

Fox River Navigational System Authority
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Fox River Navigational System Authority

Management Plan

2019-2020



Fox River Navigational System Authority

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Joel Brennan, Secretary
Wisconsin Department of Administration
101 E Wilson St, 10th Floor
Madison, WI 53703

Subject: Fox River Navigational System Authority – Management Plan

Dear Secretary Brennan;

Enclosed please find the Fox River Navigational System Authority Management Plan for FY 2019-20. The submittal of this Management Plan is in accordance with requirements set forth in Wisconsin State Statute 237 and addresses the costs of and funding for the rehabilitation, repair, replacement, operation and maintenance of the Fox River Navigational System Authority.

If after review, you have any questions or concerns feel free to contact me at 920-309-4501. We have expended significant effort in the preparation of this plan and feel it provides sound direction for the Authority.

Thank you for your consideration and attention to the enclosed documents.

Respectfully,

Jeremy Cords
Chief Executive Officer
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Fox River Navigational System Authority
Management Plan
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Executive Summary

This management plan is prepared by the Fox River Navigational System Authority (Authority) to satisfy the requirements of Wisconsin State Statute Chapter 237.07 **Management plan, financial statements**. The mission of the Authority is to serve the citizens of the Fox River area and the State of Wisconsin by rehabilitating, maintaining, developing and operating the navigational system. The 2019-20 FRNSA management plan updates all the previous FRNSA management plans.

The Authority's initial strategy in 2005 was to "restore the Fox Locks Navigation System in a phased manner consistent with long-term financial sustainability." In 2015 the basic locks restoration was completed. Our current 2019-20 strategy includes continued support, maintenance and operations of the restored locks. Additionally, construction of a visitor-interpretive center, the Menasha Lock Electronic AIS Barrier, and stabilization of the lock tender houses. The Authority has also prepared per Ss. Chapter 237 an abandonment/closure plan that will in the case of closure preserve the public rights in the Fox River, ensure safety, and protect life, health, and property."

The Authority has updated its financial plan schedule that includes these major projects as well as the rehabilitation of the Rapide Croche Lock. The financial schedule lists estimated annual costs and revenues from 2004 through 2034. The Authority has adopted a goal of navigational system sustainability and operation beyond 2034.



**Fox River Navigation System Authority
Management
2019-20**

Introduction

This management plan is prepared by the Authority to satisfy the requirements of Wisconsin State Statute Chapter 237.07, Management plan, financial statements. The Authority shall submit the management plan to the Wisconsin Department of Administration (DOA) together with supporting fiscal information. The Authority submitted the first management plan to the DOA within the 180 day timeline from the signing of the DOA/Authority lease agreement in 2004. The Authority has submitted subsequent management plan amendments to the DOA and Wisconsin Legislative Fiscal Bureau. The authority last revised and submitted its management plan in FY 2018-19.

Changes to Chapter 237

The Authority requested that the Wisconsin Legislature change several sections of ss. 237. The Legislature completed those changes in early 2015 and the Governor signed the 237 revisions in April of 2016. The changes address FRNSA's ability in conjunction with the DOA to own and/or trade land.

Agency Description

The Authority, created in 2001 under Wisconsin State Statute specifically Chapter 237 (Appendix A) is charged with the responsibility and authority to repair, rehabilitate, replace, operate and maintain the navigational system (Appendix B). The transfer of the locks system from the federal government (Army Corps of Engineers) to the State of Wisconsin occurred September 17, 2004.

The Authority creates and develops an annual management plan (this document) and implements an annual budget to manage monies received, from the federal government, State of Wisconsin and local fundraising, to ensure that sufficient funds are available for sustainable repair and rehabilitation of the system. The authority has also partnered with local organizations to provide funding required to match the federal and state monies received.

The authority is governed by a nine-member board of directors, six of whom are appointed by the Governor. Members represent the three county geographical area associated with the Fox River. Other board members consist of the secretaries or their representatives of the Departments of Natural Resources and Transportation, and the Director of the State Historical Society.

Mission

The mission of the authority is to serve the citizens of the Fox River area and the State of Wisconsin by rehabilitating, maintaining, developing and operating the navigational system to:

- Restore, maintain and improve the scenic, physical, historic and environmental character of the Fox River Navigational System
- Manage the system for sustainability
- Promote tourism, recreational and commercial use of the navigational system stressing heritage planning and management
- Promote opportunities to educate the public about the historic and cultural heritage of the Lower Fox River Navigational System

Program, Goals, Objectives and Activities

The Authority has adopted goals and objectives to its short and long-term program activities including the following:

2019-20 Fiscal Years Goals and Objectives

Program No.	Goal	Goal 2019	Actual 2019	Goal 2020	Actual 2020
1.	Develop and implement a comprehensive management plan.	Implementation of approved Management plan, update annually while making future considerations concerning projects and budget	Implemented and updated Management plan	Management plan implementation, updates, and future visioning	Early stages of plan implementation
1.	Operate restored locks	Operate 9 locks	9 locks operated	Operate 9 locks	TBD
1.	Days of lock operations (9) locks in 2018	150 days	150 days	135 days "Covid-19 delay"	TBD
1.	# of seasonal lockage permits sold	60	58	60	TBD
1.	# of daily lockage permits sold	1100	1150	1100	TBD
1.	Monitor invasive species	4 sites annually	5 sites were monitored	5 sites annually	TBD
1.	Conduct eDNA (electronic DNA) study and review impact on the AIS issue	Have study completed and review findings	Samples were taken in L. Winnebago and reviewed with negative findings for	Conduct additional eDNA studies	TBD

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1.	Design, develop and construct a positive AIS barrier at the Menasha Lock to allow reopening of the Lock while preventing AIS transmission	Design, Develop, and evaluate a positive AIS Barrier at Menasha Lock	Design, develop, and evaluate barrier plans with partners and the DNR	Gain necessary approvals from DNR, for implementation of electronic barrier at the Menasha Lock	TBD
1.	Rapid Croche: design and develop positive AIS Barrier at the Rapid Croche Transfer Station	Design, develop, and evaluate positive AIS Barrier at Rapide Croche	Design, develop and evaluate with partners and the DNR	Incorporate new and emerging solutions into consideration of the positive AIS Barrier.	TBD
1.	Visitor Center – Interpretive Center: begin land transfer process at Appleton Lock #3	Continue to facilitate land transfer at Appleton Lock #3	Land Transfer completed, Deeds and Certified Survey Maps recorded. Design Visitor Center	Re-evaluate design, location, and operation of proposed Visitor Center	TBD

Strategy Statement

The Authority has prepared an initial strategy for future management of the Fox River Navigation System. The initial approach was to “restore the Fox Locks Navigation System in a phased manner consistent with long-term financial sustainability.” This approach was dependent upon adequate funding and concentrated on the restoration, long term maintenance and operation of the three major deteriorated lock segments in Appleton, Little Chute and Kaukauna. This approach also included the



continued maintenance and operation of the three continuously operating locks at De Pere, Little Kaukauna and Menasha and the maintenance of the sea lamprey barrier at Rapide Croche lock site.

The updated strategy includes the operation of the restored locks, design and construction of AIS Barrier at the Menasha Lock, evaluation of technology tested at Kaukauna Lock #2 by USGS for potential use in conjunction with AIS needs at the Rapide Croche lock site, construction of a visitor-interpretive center, rehabilitation of lock tender houses and recreational features of the locks system.

Key to the Authority's strategy is system sustainability; having adequate finances to operate and rebuild the system over a 30 year planning period. This 30 year planning period (through September 2034) is consistent with the lease agreement (Appendix C) for the Navigational System Authority as signed with the State of Wisconsin.

While the Authority's lease expires in 2034 the management strategy includes system sustainability for another 20 years. The financial plan justifies continued capital maintenance of the system through year 2054. The State would have to renew the Authority's lease to manage the system or select an alternative responsibility.

The strategy also includes an abandonment alternative that is required by Chapter 237 to shut down the navigation system in 2034 if necessary and dispose of the property.

Funding and Financial Requirements

The Authority's management strategy is predicated upon financial sustainability of funding for the 30 year lease period. To accomplish this, the Authority has established an investment approach that provides a base funding mechanism to support the short term capital development (restoration) of the system and long term operating and maintenance funds. This approach relies on the initial base funding realized in the Army Corps/State transfer agreement but contains flexibility to adjust for expenditures and additional funding sources.

Capital Development (Restoration and Major Project) Funding

The basic initial financing for the Authority was provided through a funding formula outlined in the Corps/State transfer agreement. The Corps provided an initial 11.8 million dollars that has been deposited with the Authority in November 2004. At its December 1, 2004 meeting the Authority allocated the 11.8 million dollars to a special long-term (escrow) investment funds. The Corps has also agreed to provide an additional 5.6 million dollars within a 10 year period provided the State and local area provide a 5.6 million dollar match. The State obligated 2.8 million dollars (\$400,000/yr.) over a seven year period and the local area, through three community foundations, has also obligated 2.8 million dollars through donations. At its January 5, 2005 meeting the Authority requested the first (2005) additional funding installment of \$800,000 from the Corps, \$400,000 from the State, and \$400,000 from the community foundations. The final base federal and state payments were received in 2014. The Corps, based on the 2001 MOA, will also pay an inflationary clause of 2.112 million dollars in 2015 on interest accrued during the MOA payment period.

The Authority has entered into agreement with the Green Bay, Fox Cities and Oshkosh Community Foundations to serve as its financial investor as well as the nexus for fund raising. A memorandum of agreement (Appendix D) between the Authority and the 3 foundations was approved. An investment plan has been prepared by the foundations and financial transaction mechanisms between the

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foundations and the Authority have also been prepared. The 2.8 million dollar local cost share has been raised and invested as of June 30, 2011.

A proactive fundraising effort with local groups and individuals is still underway. The intent of this effort is to commit additional dollars beyond the initial 2.8 million to address additional capital projects.

Additional sources of restoration funding are possible through government and private grant programs. Several grant sources have been identified including the USDOT transportation enhancement program and the Fox Cities Convention and Visitors Bureau Capital Development Fund. In 2006 the Fox Cities Convention and Visitors Bureau provided a \$250,000 grant to be paid over a three year period for the initial fund raising effort. In 2008 a USDOT transportation enhancement grant was awarded for the rehabilitation of Kaukauna Lock #5. In 2010 a transportation stimulus grant was received for the exterior preservation of eight historic lock tender houses.

Operations Funding

The Authority has established a funding process for administration, operation and annual maintenance. Sources of this income include:

Lockage user fees: Fee schedules are established by the Authority and historically average \$20,000 income annually.

Rental income: The Authority is re-evaluating the rental potential of space at its Kaukauna office that was previously occupied by the Army Corps of Engineers.

Out Grant/property Income: The Authority manages over 95 acres of real property and approximately 70 previous inherited Corps of Engineers out grants consisting of leases and easements. New out grant requests are being addressed and previous out grants are being reviewed for renewal and may also present a minor amount of income.

State funding Assistance: The Authority has received State funding assistance for start-up and on-going operations. The State has historically provided \$125,400 in annual operating assistance to the Authority. The Authority is requesting continuation of this allocation to offset operational costs.

Capital fund Income: The capital fund investment is generating interest and equity income providing partial sustainability of the Authority and its responsibilities. A portion of this income is scheduled to offset other sources of operating income.

Financial Plan Schedule

The Authority initially prepared two series of financial plan (cost/income) schedules, one for the basic scheduled restoration over seven years and one for accelerated restoration over five years. These schedules outlined different phasing and cost assumptions for locks restoration. Under any schedule, sufficient funds need to be retained in escrow to financially sustain the operation and maintenance of the system. In 2010 the accelerated strategy was dropped due to the lack of accelerated fundraising, a delayed Corps funding schedule and the 2008 economic downturn. In 2010 the basic schedule was then modified for the completion of the lock restoration in 2015.

The updated financial plan schedule includes lock restoration completion in 2015, the locks visitor center and Menasha AIS Barrier. The schedule lists estimated annual costs and revenues beginning



in 2004 through 2034. The 2004 to 2014 dollar amounts are actual. The 2014 through 2034 amounts are projections with the base year being 2014. Assumptions in the projections include an inflation factor for capital inflation of two percent, operation inflation of three percent and income of 6.95 per cent.

The schedule includes the 2015 calendar year end investment fund total and projects this total to 2034 based upon expected costs and revenue. The estimates include the capital maintenance required for system sustainability beyond 2034. The financial plan schedule is listed in (Appendix E). An additional schedule is listed in Appendix E that provides costs and revenue through 2054 for sustained operation.

