16,998

Total Obligations to Date *(FYs 2009-2012)*: $175,534 (FYs 2011 and 2012)

Project Update *(as of September 30, 2012)*: As part of its multi-year effort to upgrade its information technology network, the SLSDC awarded a contract for $12,450 to MacSource Communications, Syracuse, N.Y. (large business; sole source), to further develop the SLSDC's Massena-based network. MacSource Communications has been working with the SLSDC over the past several years to modernize its network to meet federal and departmental standards and requirements.

---

(24) Project No. 58: Corporation Facilities – Upgrades to Meet Sustainability and Energy Goals

General Description: This project implements the recommendations of two consultant-led initiatives: an energy/water conservation audit and a retro-commissioning study. These upgrades will be made to meet the sustainability requirements of various federal executive orders and laws.

Type of Project: Capital Project

Mission Objective: Facility/Equipment Upgrade and Maintenance

FY 2012 Request Estimate *(February 2011)*: $0

FY 2012 Adjusted Internal Spending Plan *(December 2011)*: $55,000

FY 2012 Obligations *(as of September 30, 2012)*: $57,036

Total Obligations to Date *(FYs 2009-2012)*: $104,547 (FYs 2011 and 2012)

Project Update *(as of September 30, 2012)*: As reported in the FY 2011 ARP annual report, the SLSDC began a multi-year project in FY 2012 to retro-commission its Administration Building in Massena, N.Y. Building improvements will meet federal and departmental regulations and goals for sustainable buildings.

The project was launched with an April 2012 contract award for $51,148 to the SLSDC's IDIQ firm, Hatch Mott MacDonald, Buffalo, N.Y. (large business). The contractor performed an initial assessment of needed improvements and upgrades at the Administration Building to meet sustainability requirements and goals. This preliminary work was completed in FY 2012 and a prioritized list of Energy Conservation Measures (ECMs) and other measures is being developed for implementation over the next several years.

Saint Lawrence Seaway Development Corporation (SLSDC)
Asset Renewal Program (ARP) Obligations (Fiscal Years 2009-2012)
(In Whole Dollars)

ARP #	ARP Project Description	ARP FY 2009 Obligations (Year 1)	ARP FY 2010 Obligations (Year 2)	ARP FY 2011 Obligations (Year 3)	ARP FY 2012 Obligations (Year 4)	Four Year Obligation Totals
1	Snell Lock - Replace Fendering Downstream Guidewall Extension	$241,600	$8,091	$0	$0	$249,691
2	Both Locks - Rehabilitate Downstream Miter Gates	$0	$0	$3,539,935	$8,384	$3,548,319
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	(Comb. w/ No. 14)	$35,422	$0	$0	$35,422
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	$4,117,050	$344,915	$3,965,005	$539,889	$8,966,859
5	Both Locks - Rehabilitate Winter Maintenance Lock Covers	$46,698	$6,638	$23,781	$28,335	$105,452
6	Seaway International Bridge – Perform Structural Rehabilitation and Corrosion Prevention	$3,102,878	$5,680,707	$0	$0	$8,783,585
7	Both Locks - Culvert Valves - Replace With Single Skin Valves	$0	$326,898	$65,591	$302,468	$694,957
8	Floating Navigational Aids - Replace	$61,254	$54,576	$0	$0	$115,830
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles, and Shop Equipment	$1,574,504	$481,052	$108,038	$81,623	$2,245,217
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	$372,479
11	Fixed Navigational Aids - Rehabilitate	$0	$10,998	$16,217	$21,048	$48,263
12	Corporation Equipment - Upgrade/Replace Floating Plant	$678,745	$1,627,925	$1,908,563	$2,160,169	$6,375,402
13	Corporation Facilities - Replace Roofs	$143,949	$0	$3,348	$89,024	$236,321
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	$921,837	$1,829,621	$85,481	$0	$2,836,939
15	Eisenhower Lock - Highway Tunnel - Rehabilitate	$26,636	$271,804	$99,459	$1,523	$399,422
16	Corporation Technologies - Upgrade GPS/AIS/TMS	$100,997	$76,451	($3,328)	$10,000	$184,120
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	$4,279,556	$0	$3,662,267	$99,714	$8,041,537
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	$0	$487,750	$109,490	$268,549	$865,789
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	$0	$753,400	$306,847	$41,304	$1,101,551
20	Both Locks - Upgrade Lock Status/Controls	$8,558	$139,805	$89,507	$37,549	$275,419
21	Both Locks - Compressed Air Systems - Upgrade/Replace	$19,878	$787,549	$3,381	$986	$811,794
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	$37,561	$0	$0	$0	$37,561
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	$4,148	$0	$4,007	$0	$8,155
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	$0	$418,000	$12,144	$0	$430,144
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	$0	$33,776	$5,537	$8,070	$47,383
29	Eisenhower Lock - Walls, Sills, and Culverts - Rehabilitate Concrete	$0	$209,395	$0	$0	$209,395
31	Both Locks - Rehabilitate Upstream Miter Gates	$2,201,585	$2,478,896	$347,662	$14,961	$5,043,104
32	Snug Harbor - Rehabilitate Spare Gate Storage and Assembly Area	$0	$12,734	$346,600	$0	$359,334
34	Both Locks - Improve Ice Control	$0	$7,462	$0	$0	$7,462
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	$0	$0	$0	$189,763	$189,763
41	Snell Lock - Install Ice Flushing System Technologies	$0	$0	$272,000	$11,477,293	$11,749,293
42	Both Locks - Miter Gates - Structural Rehabilitation	$0	$0	$0	$210	$210
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	$0	$0	$133,364	$1,207	$134,571
51	Corporation Facilities - Upgrade Physical Security to Meet HSPD-12 Requirements	$0	$24,183	$21,097	$352,347	$397,627
52	Corporation Facilities - Eisenhower Lock Visitors' Center - Replace	$0	$0	$13,042	$0	$13,042
54	Corporation Facilities - Administration Building - Replace Elevator	$0	$0	$140,346	$0	$140,346
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	$0	$0	$189,350	$2,350	$191,700
56	Corporation Facilities - Duth Free Store Property - Upgrade Security	$0	$0	$13,025	$0	$13,025
57	Corporation Facilities - Upgrade Network Security	$0	$0	$158,536	$16,998	$175,534
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	$0	$0	$47,511	$57,036	$104,547
--	Miscellaneous Expenses	$0	$443	$1,699	$0	$2,142
	Asset Renewal Program Total	**$17,587,028**	**$16,339,760**	**$15,783,115**	**$15,838,803**	**$65,548,706**