The Authority has also specified that sufficient funds will be reserved to abandon the system should action be required. As an example, if a decision were made in 2015 to abandon the 17 locks 11.3 million dollars would be required according to an engineering study. If during the period to 2034 a decision for abandonment were made, the escrow account would require sufficient funds for closure. The amount of funds depends upon how much of the system is closed and the timing of closure. In 2016, the Authority re-evaluated the funding necessary to close the system and because significant rehabilitation procedures has been completed the fund has been reduced from 11.3 million to 6.5 million dollars.

The Authority has developed a financial plan (cost-income) schedule for closure and abandonment if required in 2034 (Appendix F). The closure plan calls for a fixed crest gravity dam option which maintains the basic integrity of the lock masonry. The estimated cost of closure for 2034 is 6.5 million dollars. The closure analysis is included in Appendix M.

Restoration Process

The restoration process involves phasing construction for major lock segments over a period of time. During 2005, preliminary work for restoration of the Appleton segment began and the Little Chute and Kaukauna segments were stabilized to prevent major deterioration prior to eventual restoration. The initiation of each succeeding phase is dependent upon adequate financial resources. In 2006 the major restoration phases began with proposed completion of all phases in 2010. Due to the economy of 2008 and other financial implications the construction schedule was set back. The completion of the locks rehabilitation, except for Rapid Croche was achieved in 2016.

The restoration process involved reconstruction of navigation dependent features of the system. Detailed engineering reports for both restoration and closure have been completed. In 1995 and 1996 Mead & Hunt completed reports outlining alternatives. In 2004 Mead & Hunt updated the restoration report, re-evaluating the system status, alternatives and costs. For each lock segment, the report describes immediate stabilization needs, initial restoration work, supplemental lock wall rebuilding, and canal and dike rebuilding. The report recommends major lock wall rebuilding for Appleton Lock #1, and Kaukauna Locks #1, #3 and #4. In early 2005 a benchmark monitoring system was installed to determine the structural stability of all of the lock chambers. Based upon the annual monitoring of the lock benchmarks, these lock walls may not require complete re-construction, thus saving substantial cost.

Stabilization Work: The lock system was evaluated to determine immediate stabilization needs. Various portions of infrastructure were beginning to collapse and pose either a safety hazard or, if not addressed, will lead to greater restoration costs. Examples are lock gates that may collapse, pop-

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outs in stone walls, and sink holes in dikes. The primary work is directed to the Kaukauna and Little Chute segments. The itemized list was used to prepare a short-term contract proposal on a time and materials basis. The contract maximum was targeted for \$100,000. A contractor was selected and initial work completed in 2005 and 2006. Additional minor stabilization and maintenance projects were completed annually.

Appleton Phase: The Appleton locks 1-4 were restored in 2006. The Authority utilized a "design/build" contract for this reconstruction. A Request For Qualifications (RFQ) was prepared in June, 2005. A Request for proposals was prepared during June and July, 2005. Contractor selection was completed in November 2005 with starting in December 2005.

Cedars Lock: The Cedars Lock was restored in 2007. The Authority utilized a "design/build" contract for this reconstruction. A Request For Proposals was prepared during November, 2006. Contractor selection was completed in February 2007 with construction starting in June 2007.

Little Chute Levee: The Little Chute Levee was re-built in 2007. Design work was completed in February 2007 and bids let in May 2007. Construction began in August 2007 and was completed in May 2008.

Little Chute Phase: The Little Chute Locks were re-stored in 2008. A Request For Proposals was prepared during December, 2007. Contractor selection was completed in February 2008 with construction starting in June 2008.

Lock Tender Houses: Restoration of the exterior of eight lock tender houses was completed in 2010. A Federal stimulus grant was received through the WDOT in July 2009.

Kaukauna Phase: The Kaukauna locks 1-4 were restored in 2015. A WDOT enhancement grant for restoration was received in 2010. The Kaukauna Lock 5 restoration was completed in 2017.

The Authority has used the Mead & Hunt engineering information to prepare the restoration strategy and schedule. To validate the Mead & Hunt study, a major local contractor with historic lock reconstruction experience evaluated Appleton Locks 1 & 2 in 2005. The analysis took into account cost validation, constructability and risks. The contractor indicated that cost estimates appeared to be within 10 percent of the initial estimates. As new detailed plans, costs and contracts are prepared, alternative restoration proposals may reflect additional cost savings.

Operation, Maintenance and Administration

The continued day-to-day management of the system contains three primary elements; operation of the locks, annual maintenance of the facilities and grounds, and general administration. The cost basis for lock tender operation of the locks was initially estimated from the historical records of the Fox River Management Commission. The number of locks, staffing, hours of operation and wages change as additional locks are restored and come into operation. The cost basis has been standardized after nearly 10 years of operation. The 2018-19 capital and operational budgeted cost was approximately \$1,175,652.95. The current FY 2019-20 Annual Budget is included in Appendix G.

The annual maintenance of the facilities and grounds was previously provided by the Corps with the exception of minor grounds keeping at the operating locks. While the Corps staff provided some minor maintenance of the facilities, more major items such as lawn mowing and construction (i.e.

levee repairs) was contracted out. Adequate historical records from the Corps for calculating annual costs were not available or are not suitable because some of these costs were dam maintenance and others had significant overhead costs.

The 1995 Mead & Hunt Report described annual maintenance items and costs associated with the restoration of the system. Annual maintenance items include; grass mowing and landscape care, dike repair, canal and retaining wall repair, minor building maintenance, access road and parking area maintenance, minor lock structure maintenance, and safety and lighting maintenance. Based upon these activities costs have been calculated for labor and materials. Labor may be provided by both Authority staff and independent contractors. The on-going maintenance cost over years have been significantly less than original Mead & Hunt estimates.

General administration includes the management functions of the Authority. Administrative salaries and agency overhead are included costs. Overhead costs were estimated from Corps specific expense records for the office. Current insurance costs, and projected office and administrative operating costs were estimated by the Authority CEO. The schedule for the long-term management cost is included in Appendix E.

Potential Locks Abandonment or Closure

State Statutes Chapter 237.14 requires a management strategy for closure of the system. If abandonment of the system is proposed, a closure plan will be submitted to both the Department of Administration and the Department of Natural Resources to "determine that the plan for abandonment will preserve the public rights in the Fox River, will ensure safety, and will protect life, health, and property." The basis for selecting and costing specific closure options is included in the Mead & Hunt Report *Lower Fox River Locks Abandonment Study, Final Report, and August 1994*. The report describes three primary closure options including; Alternative A – Return to Natural Condition, Alternative B – Earth Filled Lock Chambers, and Alternative C – Fixed Crest Gravity Dam. The Corps of Engineers, in determining the closure method for a potential federal closure, selected the Earth Filled Lock Chamber alternative.

The Authority has selected a closure alternative. If closure is needed, the closure option is Alternative C, Fixed Crest Gravity Dam. This option has less initial cost but higher long-term maintenance cost. This alternative assumes the Authority makes the decision to partially or totally close the navigation system, properly abandoning the infrastructure and disposing the property to public and/or private interests. The Authority has updated the original closure cost estimates. Since system restoration improvements have been made that modified the original abandonment needs. A new engineering analysis has been prepared with updated cost estimates. The estimated closure cost schedules are included in (Appendix G).

While the abandonment of the system is the worst-case option, partial closure is the preferred practical alternative recommended by the Authority. The De Pere, Little Kaukauna and Menasha locks are structurally sound and have low maintenance costs. They also have the most use in the system. The permanent closure costs of nine hundred and ten thousand three hundred and sixty dollars (\$910,360) associated with these locks would not be cost effective when compared to their long-term maintenance costs. If these locks are not closed, they would reduce the system closure cost.



Management Timeline

The short-term strategy timeline at agency start-up included:

- Formal organization of the Authority – October, 2004 (completed)
 - Bylaws
 - Budget
 - Insurance
 - Corps rental agreement
 - Foundation MOA
- System management plan – May, 2005 (completed)
 - On-site infrastructure survey, October, 2004
 - Financing plan, March, 2005
 - Management recommendations, May, 2005
- Office establishment – April/June, 2005
 - Telecommunications, March, 2005 (completed)
 - Staffing, April, 2005 (completed)

The long-term strategy timeline included:

- Continued lock operation – 2005 to present
- Preventative Locks Maintenance and Stabilization – 2005 (on-going)
 - Contract preparation, bid – June, 2005
 - Infrastructure stabilization (Cedars, Lt. Chute, Kaukauna locks) –
(Includes checking and repairing the stop logs, gates, hardware,
lock walls, and longevity maintenance as needed, etc.) June - October, 2005
- Begin Appleton Restoration Phase – 2005 (completed)
 - Contract preparation, bid – October, 2005
 - Lock restoration, November - December, 2006
 - Begin seven lock operation – 2008 Regular operation for De Pere, Lt. Kaukauna, Menasha
 - Limited (3 or 5 day) operation for Appleton segment (delayed to 2009)
- Little Chute Restoration Phase – 2007 & 2008 (completed)
 - Contract preparation, bid – spring 2007 & spring 2008
 - Cedars Lock and levee restoration, November 2007 – remaining locks, December, 2008
- Begin operation of 8 locks – 2008
 - Regular operation for De Pere, Little Kaukauna, Menasha
 - Limited (3 or 5 day) operation for Appleton, Cedars segment (delayed to 2009)
- Kaukauna Restoration Phase – 2012 (on-going)
 - Contract D/B #4 preparation, bid – October 2010



- Contract D/B #1, #2, #3 preparation, bid – July 2012
- Contract (traditional) #5 preparation – July 2010
- Lock restoration completion, September 2011 to August 2015
- Lock operations – 2019
 - Regular operation of 9 Locks
 - Limited operation (3 or 5 day) operation for Appleton, Lt Chute and Kaukauna segments
- 2019 Kaukauna's Veteran's Bridge issues/barrier resolved
 - Once bridge is rehabilitated, Kaukauna Locks 1-5 are accessible
- 2020 Ongoing design, evaluation, and negotiations of Menasha AIS Barrier
- 2020 Ongoing evaluation, design and negotiations regarding the future construction of the FRNSA Visitor/Interpretive Center
- 2021 Ongoing design, negotiations with other State Agencies and stakeholder, regarding the construction, opening and operation of Menasha Lock
- 2021 Anticipated operation of 9 locks plus 5 additional "Kaukauna" Locks upon successful completion of Kaukauna's Veteran's Memorial Bridge rehabilitation
- 2022 Evaluation of electronic barrier system and technology at Menasha Lock for potential implementation into a solution for the Rapide Croche Lock

Rapide Croche Lock Aquatic Species Barrier

As required by the Corps/State Memorandum of Agreement, Wisconsin Statute Chapter 237.10, and the State Lease Agreement, the Authority will maintain the sea lamprey barrier at the Rapide Croche Lock. The barrier shall be maintained "according to the specifications of the Department of Natural Resources in order to prevent sea lampreys and other aquatic nuisance species from moving upstream. The Corps of Engineers/State of Wisconsin/Authority Partnership Agreement specifies cooperative procedures for barrier responsibility. Under this agreement the Corps of Engineers maintained the sea lamprey barrier at Rapide Croche until the transfer of the locks system was made for Authority control.

The Authority maintains a stop log barrier and concrete barrier, installed in 2013. A permanent barrier will remain and be incorporated into future considerations of the proposed boat transfer/cleansing station. The Authority is dedicated to exotic species control and management and will incorporate management practices on the navigation system wherever feasible. According to Ss. 237.10(2) "If the Authority decides to construct a means to transport watercraft around the Rapide Croche lock, the Authority will develop a plan for the construction that includes steps to be taken to control sea lampreys and other aquatic nuisance species. The Authority will submit plans to the Department of Natural Resources for consideration and approval."

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The Authority has approved the preparation of an aquatic species management plan. Preliminary objectives of the plan are included in (Appendix H). The Authority has also printed an aquatic species prevention informational brochure for distribution to boaters and the public.