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, and $672,000 in personnel compensation and benefits from its "Agency Operations" program for staff time associated with ARP work in FYs 2009, 2010, 2011, and 2012, respectively.

(4) The miscellaneous expenses of $443 in FY 2010 and $1,699 in FY 2011 were for ARP-related travel costs by SLSDC personnel that could not be linked to a specific ARP project.

SLSDC Asset Renewal Program (ARP) Funding Summary (FY 2009-2013)

ARP Project No.	ARP Project Title	Project Funding Status *(Based on actual obligations and/or planned obligations through FY 2013)*	Number of Funding Years	Total Project Cost *(Actual or Estimated)*	FY 2009					FY 2010				
					FY 2009 ARP/CIP Estimate *(02-04-08)*	FY 2009 Congressional Request *(02-04-08)*	FY 2009 Enacted *(03-11-09)*	FY 2009 Internal Spending Plan *(04-10-09)*	FY 2009 Obligations (Actual) *(09-30-09)*	FY 2010 ARP/CIP Estimate *(02-04-08)*	FY 2010 Congressional Request *(05-07-09)*	FY 2010 Enacted *(12-16-09)*	FY 2010 Internal Spending Plan *(03-15-10)*	FY 2010 Obligations (Actual) *(09-30-10)*
1	Snell Lock - Replace Fendering Downstream Guidewall Extension	Completed	2	$249,691	$300,000	$300,000	$300,000	$300,000	$241,600	---	---	---	$10,000	$8,091
2	Both Locks - Rehabilitate Downstream Miter Gates	Completed	3	$6,518,319	$1,500,000	$1,500,000	$1,500,000	---	---	$1,500,000	$1,508,000	$1,508,000	---	---
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	Completed	3	$135,422	$250,000	$250,000	$250,000	*(Comb. w/ No. 14)*	*(Comb. w/ No. 14)*	$250,000	$251,000	$251,000	---	$35,422
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	Completed	5	$9,141,859	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$4,117,050	---	---	---	$325,000	$344,915
5	Both Locks - Rehabilitate Winter Maintenance Lock Covers	Completed	5	$255,452	$250,000	$250,000	$250,000	$250,000	$46,698	---	---	---	$5,000	$6,638
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	Completed	2	$8,783,585	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$3,102,878	$5,600,000	$5,773,000	$5,773,000	$4,500,000	$5,680,707
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	Completed	4	$1,044,957	$600,000	$600,000	$600,000	$600,000	---	$600,000	$603,000	$603,000	$297,000	$326,898
8	Floating Navigational Aids - Replace	On-Going	8	$505,830	$60,000	$60,000	$60,000	$60,000	$61,254	$60,000	$60,000	$60,000	$60,000	$54,576
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	On-Going	10	$3,920,217	$1,750,000	$1,750,000	$1,750,000	$1,750,000	$1,574,504	$250,000	$251,000	$251,000	$235,000	$481,052
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	On-Going	10	$492,479	$75,000	$75,000	$75,000	$75,000	$19,594	$75,000	$75,000	$75,000	$100,000	$231,269
11	Fixed Navigational Aids - Rehabilitate	On-Going	8	$1,048,263	$100,000	$100,000	$100,000	$100,000	---	$200,000	$201,000	$201,000	$10,000	$10,998
12	Corporation Equipment - Upgrade/Replace Floating Plant	On-Going	7	$26,725,402	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$678,745	$500,000	$503,000	$503,000	$1,845,000	$1,627,925
13	Corporation Facilities - Replace Roofs	On-Going	8	$1,721,321	$50,000	$50,000	$50,000	$50,000	$143,949	---	---	---	---	---
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	On-Going	5	$4,811,939	$950,000	$950,000	$950,000	$1,200,000	$921,837	---	$1,508,000	$1,508,000	$1,000,000	$1,829,621
15	Eisenhower Lock - Highway Tunnel - Rehabilitate	On-Going	6	$919,422	$250,000	$250,000	$250,000	$250,000	$26,636	---	---	---	$275,000	$271,804
16	Corporation Technologies - Upgrade GPS/AIS/TMS	On-Going	5	$384,120	$100,000	$100,000	$100,000	$100,000	$100,997	---	---	---	---	$76,451
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	On-Going	6	$18,441,537	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$4,279,556	---	---	---	---	---
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	Completed	3	$865,789	---	---	---	---	---	$500,000	$503,000	$503,000	$500,000	$487,750
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	Completed	4	$1,101,551	---	---	---	---	---	$150,000	$151,000	$151,000	$150,000	$753,400
20	Both Locks - Upgrade Lock Status/Controls	Completed	5	$300,419	---	---	---	---	$8,558	$150,000	$151,000	$151,000	$200,000	$139,805
21	Both Locks - Compressed Air Systems - Upgrade/Replace	Completed	5	$826,794	---	---	---	---	$19,878	$1,500,000	$1,508,000	$1,508,000	$1,500,000	$787,549
22	Both Locks - Install Vessel Self Spotting Equipment	On-Going	2	$700,000	---	---	---	---	---	$250,000	$251,000	$251,000	---	---
23	Both Locks - Install Vessel Vacuum Mooring Systems	Not Started	2	$10,000,000	---	---	---	---	---	$1,650,000	---	---	---	---
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	Completed	2	$137,561	---	---	---	---	$37,561	$200,000	$201,000	$201,000	---	---
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	Completed	2	$8,155	---	---	---	---	$4,148	$100,000	$101,000	$101,000	$5,000	---
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	On-Going	4	$1,080,144	---	---	---	---	---	$200,000	$201,000	$201,000	$200,000	$418,000
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	On-Going	6	$667,383	---	---	---	---	---	$200,000	$201,000	$201,000	$200,000	$33,776
28	Snell Lock - Walls, Sills and Culverts - Rehabilitate Concrete	Not Started	2	$3,575,000	---	---	---	---	---	---	---	---	---	---
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitate Concrete	On-Going	5	$9,034,395	---	---	---	---	---	$2,000,000	$2,010,000	$2,010,000	$2,000,000	$209,395
30	Eisenhower Lock - Ice Flushing System - Upgrade	Cancelled	0	$0	---	---	---	---	---	---	---	---	---	---
31	Both Locks - Rehabilitate Upstream Miter Gates	Completed	4	$5,043,104	---	---	---	$1,500,000	$2,201,585	---	---	---	$2,800,000	$2,478,896
32	Snug Harbor - Rehabilitate Spare Gate Storage and Assembly Area	Completed	3	$1,359,334	---	---	---	---	---	---	---	---	---	$12,734
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	Not Started	3	$455,000	---	---	---	---	---	---	---	---	---	---
34	Both Locks - Improve Ice Control	On-Going	3	$467,462	---	---	---	---	---	---	---	---	---	$7,462
35	Vessel Mooring Cells - Rehabilitate and Extend	On-Going	3	$2,260,000	---	---	---	---	---	---	---	---	---	---
36	Eisenhower Lock - Diffusers - Replace	Combined with No. 29	0	$0	---	---	---	---	---	---	---	---	---	---
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	Not Started	1	$800,000	---	---	---	---	---	---	---	---	---	---
38	Both Locks - Upgrade/Replace Emergency Generators	On-Going	1	$700,000	---	---	---	---	---	---	---	---	---	---
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	On-Going	2	$194,763	---	---	---	---	---	---	---	---	---	---
40	Both Locks - Extend Guidewalls in Pool	Not Started	1	$1,550,000	---	---	---	---	---	---	---	---	---	---
41	Snell Lock - Install Ice Flushing System Technologies	Completed	3	$12,849,293	---	---	---	---	---	---	---	---	$100,000	---
42	Both Locks - Miter Gates - Structural Rehabilitation	On-Going	4	$4,070,210	---	---	---	---	---	---	---	---	---	---
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	On-Going	3	$1,884,571	---	---	---	---	---	---	---	---	---	---
44	Both Locks - Ship Arrestor Machinery - Upgrade/Replace	Not Started	2	$825,000	---	---	---	---	---	---	---	---	---	---
45	Flow Control Dikes - Rehabilitate	Not Started	1	$515,000	---	---	---	---	---	---	---	---	---	---
46	Both Locks - Guidewall Extensions - Rehabilitate	Not Started	2	$1,035,000	---	---	---	---	---	---	---	---	---	---
47	Eisenhower Lock - Vertical Lift Gate - Structural Rehabilitation	Not Started	1	$725,000	---	---	---	---	---	---	---	---	---	---
48	Both Locks - Stiffleg Derricks - Replace	Not Started	2	$840,000	---	---	---	---	---	---	---	---	---	---
49	Seaway International Bridge - Replace Deck	Not Started	1	$14,225,000	---	---	---	---	---	---	---	---	---	---
50	Snell Lock - Diffusers - Replace	Not Started	1	$3,140,000	---	---	---	---	---	---	---	---	---	---
51	Corporation Facilities - Upgrade Physical Security to Meet HSPD-12 Requirements	On-Going	5	$522,627	---	---	---	---	---	---	---	---	---	$24,183
52	Corporation Facilities - Eisenhower Lock Visitors' Center - Replace	On-Going	3	$813,042	---	---	---	---	---	---	---	---	---	---
53	Corporation Technologies - Financial Management System - Upgrade/Replace	Not Started	1	$1,500,000	---	---	---	---	---	---	---	---	---	---
54	Corporation Facilities - Administration Building - Replace Elevator	Completed	1	$140,346	---	---	---	---	---	---	---	---	---	---
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	Completed	2	$191,700	---	---	---	---	---	---	---	---	---	---
56	Corporation Facilities - Duty Free Store Property - Security Upgrades	Completed	1	$13,025	---	---	---	---	---	---	---	---	---	---
57	Corporation Technologies - Upgrade Network Security	Completed	2	$175,534	---	---	---	---	---	---	---	---	---	---
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	On-Going	4	$404,547	---	---	---	---	---	---	---	---	---	---
59	Corporation Facilities - Communications Improvements (Maintenance)	Not Started	0	$0	---	---	---	---	---	---	---	---	---	---
60	Both Locks - Improve Access to and Rehabilitate Machinery in Crossovers and Recesses	Not Started	5	$1,600,000	---	---	---	---	---	---	---	---	---	---
61	Both Locks - Replace Recess Covers on Lock Walls	Not Started	5	$500,000	---	---	---	---	---	---	---	---	---	---
---	Engineering Design, Construction Inspection, Contracting Support, and Project Management			---	$300,000	$300,000	$300,000	$300,000	*[$608,769]*	$300,000	$306,000	$306,000	---	---
---	Miscellaneous Expenses			$2,143	---	---	---	---	---	---	---	---	---	$443
	Total			$172,198,707	$17,535,000	$17,535,000	$17,535,000	$17,535,000	$17,587,028	$16,235,000	$16,317,000	$16,317,000	$16,317,000	$16,339,760