The Authority has prepared a feasibility plan for the installation of a boat lift/ cleansing station at Rapid Croche. This planning process was initiated in 2005 under the oversight of a special committee. The planning process included:

- Created AIS Committee in June 2005
- Annual monitoring for AIS by Lawrence University above and below Rapide Croche is being managed by Professor Bart De Stasio – 2006 to 2019. Monitoring is now being conducted by UWGB.
- Developed AIS Management Plan for Rapide Croche
- Developed FAQ (Frequently Asked Questions) brochure
- Presented initial AIS Management Plan to DNR
- Received initial DNR Response to AIS Management Plan
- Modified AIS Management Plan
- STS Consultants developed Rapide Croche Boat Transfer Station Study Report
- Developed model of Rapide Croche Transfer and Cleansing Station
- Conducted informal public forums
- Conducted five community formal public forums with DNR presence
- STS/AECOM developed Preliminary Engineering Study Report for Rapide Croche Boat Transfer Station
- Developed and reviewed Jack Nelson's alternative transfer station in the channel
- UW Madison Proposal design for Transfer Station
- Thermal limits study of AIS by Bart DeStasio
- Publication of thermal limit study results in a peer reviewed journal (J. Beyer, P. Moy and B. DeStasio. 2010. Acute upper thermal limits of three aquatic invasive invertebrates: hot water treatment to prevent upstream transport of invasive species. Environmental Management, 47:67-76).
- Saint Norbert College Boater Survey
- FRNSA Boater Survey
- Preparation of an environmental assessment report by FRNSA
- Preparation of Historic Preservation report by FRNSA
- Preparation of environmental impact assessment by WDNR
- Determination of impact by WDNR Secretaries Director
- Preparation of final design – December 2015
- Construction bid let – December 2016

The cost of construction of the transfer station was estimated at four million dollars however proposals were received in the 8-9-million-dollar range. These proposals were cost prohibitive. An estimated/acceptable cost is incorporated into the financial schedule in (Appendix E).

Annual Budget

The annual budget is scheduled for adoption at the annual Board of Directors meeting held the last Tuesday in June. The development of a preliminary budget is scheduled each January. Due to initial

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year start-up activities an operating fund was established on September 9, 2004 and the first annual FY budget was adopted in June 2005. The adopted FY 2019-20 budget is included in (Appendix G).

Property Insurance

The Authority has been self-insuring property. The only structure with a property value estimate at the time of transfer was the Authority's office/shop complex. No values were available for the locks, lock tender houses or outbuildings. While property insurance is available through the Department of Administration, early discussions with State Risk Management determined that coverage and cost based upon the values of the property be evaluated after restoration of the locks and determination of the future uses of the lock tender houses and out buildings.

Liability Insurance

Liability insurance is required as part of the lease agreement with the State. The Authority has cooperated with the State Risk Assessment Office to obtain liability insurance. Based upon the characteristics and needs of the Authority the criteria for liability insurance include:

- General liability including any marine exposures related to the operation of the locks, one million dollars in coverage.
- Public official's liability for the board members of the Authority, one million dollars in coverage.
- Hired and non-owned auto coverage, one million dollars in excess of personal liability coverage.
- Umbrella coverage with five million dollars in limits.

Liability insurance was obtained through the AON Mutual Insurance Company. The AON provided the required levels of coverage however they also required a deductible of fifty thousand dollars.

Employees

The Authority may employ staff and contract services to carry out the functions of the agency. The Authority is required to hire a chief executive officer (CEO). The CEO shall provide the duties specified in Ss. 237.02(6) and serves at the pleasure of the board of directors. The Authority may hire employees, define their duties and fix their rate of compensation. The Authority may also enter into contractual agreements for the operation and maintenance of the system where employee services are not practical or feasible. As of January 1, 2019 FRNSA employs one fulltime employee with the remainder part-time or seasonal. Where qualifying, employees are entitled to Wisconsin Employee Trust Fund benefits. The Table of Organization (Appendix I) lists the number and positions of employees.

DOA Audit Process

The State Lease Agreement requires the submittal of an annual audit to the Department of Administration and the Department of Natural Resources. The financial statement shall include the sources and amounts of funding received from the Department of Natural Resources under Ss. 237.08(2) and from contributions raised from the foundations under Ss. 237.08(3).

The Authority has contracted an independent firm to maintain the financial accounting system. The Authority has also selected an independent financial auditor to perform the annual audit required in Ss. 237.07. The Authority has selected the State Fiscal Year of July 1st through June 30th. The annual

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audit will be prepared in August, approved by the Authority in September and submitted to the Wisconsin Department of Administration.

Inter-agency Coordination

The Authority is coordinating its activities with state, federal and local agencies. A Cooperative Agreement (Appendix J) has been approved between the Authority, U.S. Army Corps of Engineers, and Wisconsin Department of Administration. These agencies have been cooperating on a number of activities and annual formal cooperative meetings are scheduled.

Because the Authority has rights of an Authority and/or a State Agency, the Authority has cooperative agreements with the Department of Administration Division of State Facilities, the Department of Natural Resources, the Department of Transportation, and the State Historical Society. The Authority is also working with various municipalities and local organizations.

Administrative Matters

Wisconsin State Statute 237 describes the basic requirements, authority and functions of the Authority. Additional requirements and guidelines are also listed in a variety of statutes under state agency and municipal citations. The base Statutes and additional citations are listed in (Appendix B).

The Authority has adopted various responses to its statutory obligations including an affirmative action statement (Appendix K), bylaws (Appendix L) and a Lower Fox Abandonment Study (Appendix M). The Authority has applied and is recorded as a state agency under the State of Wisconsin Retirement System.

9-2-04	QUITCLAIM DEED
--------	----------------

OUTAGAMIE COUNTY
RECEIVED FOR RECORD

SEP 20 2004

AT 11:40
O'CLOCK A.M. P.M.
JANICE FLENZ
REGISTER OF DEEDS

THIS QUITCLAIM DEED, made between the UNITED STATES OF AMERICA, hereinafter referred to as Grantor, acting by and through the Deputy Assistant Secretary of the Army (Installations and Housing), pursuant to a delegation of authority from the SECRETARY OF THE ARMY (herein after "Army") under the authority of Public Law 102-580, Section 332 of the Water Resources Development Act of 1992 and to conform to the intention of the parties as provided in the Memorandum of Agreement entered into on 11 September 2000 by and between the Grantor and the STATE OF WISCONSIN, hereinafter the Grantee.

State of Wisconsin
Wisconsin Department of Administration
Division of State Facilities
P.O. Box 7866
Madison, Wisconsin 53707-7864

Exempt number 2 FEE
2 EXEMPT
WITNESSETH THAT:

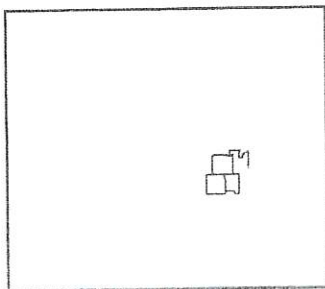
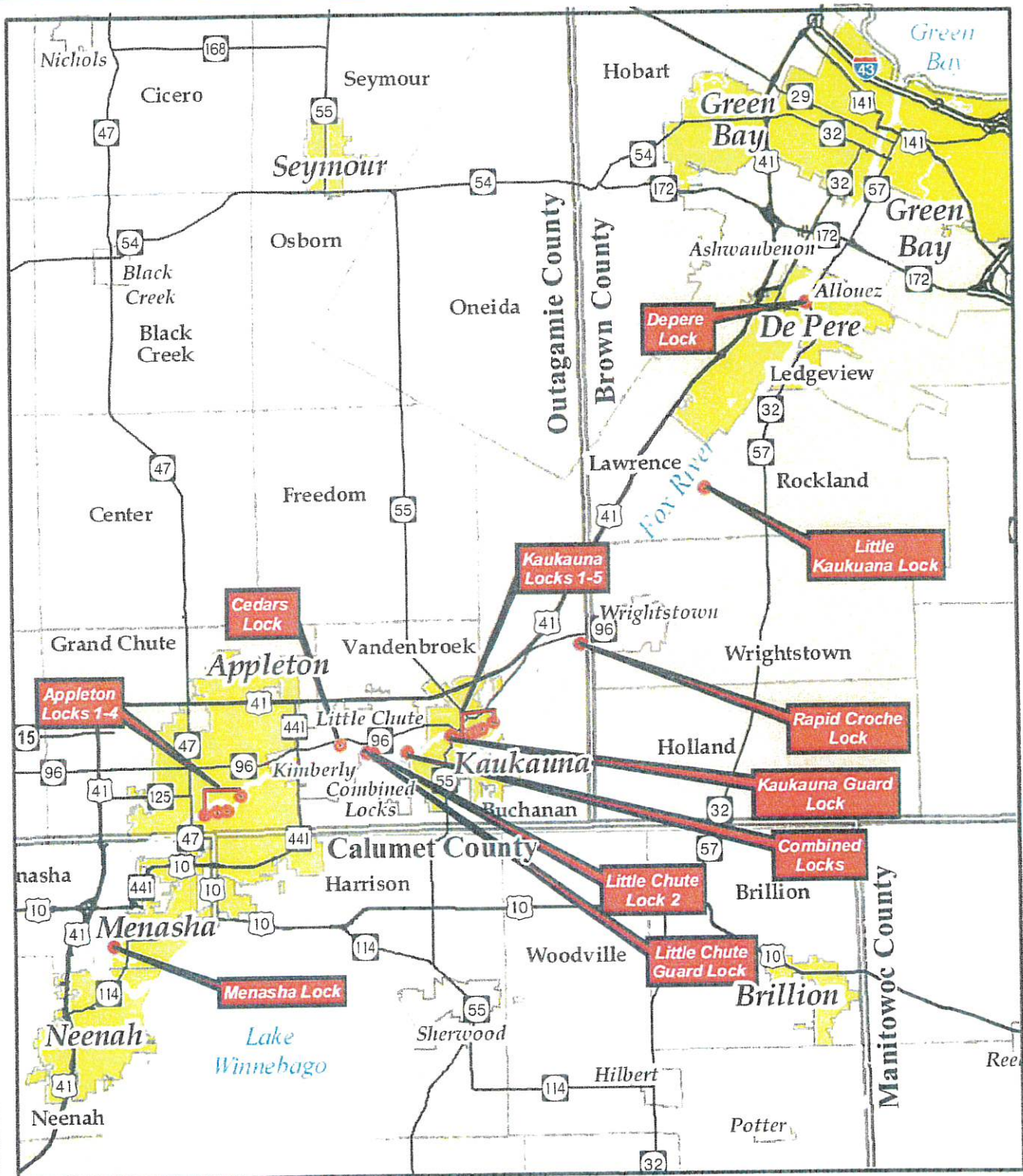
NOW THEREFORE, the Grantor, for and in consideration of the covenants and conditions herein contained and the payment of eleven million, eight hundred and thirty-one thousand dollars (\$11,831,000.00), cash in hand paid to the Grantee, and other good and valuable consideration, the receipt of all of which is hereby acknowledged by the respective parties, does hereby REMISE, RELEASE, AND FOREVER QUITCLAIM unto the Grantee, its successors and assigns, all its right, title and interest in the property referred to as Fox River [FR] Tracts One through Ten [1-10], inclusive, each separately legally described on the Maps attached hereto and made a part hereof.

SUBJECT TO all valid and existing restrictions, reservations, covenants, conditions, and easements, including but not limited to rights-of-way for public highways, railroads, aviation, pipelines, and public utilities, if any, whether of public record or not.










TO HAVE AND TO HOLD the Property granted herein to the GRANTEE and its successors and assigns, together with all and singular the appurtenances thereunto belonging or in anywise appertaining, and all the estate, right, title, interest, or claim whatsoever of the GRANTOR, either in law or in equity and subject to the terms, reservations, restrictions, covenants, and conditions set forth in this Deed.

Definitions: Where the following terms appear in this document and its attachments they shall have the following meanings:

Lower Fox River Study Area



Key

-  Interstate Highway
-  US Highway
-  State Highway
-  Water Features
-  Cities
-  Villages
-  Fox Wisconsin Parkway
-  Corridor Boundary
-  Local State



Map Prepared April 2010
By the East Central Wisconsin
Regional Planning Commission.

Base Data provided by
WDNR Geo data, Bay Lake Regional Planning
Commission and East Central's Regional Counties

CHAPTER 237

FOX RIVER NAVIGATIONAL SYSTEM AUTHORITY

237.01	Definitions.
237.02	Creation and organization of authority.
237.03	Duties of authority.
237.04	Powers of authority.
237.05	Restrictions on authority.
237.06	Lease.
237.07	Management plan; financial statements.