SLSDC Asset Renewal Program (ARP) Funding Summary (FY 2009-2013)

					FY 2011					FY 2012				
ARP Project No.	ARP Project Title	Project Funding Status *(Based on actual obligations and/or planned obligations through FY 2013)*	Number of Funding Years	Total Project Cost *(Actual or Estimated)*	FY 2011 ARP/CIP Estimate *(05-07-09)*	FY 2011 Congressional Request *(02-01-10)*	FY 2011 Enacted *(04-15-11)*	FY 2011 Internal Spending Plan *(04-22-11)*	FY 2011 Obligations (Actual) *(09-30-11)*	FY 2012 ARP/CIP Estimate *(02-01-10)*	FY 2012 Congressional Request *(02-14-11)*	FY 2012 Enacted *(12-23-11)*	FY 2012 Internal Spending Plan *(12-30-11)*	FY 2012 Obligations (Actual) *(09-30-12)*
1	Snell Lock - Replace Fendering Downstream Guidewall Extension	Completed	2	$249,691	---	$10,000	$10,000	---	---	---	---	---	---	---
2	Both Locks - Rehabilitate Downstream Miter Gates	Completed	3	$6,518,319	$1,515,000	$4,250,000	$4,250,000	$4,250,000	$3,539,935	$4,380,000	$4,380,000	$4,380,000	$2,700,000	$8,384
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	Completed	3	$135,422	$253,000	---	---	---	---	---	---	---	$200,000	---
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	Completed	5	$9,141,859	$2,020,000	$4,500,000	$4,500,000	$4,500,000	$3,965,005	---	---	---	$180,000	$539,889
5	Both Locks - Rehabilitate Winter Maintenance Lock Covers	Completed	5	$255,452	$253,000	---	---	---	$23,781	$258,000	$258,000	$258,000	$25,000	$28,335
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	Completed	2	$8,783,585	$4,666,000	$3,466,000	$3,466,000	$3,066,000	---	---	---	---	---	---
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	Completed	4	$1,044,957	$606,000	$300,000	$300,000	$300,000	$65,591	$305,000	$405,000	$405,000	$300,000	$302,468
8	Floating Navigational Aids - Replace	On-Going	8	$505,830	$61,000	$61,000	$61,000	$61,000	---	$61,000	$61,000	$61,000	$60,000	---
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	On-Going	10	$3,920,217	$253,000	$100,000	$100,000	$100,000	$108,038	$254,000	$255,000	$255,000	$100,000	$81,623
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	On-Going	10	$492,479	$76,000	$50,000	$50,000	$50,000	$93,613	$20,000	$20,000	$20,000	$40,000	$28,003
11	Fixed Navigational Aids - Rehabilitate	On-Going	8	$1,048,263	$202,000	$100,000	$100,000	$100,000	$16,217	$203,000	$100,000	$100,000	$100,000	$21,048
12	Corporation Equipment - Upgrade/Replace Floating Plant	On-Going	7	$26,725,402	$505,000	$505,000	$505,000	$505,000	$1,908,563	$1,524,000	$1,524,000	$1,524,000	$2,335,000	$2,160,169
13	Corporation Facilities - Replace Roofs	On-Going	8	$1,721,321	$91,000	$130,000	$130,000	$130,000	$3,348	$230,000	$230,000	$230,000	$40,000	$89,024
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	On-Going	5	$4,811,939	$1,515,000	$750,000	$750,000	---	$85,481	---	---	---	---	---
15	Eisenhower Lock - Highway Tunnel - Rehabilitate	On-Going	6	$919,422	$253,000	$650,000	$650,000	$650,000	$99,459	---	---	---	---	$1,523
16	Corporation Technologies - Upgrade GPS/AIS/TMS	On-Going	5	$384,120	$101,000	$50,000	$50,000	$50,000	-$3,328	---	---	---	---	$10,000
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	On-Going	6	$18,441,537	---	---	---	$770,000	$3,662,267	---	---	---	---	$99,714
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	Completed	3	$865,789	---	---	---	---	$109,490	---	---	---	$250,000	$268,549
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	Completed	4	$1,101,551	$152,000	$150,000	$150,000	---	$306,847	$500,000	$400,000	$400,000	$400,000	$41,304
20	Both Locks - Upgrade Lock Status/Controls	Completed	5	$300,419	$152,000	$75,000	$75,000	$75,000	$89,507	---	---	---	---	$37,549
21	Both Locks - Compressed Air Systems - Upgrade/Replace	Completed	5	$826,794	$1,515,000	---	---	---	$3,381	---	---	---	$15,000	$986
22	Both Locks - Install Vessel Self Spotting Equipment	On-Going	2	$700,000	$253,000	---	---	---	---	---	---	---	---	---
23	Both Locks - Install Vessel Vacuum Mooring Systems	Not Started	2	$10,000,000	---	---	---	---	---	---	---	---	---	---
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	Completed	2	$137,561	---	---	---	---	---	$203,000	$203,000	$203,000	$100,000	---
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	Completed	2	$8,155	---	---	---	---	$4,007	---	---	---	---	---
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	On-Going	4	$1,080,144	---	---	---	---	$12,144	$203,000	$203,000	$203,000	---	---
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	On-Going	6	$667,383	---	---	---	---	$5,537	$203,000	$203,000	$203,000	$50,000	$8,070
28	Snell Lock - Walls, Sills and Culverts - Rehabilitate Concrete	Not Started	2	$3,575,000	$2,020,000	---	---	---	---	---	---	---	---	---
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitate Concrete	On-Going	5	$9,034,395	---	---	---	---	---	$2,030,000	---	---	---	---
30	Eisenhower Lock - Ice Flushing System - Upgrade	Cancelled	0	$0	$202,000	---	---	---	---	---	---	---	---	---
31	Both Locks - Rehabilitate Upstream Miter Gates	Completed	4	$5,043,104	---	---	---	---	$347,662	---	---	---	---	$14,961
32	Snug Harbor - Rehabilitate Spare Gate Storage and Assembly Area	Completed	3	$1,359,334	$253,000	$253,000	$253,000	$253,000	$346,600	$254,000	$254,000	$254,000	$250,000	---
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	Not Started	3	$455,000	$152,000	---	---	---	---	$152,000	$152,000	$152,000	$100,000	---
34	Both Locks - Improve Ice Control	On-Going	3	$467,462	$101,000	$100,000	$100,000	$100,000	---	$228,000	$228,000	$228,000	---	---
35	Vessel Mooring Cells - Rehabilitate and Extend	On-Going	3	$2,260,000	$1,010,000	$100,000	$100,000	$100,000	---	---	---	---	---	---
36	Eisenhower Lock - Diffusers - Replace	Combined with No. 29	0	$0	---	---	---	---	---	$3,045,000	$3,045,000	$3,045,000	---	---
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	Not Started	1	$800,000	---	---	---	---	---	---	---	---	---	---
38	Both Locks - Upgrade/Replace Emergency Generators	On-Going	1	$700,000	---	---	---	---	---	$508,000	$508,000	$508,000	$100,000	---
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	On-Going	2	$194,763	---	---	---	---	---	$203,000	$203,000	$203,000	$200,000	$189,763
40	Both Locks - Extend Guidewalls in Pool	Not Started	1	$1,550,000	---	---	---	---	---	---	---	---	---	---
41	Snell Lock - Install Ice Flushing System Technologies	Completed	3	$12,849,293	---	---	---	$400,000	$272,000	$5,075,000	$2,000,000	$2,000,000	$6,705,000	$11,477,293
42	Both Locks - Miter Gates - Structural Rehabilitation	On-Going	4	$4,070,210	---	---	---	---	---	$761,000	$761,000	$761,000	$750,000	$210
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	On-Going	3	$1,884,571	---	---	---	---	$133,364	---	$1,632,000	$1,632,000	---	$1,207
44	Both Locks - Ship Arrestor Machinery - Upgrade/Replace	Not Started	2	$825,000	---	---	---	---	---	---	---	---	---	---
45	Flow Control Dikes - Rehabilitate	Not Started	1	$515,000	---	---	---	---	---	---	---	---	---	---
46	Both Locks - Guidewall Extensions - Rehabilitate	Not Started	2	$1,035,000	---	---	---	---	---	---	---	---	---	---
47	Eisenhower Lock - Vertical Lift Gate - Structural Rehabilitation	Not Started	1	$725,000	---	---	---	---	---	---	---	---	---	---
48	Both Locks - Stiffleg Derricks - Replace	Not Started	2	$840,000	---	---	---	---	---	---	---	---	---	---
49	Seaway International Bridge - Replace Deck	Not Started	1	$14,225,000	---	---	---	---	---	---	---	---	---	---
50	Snell Lock - Diffusers - Replace	Not Started	1	$3,140,000	---	---	---	---	---	---	---	---	---	---
51	Corporation Facilities - Upgrade Physical Security to Meet HSPD-12 Requirements	On-Going	5	$522,627	---	$100,000	$100,000	$100,000	$21,097	$50,000	$50,000	$50,000	$300,000	$352,347
52	Corporation Facilities - Eisenhower Lock Visitors' Center - Replace	On-Going	3	$813,042	---	---	---	---	$13,042	---	---	---	---	---
53	Corporation Technologies - Financial Management System - Upgrade/Replace	Not Started	1	$1,500,000	---	---	---	---	---	---	---	---	---	---
54	Corporation Facilities - Administration Building - Replace Elevator	Completed	1	$140,346	---	---	---	$140,000	$140,346	---	---	---	---	---
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	Completed	2	$191,700	---	---	---	---	$189,350	---	---	---	---	$2,350
56	Corporation Facilities - Duty Free Store Property - Security Upgrades	Completed	1	$13,025	---	---	---	---	$13,025	---	---	---	---	---
57	Corporation Technologies - Upgrade Network Security	Completed	2	$175,534	---	---	---	---	$158,536	---	---	---	$250,000	$16,998
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	On-Going	4	$404,547	---	---	---	---	$47,511	---	---	---	$50,000	$57,036
59	Corporation Facilities - Communications Improvements (Maintenance)	Not Started	0	$0	---	---	---	---	---	---	---	---	---	---
60	Both Locks - Improve Access to and Rehabilitate Machinery in Crossovers and Recesses	Not Started	5	$1,600,000	---	---	---	---	---	---	---	---	---	---
61	Both Locks - Replace Recess Covers on Lock Walls	Not Started	5	$500,000	---	---	---	---	---	---	---	---	---	---
---	Engineering Design, Construction Inspection, Contracting Support, and Project Management			---	$312,000	---	---	---	---	---	---	---	---	---
---	Miscellaneous Expenses			$2,143	---	---	---	---	$1,700	---	---	---	---	---
	Total			$172,198,707	$18,492,000	$15,700,000	$15,700,000	$15,700,000	$15,783,116	$20,650,000	$17,075,000	$17,075,000	$15,600,000	$15,838,803