237.08	Sources of funding.
237.09	Requirements for nonprofit corporations.
237.10	Rapide Croche lock.
237.11	Political activities.
237.12	Liability limited.
237.13	Exemption.
237.14	Abandonment.

237.01 Definitions. In this chapter:

(1) “Authority” means the Fox River Navigational System Authority.

(2) “Board of directors” means the board of directors of the authority.

(3) “Fiscal year” means the period beginning on July 1 and ending on the following June 30.

(4) “Lock” includes any spillway associated with the lock.

(5) “Navigational system” means locks, harbors, real property, structures, and facilities related to navigation that are located on or near the Fox River, including locks, harbors, real property, structures, and facilities that were under the ownership or control of the federal government on April 1, 1984. “Navigational system” does not include dams on the Fox River.

History: 2001 a. 16 ss. 1337, 3128; 2001 a. 104.

237.02 Creation and organization of authority.

(1) There is created a public body corporate and politic to be known as the “Fox River Navigational System Authority.” The board of directors of the authority shall consist of the following members:

(a) Six members nominated by the governor, and with the advice and consent of the senate appointed, for 3-year terms.

(b) The secretary of natural resources, or his or her designee.

(c) The secretary of transportation, or his or her designee.

(d) The director of the state historical society, or his or her designee.

(1m) (a) Two of the 6 members appointed under sub. (1) (a) shall be residents of Brown County, 2 shall be residents of Outagamie County, and 2 shall be residents of Winnebago County.

(b) At least one of the 2 members appointed from each of the counties specified in par. (a) shall be a resident of a city, village, or town in which is located a lock that is part of the navigational system.

(2) A vacancy on the board of directors shall be filled in the same manner as the original appointment to the board of directors for the remainder of the unexpired term, if any.

(3) A member of the board of directors may not be compensated for his or her services but shall be reimbursed for actual and necessary expenses, including travel expenses, incurred in the performance of his or her duties.

(4) No cause of action of any nature may arise against and no civil liability may be imposed upon a member of the board of directors for any act or omission in the performance of his or her powers and duties under this chapter, unless the person asserting liability proves that the act or omission constitutes willful misconduct.

(5) The members of the board of directors shall annually elect a chairperson and may elect other officers as they consider appropriate. Five voting members of the board of directors constitute a quorum for the purpose of conducting the business and exercising the powers of the authority, notwithstanding the existence of

any vacancy. The board of directors may take action upon a vote of a majority of the members present, unless the bylaws of the authority require a larger number.

(6) The board of directors shall appoint a chief executive officer who shall not be a member of the board of directors and who shall serve at the pleasure of the board of directors. The authority may delegate by resolution to one or more of its members or its executive director any powers and duties that it considers proper. The chief executive officer shall receive such compensation as may be determined by the board of directors. The chief executive officer or other person designated by resolution of the board of directors shall keep a record of the proceedings of the authority and shall be custodian of all books, documents, and papers filed with the authority, the minute book or journal of the authority, and its official seal. The chief executive officer or other person may cause copies to be made of all minutes and other records and documents of the authority and may give certificates under the official seal of the authority to the effect that such copies are true copies, and all persons dealing with the authority may rely upon such certificates.

History: 2001 a. 16.

237.03 Duties of authority. (1) **GENERAL DUTIES.** In addition to all other duties imposed under this chapter, the authority shall do all of the following:

(a) Adopt bylaws and policies and procedures for the regulation of its affairs and the conduct of its business.

(b) Contract for any legal services required for the authority.

(c) Establish the authority’s annual budget and monitor the fiscal management of the authority.

(d) Procure liability insurance covering its officers and employees and procure insurance against any loss in connection with its property and other assets.

(e) Make every reasonable effort to contract with one or more corporations to provide the services specified under s. 237.09 (2).

(f) Establish an escrow account with moneys sufficient to dispose of the visitor center authorized under s. 237.04 (11) and to terminate any lease under s. 237.04 (7) associated with the visitor center.

(2) **DUTIES UPON LEASING.** Upon entering into the lease under s. 237.06, the authority shall rehabilitate, repair, replace, operate, and maintain the navigational system.

History: 2001 a. 16; 2015 a. 357.

237.04 Powers of authority. The authority shall have all the powers necessary or convenient to carry out the purposes and provisions of this chapter. In addition to all other powers granted by this chapter, the authority may:

(1) Incur debt, except as restricted under s. 237.05 (1).

(2) Sue and be sued.

(3) Hire employees, define their duties, and fix their rate of compensation.

(4) Have a seal and alter the seal at pleasure; have perpetual existence; and maintain an office.

(5) Appoint any technical or professional advisory committee that the authority finds necessary to assist the authority in exercising its duties and powers. The authority shall define the duties of the committee, and provide reimbursement for the expenses of the committee.

(6) Enter into contracts with 3rd parties as are necessary for the rehabilitation, repair, replacement, operation, or maintenance of the navigational system.

(7) Acquire, lease, subject to s. 237.05 (2), and dispose of property as is necessary for the rehabilitation, repair, replacement, operation, or maintenance of the navigational system or the construction, operation, and maintenance of a navigational system visitor center. A lease agreement for the construction, operation, and maintenance of a navigational system visitor center shall not be subject to building commission approval, notwithstanding any contrary provision of law.

(8) Accept gifts and other funding for the rehabilitation, repair, replacement, operation, or maintenance of the navigational system.

(9) Charge user fees for services the authority provides to the operators of watercraft using the navigational system.

(10) Charge fees for use of facilities of the navigational system as provided in s. 16.845.

(11) Construct, operate, and maintain a navigational system visitor center. Facilities constructed under this subsection are not required to be enumerated or approved by the building commission and are not subject to the design, bidding, or construction requirements of subch. V of ch. 16.

History: 2001 a. 16; 2015 a. 357.

237.05 Restrictions on authority. (1) The authority may not issue bonds.

(2) The authority may not sublease all, or any part of, the navigational system without the approval of the department of administration.

History: 2001 a. 16.

237.06 Lease. Upon transfer of the ownership of the navigational system by the federal government to the state, the department of administration on behalf of the state and the authority shall enter into a lease agreement under which the state shall lease the navigational system to the authority for nominal consideration. The secretary of administration shall determine the amount of the rental payments.

History: 2001 a. 16.

237.07 Management plan; financial statements. (1) (a) The authority shall submit to the department of administration a plan that does all the following:

1. Addresses the costs of and funding for the rehabilitation, repair, replacement, operation, and maintenance of the navigational system.

2. Describes how the authority will manage its funds to ensure that sufficient funding is available to abandon the navigational system if the operation of the navigational system is no longer feasible.

3. Describes the escrow account required under s. 237.03 (1) (f).

(b) The authority shall submit the plan under par. (a) within 180 days after the date on which the state and the authority enter into the lease agreement specified in s. 237.06.

(2) The authority shall update and resubmit the plan under sub. (1) upon the request of the department of administration.

(3) (a) For each fiscal year, the authority shall submit to the department of administration an audited financial statement of the funding received by the authority from contributions and other funding accepted by the authority under s. 237.08 (3).

(b) The financial statement under par. (a) shall include notes that explain in detail the specific sources of funding contained in the financial statement.

(4) For each fiscal year in which moneys are to be released to the authority by the department of natural resources under s. 237.08, each corporation specified in s. 237.09 shall submit to the authority an audited financial statement of the amount raised by the corporation under s. 237.09 (2) (b) for that fiscal year.

History: 2001 a. 16; 2015 a. 55, 357.

237.08 Sources of funding. (1) **FEDERAL FUNDING.** The authority shall accept federal funding for the rehabilitation, repair, replacement, operation, and maintenance of the navigational system and shall agree with any conditions attached to the funding.

(3) **OTHER FUNDING.** The authority shall encourage and may accept contributions and funding for the rehabilitation, repair, replacement, operation, or maintenance of the navigational system. The authority shall also accept funding raised by each corporation under s. 237.09 (2).

History: 2001 a. 16; 2015 a. 55.

237.09 Requirements for nonprofit corporations.

(1) Each corporation contracted with under s. 237.03 (1) (e) shall be a nonprofit corporation as described in section 501 (c) (3) of the Internal Revenue Code that is exempt from federal income tax under section 501 (a) of the Internal Revenue Code and shall be based in one or more of the counties in which the navigational system is located.

(2) Each corporation contracted with under s. 237.03 (1) (e) shall do all of the following:

(a) Provide marketing and fund-raising services for the authority.

(b) Make every reasonable effort to raise \$2,750,000 of local or private funding for the rehabilitation and repair of the navigational system.

(c) Accept for investment moneys received by the authority for rehabilitation and repair under s. 237.08 and invest the moneys at a rate of return that the authority finds adequate to enable the authority to exercise its duties and powers in rehabilitating and repairing the navigational system.

(3) If the authority contracts with more than one corporation under s. 237.03 (1) (e), all of the corporations shall make the effort to raise the total of \$2,750,000.

History: 2001 a. 16.

237.10 Rapide Croche lock. (1) Upon entering into the lease under s. 237.06, the authority shall maintain the sea lamprey barrier at the Rapide Croche lock according to specifications of the department of natural resources in order to prevent sea lampreys and other aquatic nuisance species from moving upstream.

(2) If the authority decides to construct a means to transport watercraft around the Rapide Croche lock, the authority shall develop a plan for the construction that includes steps to be taken to control sea lampreys and other aquatic nuisance species. The authority shall submit the plan to the department of natural resources and may not implement the plan unless it has been approved by the department.

History: 2001 a. 16, 104.

237.11 Political activities. (1) No employee of the authority may directly or indirectly solicit or receive subscriptions or contributions for any partisan political party or any political purpose while engaged in his or her official duties as an employee. No employee of the authority may engage in any form of political activity calculated to favor or improve the chances of any political party or any person seeking or attempting to hold partisan political office while engaged in his or her official duties as an employee or engage in any political activity while not engaged in his or her official duties as an employee to such an extent that the person's efficiency during working hours will be impaired or that he or she

will be tardy or absent from work. Any violation of this section is adequate grounds for dismissal.

(2) If an employee of the authority declares an intention to run for partisan political office, the employee shall be placed on a leave of absence for the duration of the election campaign and if elected shall no longer be employed by the authority on assuming the duties and responsibilities of such office.

(3) An employee of the authority may be granted, by the chief executive officer, a leave of absence to participate in partisan political campaigning.

(4) Persons on leave of absence under sub. (2) or (3) shall not be subject to the restrictions of sub. (1), except as they apply to the solicitation of assistance, subscription, or support from any other employee in the authority.

History: 2001 a. 16, 104.

237.12 Liability limited. (1) Neither the state nor any political subdivision of the state nor any officer, employee, or agent of the state or a political subdivision who is acting within the scope of employment or agency is liable for any debt, obligation, act, or omission of the authority.

(2) All of the expenses incurred by the authority in exercising its duties and powers under this chapter shall be payable only from funds of the authority.

History: 2001 a. 16.

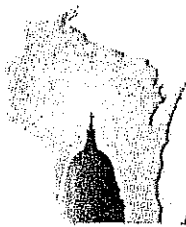
237.13 Exemption. (1) In this section, “lock structure” includes a spillway of a lock and excludes the canal body of a lock.

(2) Any activity or work that is performed on a lock structure that is part of the navigational system is exempt from any permit or other approval required under ch. 30 or 31.

History: 2001 a. 16.

237.14 Abandonment. If the authority determines the operation of the navigational system is no longer feasible, the authority shall submit a plan to the department of administration and to the department of natural resources describing the steps the authority will take in abandoning the navigational system. The navigational system may not be abandoned unless both the department of administration and the department of natural resources determine that the plan for abandonment will preserve the public rights in the Fox River, will ensure safety, and will protect life, health, and property.

History: 2001 a. 16.



**WISCONSIN DEPARTMENT OF
ADMINISTRATION**

JIM DOYLE
GOVERNOR

MARC J. MAROTTA
SECRETARY

Office of the Secretary
Post Office Box 7864
Madison, WI 53707-7864
Voice (608) 266-1741
Fax (608) 267-3842
TTY (608) 267-9629

September 28, 2004

Ron Van De Hey, Chair
Fox River Navigational Authority
1008 Augustine Street
Kaukauna, WI 54130

RE: Lease Agreement between Wisconsin Department of Administration
and the Fox River Navigational System Authority

Dear Mr. Van De Hey:

Enclosed, please find a fully executed original of the above-referenced Agreement.

It has been a pleasure working with you on this project. If I can be of any further assistance to you in this effort to bring back navigation on the Fox River, please do not hesitate to contact me.

Sincerely,

John E. Rothschild
Chief Legal Counsel

Enclosures

LEASE AGREEMENT

This Lease Agreement is made and effective as of the 17th day of September, 2004, by and between State of Wisconsin, Department of Administration (hereinafter the "State") and the Fox River Navigational System Authority (hereinafter the "Authority"), a body corporate and politic, under Chapter 237 of the Wisconsin Statutes.

RECITALS

On September 17, 2004, pursuant to Chapter 237 of the Wisconsin Statutes, and a Memorandum of Agreement dated September 11, 2000, the State of Wisconsin acquired the locks, harbors, property, structures and facilities related to navigation that are located on or near the Fox River and were under the ownership of the federal government (the "Navigational System").

Pursuant to s. 237.06, the State and the Authority enter into this Lease Agreement.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the State hereby leases to the Authority and the Authority hereby leases from the State as follows:

1. Lease. The State hereby leases to the Authority for the purposes of rehabilitation, repair, replacement, operation and maintenance, the Navigational System as set forth in Chapter 237 of the Wisconsin Statutes, together with the personal property conveyed to the State of Wisconsin by the federal government. The real property subject to the lease is more particularly described in the Deed from the United States to the State of Wisconsin attached as Exhibit A. The personal property conveyed by the United States to the State of Wisconsin is attached hereto as Exhibit B.
2. Lease Term. The initial term of this Lease shall commence effective on the 15th of September, 2004 and shall end of the 15th of September, 2034.
3. Rent. The annual rent for the building and personal property shall be \$1.00 per year payable on the commencement of this Lease and the first day of each subsequent year of this Lease. Rent shall be payable in lawful money of the United States, without deduction or offset, to Lessor at the address for notices set forth below. Payment of rent if the Lessee remains in possession beyond the term of this Lease, shall be as provided for in paragraph 19 of the Lease.
4. State's Authority. The State represents that it is the owner of the land and has full right to make and enter into this Lease. Continuation of this agreement beyond the limits of funds available shall be contingent upon appropriation of the necessary funds, and the termination of this agreement by lack of appropriations shall be without penalty.

5. Possession, Use, Surrender. The Authority shall be entitled to possession of the Land upon the commencement date of this Lease and shall have use of the personal property as set forth in Paragraph 2 above. The Authority, upon taking possession of the land and personal property, will be deemed as accepting the property in "as is" condition without any representations or warranties on the part of the State as to the condition of the property subject to this Lease Agreement.

6. Uses Prohibited. The Authority shall not use, or permit the land or personal property and equipment to be used for any purpose or purposes other than the purposes for which the property is leased under this Agreement and as permitted pursuant to Chapter 237 of the Wisconsin Statutes.

7. Management Plan.

A. The Authority shall prepare a management plan which shall be submitted to the State no later than March 15, 2004, for the State's approval. Such plan, which shall comply with Section 237.07, Wis. Stats., shall include:

1. Preparation of and procedure for development of an annual budget.
2. Funding for abandonment of the Locks if it should become necessary.
3. Escrow for abandonment of the Locks.
4. Property Insurance—State Risk Management will provide at fee from DOA.
5. Liability Insurance for the Authority and its officers and employees as further described in Article 15 below.
6. Operational Cost; funding sources
7. Employees; Number of FTE; salaries
8. Audit by DOA
9. Maintenance and long-range plans

B. Upon the receipt of a contract with a nonprofit corporation meeting the requirements of Chapter 237 of the Wisconsin Statutes, the State shall transfer the proceeds received from the transfer of the Navigational System to the State to the nonprofit corporation or corporations. Seventy-five percent of the balance of the funds shall be held as a reserve for abandonment of the Locks until such time as the Management Plan is submitted and approved. Interest shall be transferred annually to the Authority.

C. Amendment of Management Plans. DOA shall approve the plans and all amended plans. The Authority shall update the plans at least every two years.

8. Authority's Responsibility.

A. The Authority shall comply with and enforce the terms of all conditions of the Deed Easements and land use restrictions upon the property.

- B. The Authority shall manage and enforce the terms and conditions of the outgrants and may retain any revenue derived from outgrants but may not modify or eliminate outgrants without approval from the Department of Administration.
 - C. The Authority may demolish and/or relocate and reassemble and/or replace the structures that are currently upon the Premises. The costs of relocating, rebuilding or replacement of such structures shall be the sole responsibility of the Lessee. Lessee shall comply with all laws, regulations and rules relating to environmental restrictions and historic preservation requirements.
 - D. The Authority shall, at its expense, cause the Premises to be maintained in a neat and orderly manner, including maintenance of any landscaping, and regular grass cutting and snow removal. The Authority shall, at its expense, keep all structures located on the premises in good order, repair and condition except for ordinary wear and tear.
 - E. The Authority shall be responsible for personal property and real property taxes, if any, relating to the premises. The Authority shall be responsible for all taxes, fees costs, if any, related to the rent payable under this Lease, including all taxes, assessments, fees, charges or imposition on income or franchise tax upon rents received.
 - F. The Authority hereby releases the State from any and all liability or subrogation for any loss or damage to property caused by fire or any of the extended coverage or supplementary contract casualties, even if such fire or other casualty shall have been caused by the fault or negligence of the State or anyone for whom the State may be responsible.
 - G. The Authority upon termination of this Lease, by lapse of time or otherwise, agrees to peaceably surrender the Premises to the State.
 - H. Compliance with state requirements. Pursuant to s. 16.85(16), Stats., the State shall review and approve the design and specifications for any rehabilitation or repair project by the Authority prior to commencing any work.
9. Assignment, subletting, sales. The Authority shall not assign, sell, mortgage, pledge, encumber or in any manner transfer this lease or any right, title or interest of the Authority hereunder, by operation of law or otherwise, or sublet the Premises or any portion thereof, without the prior written consent of the State. The Authority shall lease the property subject to the existing outgrants, but shall be entitled to the income from the outgrants. The Authority may amend or terminate outgrants subject to approval of the State.
10. Affirmative Action/Nondiscrimination. In connection with the performance of this Lease and pursuant to s. 16.765, Stats., the Authority agrees not to discriminate against any employee or applicant for employment because of age, race, religion, sex, physical condition, developmental disability as defined in section 51.01(5), Stats., sexual orientation as defined in section 111.32(13m), Stats., or national origin. This provision shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment, recruitment advertising, layoff, termination, rates of pay, other forms of compensation, and selection of training, including apprenticeship.

Except with respect to sexual orientation, the Lessee agrees to take affirmative action to ensure equal employment opportunities.

11. Default. If the Authority shall be in default under this Lease and shall fail to duly and fully observe or perform any covenant, condition or agreement pursuant to this Lease, and such default continues for a period of sixty (60) days after delivery of written notice, then the State shall be entitled to exercise all of its rights and remedies under the Lease or allowed by law including termination of the Lease. Upon termination, the State shall acquire all of the assets of the Authority including assets held in accounts.
12. No Waiver. No failure to exercise and no delay in exercising any right, power or remedy hereunder on the part of the State of Wisconsin or the Authority shall operate as a waiver thereof. No express waiver shall affect any event or default other than the event or default specified in such waiver, and any such waiver, to be effective must be in writing. A waiver of any covenant, term or condition contained herein shall not be construed as a waiver of any subsequent breach of the same covenant, term or condition. The making of any payment to the State under this Agreement shall not constitute a waiver of default, be considered evidence of property performance by the Authority, or considered acceptance of any defective part or work furnished by the Authority.
13. Environmental Conditions. The Authority is aware of the environmental hazards on the land and the improvements and shall be responsible for compliance with any and all environmental laws relating to the conditions of the premises at its sole expense and shall be responsible for enforcing the environmental covenant contained within the Deed from the United States to the State.
14. Right of Entry. The Authority shall permit the State and the agents and employees of the State to enter into and on the demised land at all reasonable times for the purpose of inspecting the land, or for the purpose of posting notices of non-responsibility for alterations, additions or repairs without any rebate of rent and without any liability to the Authority for any loss of occupation or quiet enjoyment of the Land occasioned by the entry.
15. Notices. All notices, demands, or other writings in this Lease provided to be given or made or sent, or which may be given or made or sent, by either party to the other, shall be deemed to have been fully given or made or sent when made in writing and deposited in the United States mail, registered and postage prepaid, and addressed as below. The address to which any notice, demand or other writing may be given or made or sent to any party as provided below may be changed by written notice given by the party.

To State:

Secretary Marc Marotta
Wisconsin Department of Administration
101 East Wilson Street, 10th Floor
P.O. Box 7864
Madison, WI 53707-7864

To Authority: Ron Van De Hey, Chair
Fox River Navigational Authority
1008 Augustine Street
Kaukauna, WI 54130

16. Insurance.

- A. Property Insurance. The State shall cover the personal and real property of the Authority whether leased or owned under the State Property Insurance Program. In addition to any rent paid to the State as Lessor under this Lease, the Authority shall pay to the State the cost of carrying any insurance which is carried by the State of Wisconsin upon the personal property, improvements or land for the benefit of the Authority. The Authority shall be responsible for the payment of any deductible.
 - B. Liability Insurance. At all times following completion of construction, the Authority shall maintain Commercial General Liability insurance policies with limits of not less than \$1,000,000.00 Dollars per occurrence and \$1,000,000.00 Dollars in the Aggregate. The Property, Commercial General Liability and Umbrella policies required in this section shall include the State of Wisconsin as a Named Insured. The Authority shall also provide errors and omissions liability insurance to its officers and employees. The Authority shall provide a certificate of insurance to the State from a company lawfully authorized to do business in the State of Wisconsin indicating coverage is in place at the limits set forth in this Section. The insurer shall give the State thirty (30) days notice of cancellation or changes in coverage.
 - C. Automobile Liability. The Authority shall maintain automobile liability insurance in the amount of \$1,000,000.00 combined single limit for owned, non-owned and leased vehicles.
 - D. Workers Compensation Insurance. The Authority shall maintain workers compensation insurance in the amounts required by law.
17. Severability. If any of the provisions of this Agreement shall be held or declared to be invalid, illegal or unenforceable under any law applicable thereto, by a court of competent jurisdiction in the State of Wisconsin, such provision shall be deemed deleted from this Lease without impairing or prejudicing the validity, legality and enforceability of the remaining provisions thereof.
18. No Liens. The Authority shall not, without prior written consent of the State, directly or indirectly create or permit to be created or to remain upon the Land any lien, encumbrance, or charge on, or pledge of, the Land, or any part thereof, and will immediately discharge, or contest the validity of, any lien, encumbrance or charge on, or pledge of, the Land, or any part thereof. The Authority shall defend and indemnify the State against any other liens placed against the Authority's interest in the Land or that otherwise impairs State's title to the property; to the extent such liens arise as the result of the acts or omissions of the Authority, its agents or employees. In amplification and not in limitation of the foregoing, the Authority shall not permit any

portion of the Land to be used by any person or persons or by the public, as such, at any time or times during the term of this Lease, in such manner as might tend to impair the title or interest of the State in the Land, or any portion thereof.

19. Counterparts. This Agreement may be signed in counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument.

IN WITNESS THEREOF, Lessor and Lessee have caused this Lease to be executed and delivered on the day and year first written above.

LESSEE:

Fox River Navigational System Authority

By: 

Ron Van De Hey, Chair
Fox River Navigational System Authority

LESSOR:

State of Wisconsin, Department of Administration

By: 

Marc J. Marotta, Secretary
Wisconsin Department of Administration



2018

Memorandum of Agreement (MOA) between the Fox River Navigational System Authority
and the Community Foundations of Fox Valley, Oshkosh and Green Bay

Purpose

This Memorandum of Agreement (MOA) is between the Fox River Navigational System Authority (the "Authority") and three non-profit 501(c)(3) organizations: the Community Foundation for the Fox Valley Region, Inc., Greater Green Bay Community Foundation and Oshkosh Area Community Foundation (collectively, those three organizations are referred to as the "Foundations"). The purpose of this MOA is to establish the parameters and procedures for continuing mutual cooperation in the fund and fiscal management of the Unlock the Fox Fund.

The Authority has all of the powers necessary and convenient to carry out the purposes and provisions outlined in Chapter 237.04. The Authority may enter into contracts with third party non-profit organizations as necessary for the rehabilitation, repair, replacement, operation, or maintenance of the navigation system under Statute 237.09(2).