SLSDC Asset Renewal Program (ARP) Funding Summary (FY 2009-2013)

ARP Project No.	ARP Project Title	Project Funding Status *(Based on actual obligations and/or planned obligations through FY 2013)*	Number of Funding Years	Total Project Cost *(Actual or Estimated)*	FY 2013				
					FY 2013 ARP/CIP Estimate *(02-14-11)*	FY 2013 Congressional Request *(02-13-12)*	FY 2013 Enacted	FY 2013 Internal Spending Plan *(02-01-13)*	FY 2013 Obligations (Actual)
1	Snell Lock - Replace Fendering Downstream Guidewall Extension	Completed	2	$249,691	---	---	---	---	---
2	Both Locks - Rehabilitate Downstream Miter Gates	Completed	3	$6,518,319	---	$230,000	$230,000	$2,970,000	---
3	Both Locks - Rehabilitate Mooring Buttons, Pins, and Concrete Along Guidewalls and Guardwalls	Completed	3	$135,422	---	$100,000	$100,000	$100,000	---
4	Both Locks - Culvert Valve Machinery - Upgrade to Hydraulic Operation	Completed	5	$9,141,859	---	---	---	$175,000	---
5	Both Locks - Rehabilitate Winter Maintenance Lock Covers	Completed	5	$255,452	---	$200,000	$200,000	$150,000	---
6	Seaway International Bridge - Perform Structural Rehabilitation and Corrosion Prevention	Completed	2	$8,783,585	---	---	---	---	---
7	Both Locks - Culvert Valves - Replace with Single Skin Valves	Completed	4	$1,044,957	$406,000	$420,000	$420,000	$350,000	---
8	Floating Navigational Aids - Replace	On-Going	8	$505,830	$61,000	$65,000	$65,000	$65,000	---
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	On-Going	10	$3,920,217	$255,000	$260,000	$260,000	$375,000	---
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	On-Going	10	$492,479	$20,000	$20,000	$20,000	$20,000	---
11	Fixed Navigational Aids - Rehabilitate	On-Going	8	$1,048,263	$204,000	$200,000	$200,000	---	---
12	Corporation Equipment - Upgrade/Replace Floating Plant	On-Going	7	$26,725,402	---	$400,000	$400,000	$500,000	---
13	Corporation Facilities - Replace Roofs	On-Going	8	$1,721,321	$300,000	$300,000	$300,000	$400,000	---
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	On-Going	5	$4,811,939	$1,530,000	$900,000	$900,000	$675,000	---
15	Eisenhower Lock - Highway Tunnel - Rehabilitate	On-Going	6	$919,422	$255,000	$750,000	$750,000	---	---
16	Corporation Technologies - Upgrade GPS/AIS/TMS	On-Going	5	$384,120	$102,000	$100,000	$100,000	---	---
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	On-Going	6	$18,441,537	---	---	---	$50,000	---
18	Eisenhower Lock - Vertical Lift Gate - Replace Wire Ropes	Completed	3	$865,789	---	---	---	---	---
19	Corporation Facilities - Upgrade Electrical Distribution Equipment	Completed	4	$1,101,551	---	---	---	---	---
20	Both Locks - Upgrade Lock Status/Controls	Completed	5	$300,419	---	---	---	$25,000	---
21	Both Locks - Compressed Air Systems - Upgrade/Replace	Completed	5	$826,794	---	---	---	$15,000	---
22	Both Locks - Install Vessel Self Spotting Equipment	On-Going	2	$700,000	---	$500,000	$500,000	$400,000	---
23	Both Locks - Install Vessel Vacuum Mooring Systems	Not Started	2	$10,000,000	---	---	---	---	---
24	Both Locks - Structural Repair - Grout Leaks in Galleries and Recesses	Completed	2	$137,561	---	---	---	$100,000	---
25	Corporation Facilities - Upgrade/Replace Fire Alarm/Protection Systems	Completed	2	$8,155	---	---	---	---	---
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	On-Going	4	$1,080,144	---	$750,000	$750,000	$450,000	---
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	On-Going	6	$667,383	---	---	---	---	---
28	Snell Lock - Walls, Sills and Culverts - Rehabilitate Concrete	Not Started	2	$3,575,000	$2,040,000	---	---	---	---
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitate Concrete	On-Going	5	$9,034,395	---	$2,000,000	$2,000,000	$2,000,000	---