The Foundations, pursuant to Section 237.09 of the Wisconsin Statutes, meet the requirements for a nonprofit corporation(s) under Section 501(c)(3) Internal Revenue Code as specified in Chapter 239.09 (1). The Foundations shall maintain such status for the term of this MOA. Wisconsin State Statutes Chapter 237 requires the assets of the Authority to be used for the specified purposes of the Authority. The Foundations shall not exercise their variance power in any manner that would divert the funds to any other purpose.

Background

The Authority and the Foundations (named above) entered into an MOA on October 8, 2004. The MOA has since been updated and executed on June 24, 2015 and again in 2018 (see signature block). The MOA establishes the basis for the Foundations to serve as agents to accept, account, administer, invest and distribute federal, state and local monetary contributions consistent with the Foundations' policies and legal requirements for the purpose of the management objectives and legal requirements of the Authority. The Authority has a Management Plan for the restoration, operation and maintenance of the navigational system as required by Section 237.07 of the State Statutes.

All major monetary assets of the Authority have been and continue to be managed as segregated funds of the Foundations.

Assets administered by the Foundations under the provisions of this MOA are held as three segregated funds under the fund name 'Unlock the Fox Fund'. The Foundations use the 'agency' fund classification for the assets of each of the "Unlock the Fox Funds". The assets and liabilities are listed on the books of each foundation.

The Foundations recognize and acknowledge that the Authority did not intend to make any unrestricted gifts of assets to the Foundations. The assets shall only be used to support the Authority's scope of responsibility to rehabilitate, repair, replace, operate and maintain the system of locks and associated property under the Authority's management. The Foundations agree to act under this MOA with this intent.

Because of the public-benefit nature of the Authority and the Unlock the Fox Fund each share of the Funds held by the Foundations as a fund under this MOA constitute a tax-exempt fund as described in IRC section 501(a)(3) as a public charity described IRC 509 (a)(1).

The Foundations will provide counsel and cooperation to support the Authority's efforts to raise funds for the navigational system. Specifically, by providing additional information such as contacts and introductions to potential donors and identifying potential grants.

The Authority has completed phase 1 of the FRNSA rehabilitation plan. The Authority has updated its Management Plan as required by the State of Wisconsin. The Management Plan, as currently drafted and presented to the State of Wisconsin, includes in its scope the following additions:

- 1) Construction and Operation of an invasive species barrier at the Menasha Lock
- 2) Construction and Operation of a Visitor Center
- 3) Construction and Operation of an invasive species barrier as well as a boat transfer station at the Rapid Croche Lock

Responsibilities of the Parties

The Authority is a public body corporate and politic of the State of Wisconsin created under Statute 237.02(1) and as such shall accept and manage Federal, State and other funding for the rehabilitation, repair, replacement, operation, and maintenance of the navigational system. The Authority's MOA with the Foundations is specified in Ss. 237.09 (2) and stipulates that the Authority will establish a relationship and an MOA with one or more groups who function as 501 c3 organizations.

The Authority's management plan specifies how the Authority's funds are raised and utilized. The Authority is required to prepare its management plan and present a current management plan to the State of Wisconsin. The Authority will also provide a copy of the management plan to the Foundations. The Authority will notify the Foundations of any changes in the management plan that would affect the portfolio.

The Foundations are IRS-approved 501 c (3) non-profit corporations. As such, they meet the requirements specified under Statute 237.09 to accept and invest monies raised on behalf of the Authority. The Foundations will administer the Authority's funds in accordance with the Foundations' Articles, Bylaws and Investment Policy Statement.

Investment Management

After consultation with the Authority, the Foundations shall administer the financial assets of the Authority with an investment management approach that meets the financial obligations of the Authority's management plan. The Foundations shall adopt an investment policy statement and select an investment manager to invest, and execute the investment policy. FRNSA and the Foundations shall monitor the investment policy statement that establishes the objective of achieving a rate of return sufficient to support the Authority's roles, duties, and powers as described in the Authority's Management Plan.

Quarterly, the Foundations shall convene a meeting with the investment manager for the purpose of receiving and assessing the performance of the Unlock the Fox Funds. The Authority's representatives shall attend these meetings, share project updates, and be apprised of the financial status of the Unlock the Fox Fund.

Financial Reporting

The Foundations will provide the Authority with financial reports as follows:

Monthly Reporting:

Board Statement/Spreadsheet
Accounts Receivable Spreadsheet
Reconciliation Report

Quarterly Reporting:

Unlock the Fox Fund statements (from each of the three Foundations)
Investment Performance Report

Annual Reporting:

Audited Financial Statements (from each of the three foundations)

Fund Expenditures

The Authority's Management Plan contains a financial plan forecasting the long-term expenditure needs by the Authority. The Authority also adopts a short-term annual budget addressing capital and operational expenditures. In accordance with the adopted budget the Authority will request capital and/or operational fund draws from the Unlock the Fox Fund. Unusual and emergency funding requests will be accepted and evaluated by the Foundations.

Expenditures from the Fund will be evaluated against the approved budget plans.

Fox River Navigational System Authority
1008 Augustine St
Kaukauna, WI 54130

Timothy Rose, Chairman
Jeremy Cords, CEO
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The Authority will confirm adherence to approved budget, providing Fund distribution requests to the Foundation. The Foundations shall transfer the requested funds to the Authority's appropriate bank accounts as requested.

Foundations' Duties

The Foundations shall supply the following to the Authority:

Upon request provide a current list of all Unlock the Fox donors and donations
Provide appropriate documentation to the donors for such gifts
Deposit donations into Unlock the Fox Fund
Maintain donor and financial records
Administer pledges
The Foundations will provide counsel and support the Authority's efforts to raise local and private funding for the navigational system

Foundation Fees

The Foundations charge a fee for their administrative services and custodial oversight for Unlock the Fox Funds.

These fees shall be disclosed monthly on financial statements to the Authority. The Foundations will inform the Authority 60 days in advance of the occurrence of any change of the fee rate negotiated with the Investment Managers.

Fee Structure:

For the term of this agreement, or until amended and replaced, Fund administration fees charged for basic Fund services provided by the Foundations shall be fixed at \$5,000 per month. If there is a 20% gain or loss in the Unlock the Fox Funds based on the average fund balance for the previous 12 months the Authority and the Foundations agree to meet and renegotiate the administrative fees.

Investment Management

Investment management services incur account-level fees borne by the Unlock the Fox Fund. These fees shall be disclosed on the monthly financial statements provided to the Authority. The Foundations will inform the Authority of any changes to the fee rate negotiated with the investment managers.

Duration of Memorandum of Agreement

This MOA shall take effect at the time of signature and shall be revisited in 2-year intervals to ensure appropriate consideration and timely re-evaluation that reflects mutual understandings and responsibilities. This MOA shall terminate 2 years after the signing date or upon the dissolution of the Authority by the State of Wisconsin.

Memorandum Agreement Amendment Process

The Authority and/or the Foundations may propose an amendment at any time. Any proposed amendment is subject to the mutual agreement by both parties.

Termination of Memorandum of Agreement

This MOA may be terminated by either party after notification in writing to the other party. Termination shall take place ninety days after such notification has been received.

If the Fox River Navigational System is closed, the Authority and the Foundations will cooperate with the State of Wisconsin regarding the disposition of FRNSA assets.

Audit

The Unlock the Fox Fund shall be included in the Authority's annual audit and in the annual audits of each of the three Foundations. Each Foundation shall audit the Fund in the same manner and shall provide an annual formal audit to the Authority. The staffs and audit teams of the Foundations shall agree to provide financial information to the Authority, its auditor or associated governmental agencies as requested.

Dispute Resolution

This MOA is governed by the Laws of the State of Wisconsin without giving effect to principles of conflict of Laws.

Any dispute arising under this MOA shall use mediation before arbitration for settlement of differences and shall be addressed informally by the designated agency contacts. Failure to resolve the dispute shall require third party arbitration with acceptance by the Authority and Foundations' Boards of Directors. Any arbitration will comply with the rules and procedures of the American Arbitration Association.

Effect of Memorandum of Agreement

Nothing in this MOA shall be interpreted as limiting, superseding, or otherwise affecting any organizations normal operations or decisions in carrying out their responsibilities and statutory and legal obligations.

Entire Memorandum of Agreement

The effective date set forth in this MOA supersedes any and all previous MOA's between the Authority and the Foundations.

This MOA constitutes the entire agreement of the parties pertaining to the subject matter

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within this MOA.

This MOA is binding not only on the parties but also their successors and/or assigns.

If any provisions of this MOA are held unenforceable by any court of competent jurisdiction, all other provisions of this MOA will remain in effect.

Timothy Rose, Chairperson
Fox River Navigational System Authority

Date

Curt Detjen, President/CEO
Community Foundation for the Fox Valley Region

Date

Dennis Buehler, President/CEO
Greater Green Bay Community Foundation

Date

William Wyman, President/CEO
Oshkosh Area Community Foundation

Date

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William Wyman, President/CEO
Oshkosh Area Community Foundation

Date

4/24/2018

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Community Foundation for the Fox Valley Region

Date



Dennis Buehler, President/CEO
Greater Green Bay Community Foundation

4/24/18

Date

William Wyman, President/CEO
Oshkosh Area Community Foundation

Date

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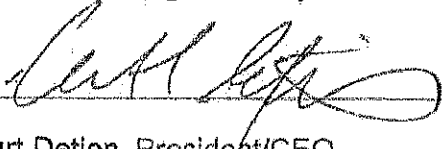
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LOCKS REHABILITATION, CAPITAL MAINTENANCE and OPERATION
YEARLY SCHEDULE through 2034

15-Jun-15
2014 DOLLARS adjusted

YEAR	ACTION	CURRENT COST (MILLIONS \$)	INFLATED COST (2%-3%/Y) (MILLIONS \$)	LOCAL INPUT	STATE INPUT	FEDERAL INPUT (MILLIONS \$)	L-S-F FUND INPUT/OUTPUT (MILLIONS \$)	ADD. FUND RAISE INPUT (MILLIONS \$)	INTEREST GAINED (actual) (MILLIONS \$)	FUND BALANCE (MILLIONS \$)
	(Major Cap Cost)		0.02						1.069	
	(Labor Cost)		0.03							
2000	(expended by the Corps-special maintenance)									
	YEAR TOTAL EXPEND	0.640	0.640000							
	MENASHA	0.080	0.080000							
	DEPERE	0.320	0.320000							
	LT KAUKAUNA	0.200	0.200000							
	CRITICAL CARE	0.040	0.040000							
	BEGINNING BALANCE - 2005									11.831000 Actual/bal Br
1	YEAR TOTAL EXPEND (2005)	0.259	0.259000	0.926402	0.000000		0.667402	0.000000	12.647339	12.915385
	Begin Appl. stabilize Kauk, Lt Chut	0.025	0.025000							
	OPERATION/ADMIN	0.130	0.130000							
	ANNUAL MAINTENANCE	0.104	0.104000							
2	YEAR TOTAL EXPEND (2006)	1.605	1.678401	0.154749	0.000000		-1.523652	0.000000	13.806547	13.816690
	CAPITAL USE	0.050	0.052224							
	APPLETON NO. 2	0.500	0.522242							
	APPLETON NO. 3	0.500	0.522242							
	APPLETON NO. 4	0.420	0.438683							
	OPERATION/ADMIN	0.031	0.032676							
	ANNUAL MAINTENANCE	0.104	0.110334							
3	YEAR TOTAL EXPEND (2007)		2.729241	0.258137	0.800000		-1.671104	0.000000	15.971832	14.940909
	OPERATION/ADMIN	0.130	0.050000							
	CAPITAL DRAW	1.034	1.765000							
	Repair Dikes, Walls	0.750	0.800597							
	ANNUAL MAINTENANCE	0.104	0.113644							
4	YEAR TOTAL EXPEND (2008)		4.022303	0.444821	0.000000		-3.577482		15.620008	14.611794
	OPERATION/ADMIN	0.148	0.166575							
	LITTLE CHUTE GUARD	0.357	0.389468							
	LITTLE CHUTE NO. 2	1.400	1.527326							
	CAPITAL DRAWS	1.670	1.821881							
	ANNUAL MAINTENANCE	0.104	0.117053							
5	YEAR TOTAL EXPEND (2009)		2.878905	0.257829	0.400000	2.104000	-0.117076	0.000000	11.134709	10.416005