30	Eisenhower Lock - Ice Flushing System - Upgrade	Cancelled	0	$0	---	---	---	---	---
31	Both Locks - Rehabilitate Upstream Miter Gates	Completed	4	$5,043,104	---	---	---	---	---
32	Snug Harbor - Rehabilitate Spare Gate Storage and Assembly Area	Completed	3	$1,359,334	$255,000	$300,000	$300,000	$1,000,000	---
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	Not Started	3	$455,000	$153,000	$160,000	$160,000	$150,000	---
34	Both Locks - Improve Ice Control	On-Going	3	$467,462	$230,000	$230,000	$230,000	---	---
35	Vessel Mooring Cells - Rehabilitate and Extend	On-Going	3	$2,260,000	$1,020,000	$500,000	$500,000	$200,000	---
36	Eisenhower Lock - Diffusers - Replace	Combined with No. 29	0	$0	---	---	---	---	---
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	Not Started	1	$800,000	---	---	---	---	---
38	Both Locks - Upgrade/Replace Emergency Generators	On-Going	1	$700,000	$510,000	$500,000	$500,000	$700,000	---
39	Both Locks - Dewatering Pumps - Upgrade Outdated Equipment	On-Going	2	$194,763	$204,000	$200,000	$200,000	$5,000	---
40	Both Locks - Extend Guidewalls in Pool	Not Started	1	$1,550,000	$1,530,000	---	---	---	---
41	Snell Lock - Install Ice Flushing System Technologies	Completed	3	$12,849,293	$5,103,000	$3,000,000	$3,000,000	$1,100,000	---
42	Both Locks - Miter Gates - Structural Rehabilitation	On-Going	4	$4,070,210	$765,000	$765,000	$765,000	$2,000,000	---
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	On-Going	3	$1,884,571	---	$2,600,000	$2,600,000	---	---
44	Both Locks - Ship Arrestor Machinery - Upgrade/Replace	Not Started	2	$825,000	---	---	---	---	---
45	Flow Control Dikes - Rehabilitate	Not Started	1	$515,000	---	---	---	---	---
46	Both Locks - Guidewall Extensions - Rehabilitate	Not Started	2	$1,035,000	---	---	---	---	---
47	Eisenhower Lock - Vertical Lift Gate - Structural Rehabilitation	Not Started	1	$725,000	---	---	---	---	---
48	Both Locks - Stiffleg Derricks - Replace	Not Started	2	$840,000	---	---	---	---	---
49	Seaway International Bridge - Replace Deck	Not Started	1	$14,225,000	---	---	---	---	---
50	Snell Lock - Diffusers - Replace	Not Started	1	$3,140,000	---	---	---	---	---
51	Corporation Facilities - Upgrade Physical Security to Meet HSPD-12 Requirements	On-Going	5	$522,627	$50,000	$50,000	$50,000	$25,000	---
52	Corporation Facilities - Eisenhower Lock Visitors' Center - Replace	On-Going	3	$813,042	$5,000,000	$300,000	$300,000	$300,000	---
53	Corporation Technologies - Financial Management System - Upgrade/Replace	Not Started	1	$1,500,000	---	---	---	---	---
54	Corporation Facilities - Administration Building - Replace Elevator	Completed	1	$140,346	---	---	---	---	---
55	Corporation Facilities - Maintenance Building - Replace Fuel Tanks	Completed	2	$191,700	---	---	---	---	---
56	Corporation Facilities - Duty Free Store Property - Security Upgrades	Completed	1	$13,025	---	---	---	---	---
57	Corporation Technologies - Upgrade Network Security	Completed	2	$175,534	---	---	---	---	---
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	On-Going	4	$404,547	---	$200,000	$200,000	$200,000	---
59	Corporation Facilities - Communications Improvements (Maintenance)	Not Started	0	$0	---	---	---	---	---
60	Both Locks - Improve Access to and Rehabilitate Machinery in Crossovers and Recesses	Not Started	5	$1,600,000	---	---	---	---	---
61	Both Locks - Replace Recess Covers on Lock Walls	Not Started	5	$500,000	---	---	---	---	---
---	Engineering Design, Construction Inspection, Contracting Support, and Project Management			---	---	---	---	---	---
---	Miscellaneous Expenses			$2,143	---	---	---	---	---
	Total			$172,198,707	$19,993,000	$16,000,000	$16,000,000	$14,500,000	---