LOCKS REHABILITATION, CAPITAL MAINTENANCE and OPERATION
YEARLY SCHEDULE through 2034

15-Jun-15
2014 DOLLARS adjusted

YEAR	ACTION	CURRENT COST (MILLIONS \$)	INFLATED COST (2%-3%/Y) (MILLIONS \$)	LOCAL INPUT	STATE INPUT	FEDERAL INPUT (MILLIONS \$)	L-S-F FUND INPUT/OUTPUT (MILLIONS \$)	ADD. FUND RAISE INPUT (MILLIONS \$)	INTEREST GAINED (actual) (MILLIONS \$)	FUND BALANCE (MILLIONS \$)
	(Major Cap Cost)		0.02						1.069	
	CAPITAL DRAW	2.583	2.583000							
	OPERATION/ADMIN	0.151	0.175340							
	ANNUAL MAINTENANCE	0.104	0.120565							
6	YEAR TOTAL EXPEND (2010)		1.175768	0.089641	0.800000	1.800000	1.513873		15.439642	14.443070
	CAPITAL DRAW	0.750	0.836211							
	Tender House Stabilization	0.090	0.090000							
	OPERATION/ADMIN	0.105	0.125375							
	ANNUAL MAINTENANCE	0.104	0.124181							
7	YEAR TOTAL EXPEND (2011)		0.754206	0.082552	0.400000	1.980000	1.708346		19.523460	18.263293
	CAPITAL DRAW	0.450	0.400000							
	KAUKAUNA NO. 5	0.020	0.020000							
	DEPERE VALVES & GATE REPA	0.070	0.083312							
	OPERATION/ADMIN	0.100	0.122987							
	ANNUAL MAINTENANCE	0.104	0.127907							
8	YEAR TOTAL EXPEND (2012)		0.743793	0.077733	0.400000		-0.743793		19.042708	17.813572
	CAPITAL DRAW	0.755	0.400000							
	KAUKAUNA NO. 5	0.030	0.030000							
	OPERATION/ADMIN	0.15	0.190016							
	ANNUAL MAINTENANCE	0.104	0.123777							
9	YEAR TOTAL EXPEND (2013)		2.264836	0.061029			-2.264836		19.974942	18.686633
	CAPITAL DRAW	0.845	0.840000							
	KAUKAUNA Dry Dock	0.150	0.150000							
	RAPID CROCHE (fill-in)	0.900	0.900000							
	KAUKAUNA NO. 5	0.020	0.020000							
	OPERATION/ADMIN	0.175	0.228335							
	ANNUAL MAINTENANCE	0.104	0.126500							
1	YEAR TOTAL EXPEND (2014)		3.421	3.432288	0.300000		-3.132288		19.974942	18.832000
	KAUKAUNA NO. 1	1.500	1.500000							
	KAUKAUNA NO. 5	0.550	0.550000		0.200000					
	Manasha Valves	0.100	0.100000							
	KAUKAUNA NO. 3	0.700	0.700000							
	WALL MASONRY	0.167	0.167000							
	OPERATION/ADMIN	0.300	0.309000							
	ANNUAL MAINTENANCE	0.104	0.106288							

LOCKS REHABILITATION, CAPITAL MAINTENANCE and OPERATION
YEARLY SCHEDULE through 2034
15-Jun-15

2014 DOLLARS adjusted										
YEAR	ACTION	CURRENT COST (MILLIONS \$)	INFLATED COST (2%-3%/Y) (MILLIONS \$)	LOCAL INPUT	STATE INPUT	FEDERAL INPUT (MILLIONS \$)	L-S-F FUND INPUT/OUTPUT (MILLIONS \$)	ADD. FUND RAISE INPUT (MILLIONS \$)	INTEREST GAINED (actual) (MILLIONS \$)	FUND BALANCE (MILLIONS \$)
	(Major Cap Cost)		0.02						1.069	
2	YEAR TOTAL EXPEND (2015)	2.744	2.810935		0.733000	2.100000	0.022065		20.131408	20.153473
	KAUKAUNA NO. 5	0.850	0.887817		0.733000					
	Kaukauna 1,2,3	0.950	0.950000							
	WALL MASONRY	0.400	0.400000							
	1st Kaukauna - VALVES	0.140	0.146228							
	OPERATION/ADMIN	0.300	0.316270							
	ANNUAL MAINTENANCE	0.104	0.108626							
3	YEAR TOTAL EXPEND (2016)	0.594	0.640894				-0.640894		21.544062	20.903168
	De Pere - VALVES	0.120	0.128096							
	Visitor Center	0.100	0.106746							
	OPERATION/ADMIN	0.270	0.295036							
	ANNUAL MAINTENANCE	0.104	0.111016							
4	YEAR TOTAL EXPEND (2017)	0.404	3.178478				-3.178478		22.345487	19.167008
	Rapide Croche Transfer	1.900	2.072799							
	Visitor Center	0.600	0.654568							
	OPERATION/ADMIN	0.300	0.337653							
	ANNUAL MAINTENANCE	0.104	0.113458							
5	YEAR TOTAL EXPEND (2018)	0.404	2.916622				-2.916622		20.489532	17.572910
	Appleton valves	0.300	0.334484							
	Rapide Croche Transfer	1.900	2.118401							
	OPERATION/ADMIN	0.300	0.347782							
	ANNUAL MAINTENANCE	0.104	0.115955							
6	YEAR TOTAL EXPEND (2019)	0.404	0.579972				-0.579972		18.785441	18.205469
	Cedars Valves	0.100	0.113948							
	OPERATION/ADMIN	0.300	0.341843							
	ANNUAL MAINTENANCE	0.104	0.124181							
7	YEAR TOTAL EXPEND (2020)	0.404	0.839438				-0.839438		19.461646	18.622208
	1st Chute valves	0.300	0.349363							
	OPERATION/ADMIN	0.300	0.368962							
	ANNUAL MAINTENANCE	0.104	0.121113							
8	YEAR TOTAL EXPEND (2021)	0.404	0.503808				-0.503808		19.907140	19.403332
	OPERATION/ADMIN	0.300	0.380031							
	ANNUAL MAINTENANCE	0.104	0.123777							

LOCKS REHABILITATION, CAPITAL MAINTENANCE and OPERATION
YEARLY SCHEDULE through 2034

15-Jun-15
2014 DOLLARS adjusted

YEAR	ACTION	CURRENT COST (MILLIONS \$)	INFLATED COST (2%-3%/Y) (MILLIONS \$)	LOCAL INPUT	STATE INPUT	FEDERAL INPUT (MILLIONS \$)	L-S-F FUND INPUT/OUTPUT (MILLIONS \$)	ADD. FUND RAISE INPUT (MILLIONS \$)	INTEREST GAINED (actual) (MILLIONS \$)	FUND BALANCE (MILLIONS \$)
	(Major Cap Cost)		0.02						1.069	
9	YEAR TOTAL EXPEND (2022)	0.404	0.517932				-0.517932		20.742162	20.224230
	OPERATION/ADMIN	0.300	0.391432							
	ANNUAL MAINTENANCE	0.104	0.126500							
10	YEAR TOTAL EXPEND (2023)	0.374	0.492141				-0.492141		21.619702	21.127561
	OPERATION/ADMIN	0.270	0.362857							
	ANNUAL MAINTENANCE	0.104	0.129283							
11	YEAR TOTAL EXPEND (2024)	0.404	0.547398				-0.547398		22.585363	22.037965
	OPERATION/ADMIN	0.300	0.415270							
	ANNUAL MAINTENANCE	0.104	0.132127							
12	YEAR TOTAL EXPEND (2025)	0.404	0.562763				-0.562763		23.558585	22.996822
	Menasha Valves	0.100	0.129841							
	OPERATION/ADMIN	0.300	0.427728							
	ANNUAL MAINTENANCE	0.104	0.135034							
13	YEAR TOTAL EXPEND (2026)	0.504	0.711262				-0.711262		24.582534	23.871272
	OPERATION/ADMIN	0.300	0.440560							
	Lt Kaukauna Valves	0.100	0.132697							
	ANNUAL MAINTENANCE	0.104	0.138005							
14	YEAR TOTAL EXPEND (2027)	0.504	0.730435				-0.730435		25.518389	24.787955
	OPERATION/ADMIN	0.300	0.463777							
	De Pere Valves	0.100	0.136617							
	ANNUAL MAINTENANCE	0.104	0.141041							
15	YEAR TOTAL EXPEND (2028)	0.404	0.611534				-0.611534		26.498324	25.886789
	OPERATION/ADMIN	0.300	0.467390							
	ANNUAL MAINTENANCE	0.104	0.144144							
16	YEAR TOTAL EXPEND (2029)	0.404	0.628727				-0.628727		27.672978	27.044251
	OPERATION/ADMIN	0.300	0.481412							
	ANNUAL MAINTENANCE	0.104	0.147315							
17	YEAR TOTAL EXPEND (2030)	2.504	3.686487				-3.686487		28.910304	25.223817
	OPERATION/ADMIN	0.300	0.496854							

LOCKS REHABILITATION, CAPITAL MAINTENANCE and OPERATION
YEARLY SCHEDULE through 2034

15-Jun-15

2014 DOLLARS adjusted

YEAR	ACTION	CURRENT COST (MILLIONS \$)	INFLATED COST (2%-3%N) (MILLIONS \$)	LOCAL INPUT	STATE INPUT	FEDERAL INPUT (MILLIONS \$)	I-S-F FUND INPUT/OUTPUT (MILLIONS \$)	ADD. FUND RAISE INPUT (MILLIONS \$)	INTEREST GAINED (actual) (MILLIONS \$)	FUND BALANCE (MILLIONS \$)
	(Major Cap Cost)		0.02						1.069	
	Appleton Seg	2.100	3.040077							
	ANNUAL MAINTENANCE	0.104	0.150556							
18	YEAR TOTAL EXPEND (2031)	0.404	2.144102				-2.144102		26.964260	24.820158
	Cedars Rebuild	1.000	1.479504							
	OPERATION/ADMIN	0.300	0.510730							
	ANNUAL MAINTENANCE	0.104	0.153868							
19	YEAR TOTAL EXPEND (2032)	0.404	0.683305				-0.683305		26.532749	25.849444
	OPERATION/ADMIN	0.300	0.526052							
	ANNUAL MAINTENANCE	0.104	0.157254							
20	YEAR TOTAL EXPEND (2033)	0.404	0.702546				-0.702546		27.633055	26.930509
	OPERATION/ADMIN	0.300	0.541833							
	ANNUAL MAINTENANCE	0.104	0.160713							
21	YEAR TOTAL EXPEND (2034)	0.404	5.144420				-5.144420		28.788714	23.644294
	11 Chula Rebuild	2.800	4.422083							
	OPERATION/ADMIN	0.300	0.558088							
	ANNUAL MAINTENANCE	0.104	0.164249							

LOCKS REHABILITATION, CAPITAL MAINTENANCE and OPERATION

60 YEAR SCHEDULE Rebuild Locks after 2034 through 2054

15-Jun-15

2014 DOLLARS adjusted

YEAR/ACTION	CURRENT COST	INFLATED COST (2%-3%/Y)	LOCAL INPUT	STATE INPUT	FEDERAL INPUT	L-S-F FUND INPUT/OUTPUT	ADD. FUND RAISE INP	INTEREST GAINED (actual)	FUND BALANCE
	(MILLIONS \$)	(MILLIONS \$)			(MILLIONS \$)	(MILLIONS \$)	(MILLIONS \$)	(MILLIONS \$)	(MILLIONS \$)
(Major Cap Cost)		0.02						1.069	
(Labor Cost)		0.03							
BEGINNING BALANCE - 2034									23.644294
22 YEAR TOTAL EXPEND (2034)	0.404	0.742693				-0.742693		25.275750	24.533057
OPERATION/ADMIN	0.300	0.574831							
ANNUAL MAINTENANCE	0.104	0.167862							
23 YEAR TOTAL EXPEND (2034)	0.504	0.928588				-0.928588		26.225838	25.297250
OPERATION/ADMIN	0.300	0.592076							
Menasha Valves	0.100	0.164957							
ANNUAL MAINTENANCE	0.104	0.171555							
24 YEAR TOTAL EXPEND (2034)	1.004	1.796684				-1.796684		27.042760	25.246076
OPERATION/ADMIN	0.300	0.609838							
Rapide Croche Rebuild	0.500	0.842930							
Lt Kaukauna Valves	0.100	0.168586							
ANNUAL MAINTENANCE	0.104	0.175329							
25 YEAR TOTAL EXPEND (2034)	0.404	0.807320				-0.807320		26.988056	26.180736
OPERATION/ADMIN	0.300	0.628133							
ANNUAL MAINTENANCE	0.104	0.179187							