Saint Lawrence Seaway Development Corporation (SLSDC)

Asset Renewal Program Five-Year Plan (FYs 2014-2018)

(In Whole Dollars)

ARP #	ARP Project Description	Type of Project (1)	Completed By (2)	Mission Objective (3)	FY 2014 Request	FY 2015 Estimate	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Five-Year Total
8	Floating Navigational Aids - Replace	CP	N/A	W	$65,000	$65,000	$65,000	$65,000	$65,000	$325,000
9	Corporation Equipment - Replace Heavy and Light Equipment, Maintenance Vehicles and Shop Equipment	CP/CE/MP	N/A	L, W	$260,000	$260,000	$260,000	$260,000	$260,000	$1,300,000
10	Both Locks - Upgrade Power Supply Infrastructure from Moses-Saunders Dam to Both Locks and Adjacent Facilities	MP	C	L	$20,000	$20,000	$20,000	$20,000	$20,000	$100,000
11	Fixed Navigational Aids - Rehabilitate	CP/MP	C	W	$200,000	$200,000	$200,000	$200,000	$200,000	$1,000,000
12	Corporation Equipment - Upgrade/Replace Floating Plant	CP/CE/MP	C/I	L, W	---	$9,500,000	$10,350,000	---	---	$19,850,000
13	Corporation Facilities - Replace Roofs	CP	C	F	$500,000	$500,000	---	$40,000	$45,000	$1,085,000
14	Corporation Facilities - Replace Paving and Drainage Infrastructure	CP	C	L, F	$1,300,000	---	---	---	---	$1,300,000
15	Eisenhower Lock - Highway Tunnel - Rehabilitate	CP/MP	C/I	T/B	---	$260,000	---	$260,000	---	$520,000
16	Corporation Technologies - Upgrade GPS/AIS/TMS Technologies	CP/CE	C/I	W	---	$100,000	---	$100,000	---	$200,000
17	Navigation Channels - Dredge U.S. Sectors to Maintain Design Grade and Dispose of Sediments	MP	C	W	$5,150,000	---	---	$5,200,000	---	$10,350,000
22	Both Locks - Install Vessel Self Spotting Equipment	CP	C	L	$300,000	---	---	---	---	$300,000
23	Both Locks - Install Vessel Vacuum Mooring Systems	CP	C	L	---	---	$5,000,000	$5,000,000		$10,000,000
26	Corporation Facilities - Upgrade Storage for Lock Spare Parts	CP	C/I	L, F	$200,000	---	---	---	---	$200,000
27	Corporation Facilities - Replace Windows and Doors and Repair Building Facades	CP	C/I	F	$200,000	---	$210,000	---	$210,000	$620,000
28	Snell Lock - Walls, Sills and Culverts - Rehabilitate Concrete	CP	C/I	L	---	---	$1,775,000	---	$1,800,000	$3,575,000
29	Eisenhower Lock - Walls, Sills and Culverts - Rehabilitate Concrete	CP	C/I	L	$1,500,000	$2,500,000	---	$2,825,000	---	$6,825,000
33	Both Locks - Upgrade Drainage Infrastructure in Galleries and Recesses	CP	C/I	L	$150,000	$155,000	---	---	---	$305,000
34	Both Locks - Improve Ice Control	CP	C	L	$230,000	$230,000	---	---	---	$460,000
35	Vessel Mooring Cells - Rehabilitate and Extend	CP	C/I	W	$1,020,000	---	---	$1,040,000	---	$2,060,000
37	Eisenhower Lock - Construct Drydock for Vessel Maintenance	CP	C	L, W	---	$800,000	---	---	---	$800,000
40	Both Locks - Extend Guidewalls in Pool	CP	C	L	---	---	---	$1,550,000	---	$1,550,000
42	Both Locks - Miter Gates - Structural Rehabilitation	CP	C	L	$1,295,000	$775,000	---	---	---	$2,070,000
43	Both Locks - Miter Gate Machinery - Upgrade/Replace	CP	C	L	$1,750,000	---	---	---	---	$1,750,000
44	Both Locks - Ship Arrestor Machinery - Upgrade/Replace	CP	C	L	$410,000	$415,000	---	---	---	$825,000
45	Flow Control Dikes - Rehabilitate	CP	C	W	---	$515,000	---	---	---	$515,000
46	Both Locks - Guidewall Extensions - Rehabilitate	CP	C	L	---	$515,000	$520,000	---	---	$1,035,000
47	Eisenhower Lock - Vertical Lift Gate - Structural Rehabilitation	CP	C	L	---	---	$725,000	---	---	$725,000
48	Both Locks - Stiffleg Derricks - Replace	CP	C	L	---	---	---	$420,000	$420,000	$840,000
49	Seaway International Bridge - Replace Deck	CP	C	T/B	---	---	---	---	$14,225,000	$14,225,000
50	Snell Lock - Diffusers - Replace	CP	C	L	---	---	---	---	$3,140,000	$3,140,000

Saint Lawrence Seaway Development Corporation (SLSDC)

Asset Renewal Program Five-Year Plan (FYs 2014-2018)

(In Whole Dollars)

ARP #	ARP Project Description	Type of Project (1)	Completed By (2)	Mission Objective (3)	FY 2014 Request	FY 2015 Estimate	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Five-Year Total
51	Corporation Facilities - Upgrade Physical Security to Meet HSPD-12 Requirements	CP/MP	C/I	F	$100,000	---	---	---	---	$100,000
52	Corporation Facilities - Eisenhower Lock Visitors' Center - Replace/Upgrade	CP	C	F	$500,000	---	---	---	---	$500,000
53	Corporation Technologies - Financial Management System - Upgrade/Replace	CP	C/I	F	---	$1,500,000	---	---	---	$1,500,000
58	Corporation Facilities - Upgrades to Meet Sustainability and Energy Goals	CP	C/I	F	$100,000	---	---	---	---	$100,000
60	Both Locks - Improve Access to and Rehabilitate Machinery in Crossovers and Recesses	CP	C	L	$500,000	$500,000	$200,000	$200,000	$200,000	$1,600,000
61	Both Locks - Replace Recess Covers on Lock Walls	CP	C/I	L	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000
	Total				**$15,850,000**	**$18,910,000**	**$19,425,000**	**$17,280,000**	**$20,685,000**	**$92,150,000**

(1) CP=Capital Project; CE=Capital Equipment; MP=Non-Capital Maintenance Project

(2) C=Contractor; C/I =Contractor and/or In-House Corporation Personnel

(3) L=Lock Operation Upgrade and Maintenance; W=Waterway Management; T/B=Tunnel and Bridge Maintenance; F=Facility/Equipment Upgrade and Maintenance

Notes: (a) Estimates as of April 2013 and (b) dollar amounts for ARP projects are "project feasibility" estimates that can vary by an industry-recognized contingency of 20-30 percent.