LOCKS REHABILITATION, CAPITAL MAINTENANCE and OPERATION

60 YEAR SCHEDULE Rebuild Locks after 2034 through 2054

15-Jun-15

2014 DOLLARS adjusted

YEAR	ACTION	CURRENT COST (MILLIONS \$)	INFLATED COST (2%-3%/Y) (MILLIONS \$)	LOCAL INPUT	STATE INPUT	FEDERAL INPUT (MILLIONS \$)	L-S-F FUND INPUT/OUTPUT (MILLIONS \$)	ADD. FUND RAISE INP (MILLIONS \$)	INTEREST GAINED (actual) (MILLIONS \$)	FUND BALANCE (MILLIONS \$)
	(Major Cap Cost)		0.02						1.069	
26	YEAR TOTAL EXPEND (2034)	0.404	0.830106				-0.830106		27.987206	27.157100
	OPERATION/ADMIN	0.300	0.646977							
	ANNUAL MAINTENANCE	0.104	0.183129							
27	YEAR TOTAL EXPEND (2044)	6.004	10.931263				-10.931263		29.030940	18.099678
	OPERATION/ADMIN	0.300	0.666387							
	Kaukauna Rebuild	5.600	10.077718							
	ANNUAL MAINTENANCE	0.104	0.187158							
28	YEAR TOTAL EXPEND (2044)	0.504	1.061572				-1.061572		19.348555	18.286984
	OPERATION/ADMIN	0.300	0.686378							
	Menasha Valves	0.100	0.183918							
	ANNUAL MAINTENANCE	0.104	0.191275							
29	YEAR TOTAL EXPEND (2044)	0.504	1.090417				-1.090417		19.548785	18.458368
	OPERATION/ADMIN	0.300	0.706970							
	Lt Kaukauna Valves	0.100	0.187965							
	ANNUAL MAINTENANCE	0.104	0.195483							
30	YEAR TOTAL EXPEND (2044)	0.504	1.120062				-1.120062		19.731995	18.611933
	OPERATION/ADMIN	0.300	0.728179							
	DePere Valves	0.100	0.192100							
	ANNUAL MAINTENANCE	0.104	0.199784							
31	YEAR TOTAL EXPEND (2044)	0.404	0.954203				-0.954203		19.896156	18.941953
	OPERATION/ADMIN	0.300	0.750024							
	ANNUAL MAINTENANCE	0.104	0.204179							

LOCKS REHABILITATION, CAPITAL MAINTENANCE and OPERATION

60 YEAR SCHEDULE Rebuild Locks after 2034 through 2054

15-Jun-15

2014 DOLLARS adjusted

YEAR	ACTION	CURRENT COST	INFLATED COST (2%-3%/yr)	LOCAL INPUT	STATE INPUT	FEDERAL INPUT	L-S-F FUND INPUT/OUTPUT	ADD. FUND RAISE INFL	INTEREST GAINED (actual)	FUND BALANCE
		(MILLIONS \$)	(MILLIONS \$)			(MILLIONS \$)	(MILLIONS \$)	(MILLIONS \$)	(MILLIONS \$)	(MILLIONS \$)
	(Major Cap Cost)		0.02						1.069	
32	YEAR TOTAL EXPEND (204	0.404	0.981196				-0.981196		20.248948	19.267752
	OPERATION/ADMIN	0.300	0.772525							
	ANNUAL MAINTENANCE	0.104	0.208671							
33	YEAR TOTAL EXPEND (204	0.404	1.008962				-1.008962		20.597227	19.588265
	OPERATION/ADMIN	0.300	0.795701							
	ANNUAL MAINTENANCE	0.104	0.213262							
34	YEAR TOTAL EXPEND (204	0.404	1.037525				-1.037525		20.939855	19.902330
	OPERATION/ADMIN	0.300	0.819572							
	ANNUAL MAINTENANCE	0.104	0.217953							
35	YEAR TOTAL EXPEND (204	0.404	1.066907				-1.066907		21.275591	20.208664
	OPERATION/ADMIN	0.300	0.844159							
	ANNUAL MAINTENANCE	0.104	0.222748							
36	YEAR TOTAL EXPEND (204	0.404	1.097132				-1.097132		21.603083	20.505951
	OPERATION/ADMIN	0.300	0.869483							
	ANNUAL MAINTENANCE	0.104	0.227649							
37	YEAR TOTAL EXPEND (204	0.404	1.128225				-1.128225		21.920861	20.792636
	OPERATION/ADMIN	0.300	0.895568							
	ANNUAL MAINTENANCE	0.104	0.232657							
38	YEAR TOTAL EXPEND (204	0.404	1.388841				-1.388841		22.227328	20.838487
	Menasha Valves	0.100	0.228630							

LOCKS REHABILITATION, CAPITAL MAINTENANCE and OPERATION

60 YEAR SCHEDULE Rebuild Locks after 2034 through 2054

15-Jun-15

2014 DOLLARS adjusted

YEAR	RACTION	CURRENT COST	INFLATED COST (2%-3%/Y)	LOCAL INPUT	STATE INPUT	FEDERAL INPUT	L-S-F FUND INPUT/OUTPUT	ADD. FUND RAISE INP	INTEREST GAINED (actual)	FUND BALANCE
		(MILLIONS \$)	(MILLIONS \$)			(MILLIONS \$)	(MILLIONS \$)	(MILLIONS \$)	(MILLIONS \$)	(MILLIONS \$)
	(Major Cap Cost)		0.02						1.069	
	OPERATION/ADMIN	0.300	0.922435							
	ANNUAL MAINTENANCE	0.104	0.237776							
39	YEAR TOTAL EXPEND (204	0.504	1.426775				-1.426775		22.276342	20.849567
	OPERATION/ADMIN	0.300	0.950108							
	Lt Kaukauna Valves	0.100	0.233660							
	ANNUAL MAINTENANCE	0.104	0.243007							
40	YEAR TOTAL EXPEND (204	0.504	1.465765				-1.465765		22.288187	20.822422
	OPERATION/ADMIN	0.300	0.978611							
	DePere Valves	0.100	0.238801							
	ANNUAL MAINTENANCE	0.104	0.248353							
41	YEAR TOTAL EXPEND (204	0.404	1.261786				-1.261786		22.259169	20.997383
	OPERATION/ADMIN	0.300	1.007970							
	ANNUAL MAINTENANCE	0.104	0.253817							

	A	B	C	D	E	F
1	Revenue					
	Account #	Items	Approved Revenues FY 2018/19	End of FY 06/30/2019	Approved Revenues FY 2019/20	Difference (Approved vs End of FY 6-30-2019)
2						
4	49200	Miscellaneous Income	\$ -	\$ -		\$ -
	60N00	Unlock the Fox Fund (UTF) Income (Loss)	\$ 1,129,000.00	\$ 979,483.12	\$ 979,483.12	\$ 149,516.88
5						
6	46980	Bridge Operation Reimbursement	\$ 13,500.00	\$ 11,322.27	\$ 11,322.27	\$ 2,177.73
7	46991	State Admin Request	\$ 125,400.00	\$ 125,400.00	\$ 125,400.00	\$ -
8	46994.2	Federal Grants	\$ -	\$ -		\$ -
	48501	Lockage Fees	\$ 23,000.00	\$ 19,680.00	\$ 19,680.00	\$ 3,320.00
9	48508					
10	48313	Lease Income	\$ 440.00	\$ 4,954.00	\$ 4,954.00	\$ (4,514.00)
	49000.2	Fundraising, Donations		\$ 1,237.19	\$ 1,237.19	\$ (1,237.19)
11	46910					
12		Total Revenues	\$ 1,291,340.00	\$ 1,142,076.58	\$ 1,142,076.58	\$ 149,263.42
13	Expenses					
14	Staffing Expenses (Operations)					
			Approved Revenues FY 2018/19	End of FY 06/30/2019	Approved Revenues FY 2019/20	Difference (Approved vs End of FY 6-30-2019)
15						
16		Staffing Expense Summary	\$ 480,500.00	\$ 538,397.66	\$ 524,764.00	\$ (57,897.66)

34 Utility Expenses (Operations)					
		Approved Revenues FY 2018/19	End of FY 06/30/2019	Approved Revenues FY 2019/20	Difference (Approved vs End of FY 6-30-2019)
35					
36 52510	Natural Gas	\$ 4,500.00	\$ 4,075.24	\$ 4,500.00	\$ 424.76
37 52540	Water and Sewer	\$ 3,000.00	\$ 3,558.60	\$ 4,000.00	\$ (558.60)
38 52200	Phone Summary	\$ 6,500.00	\$ 7,839.15	\$ 8,200.00	\$ (1,339.15)
39	Office		\$ 4,422.25	\$ -	
40	Staff		\$ 3,416.90	\$ -	
41 52500	Electric Summary	\$ 10,000.00	\$ 10,726.58	\$ 11,500.00	\$ (726.58)
64	All Total Utilities	\$ 24,000.00	\$ 26,199.57	\$ 28,200.00	\$ (2,199.57)
65 Admin/Maintenance/Supplies Expenses (Operations)					
		Approved Revenues FY 2018/19	End of FY 06/30/2019	Approved Revenues FY 2019/20	Difference (Approved vs End of FY 6-30-2019)
66					
67	Administrative Expense Summary	\$ 149,750.00	\$ 141,889.53	\$ 183,700.00	\$ 7,860.47
52741	Bank Fees	\$ 500.00	\$ 888.90	\$ 1,000.00	\$ (388.90)
68 53210					
52740	Legal Fees	\$ 5,000.00	\$ 7,349.00	\$ 12,000.00	\$ (2,349.00)
69 52756					
70	Accounting CPA	\$ 22,000.00	\$ 15,276.00	\$ 20,000.00	\$ 6,724.00
71	Audit	\$ 8,000.00	\$ 7,900.00	\$ 8,500.00	\$ 100.00
72 53800	Property Assessment	\$ 2,200.00	\$ -	\$ 2,300.00	\$ 2,200.00
73 53425	Liability Insurance	\$ 50,000.00	\$ 49,279.00	\$ 51,000.00	\$ 721.00
52739	Computer System	\$ 15,000.00	\$ 1,200.69	\$ 15,000.00	\$ 13,799.31
74 52800	Hardware Upgrade				
75 53730	Computer Software	\$ 3,500.00	\$ 1,983.45	\$ 3,500.00	\$ 1,516.55
52460	Computer Support	\$ 10,000.00	\$ 10,863.00	\$ 13,000.00	\$ (863.00)
76	(OTG)				
53100	Postage	\$ 800.00	\$ 306.34	\$ 600.00	\$ 493.66
77 53110					
78 53560	Newsletter	\$ 1,500.00	\$ 347.21	\$ 1,500.00	\$ 1,152.79
79 53130	Dues & Memberships	\$ 150.00	\$ 10.00	\$ 50.00	\$ 140.00
80 53120	Subscriptions	\$ 100.00	\$ 49.00	\$ 50.00	\$ 51.00
81 52695	Internet & Website	\$ 4,000.00	\$ 4,716.83	\$ 5,200.00	\$ (716.83)
53140	Advertising/Promotion/ Marketing	\$ 27,000.00	\$ 41,720.11	\$ 50,000.00	\$ (14,720.11)
82					

	A	B	C	D	E	F
83		Office Supply & Maintenance Expense Summary	\$ 26,700.00	\$ 40,179.62	\$ 37,000.00	\$ (13,479.62)
84	53750 53510 53550	Office Expenses	\$ 8,700.00	\$ 17,458.53	\$ 15,000.00	\$ (8,758.53)
85	53630 53740	Office Building Maintenance/Supplies	\$ 11,000.00	\$ 10,907.78	\$ 11,000.00	\$ 92.22
86	52400 52420	Office Building/Land Maintenance	\$ 7,000.00	\$ 11,813.31	\$ 11,000.00	\$ (4,813.31)
87		Maintenance Expense Summary	\$ 10,000.00	\$ 12,144.75	\$ 13,000.00	\$ (2,144.75)
88	52470	Maintenance and Repairs - Vehicles	\$ 6,500.00	\$ 5,038.96	\$ 5,500.00	\$ 1,461.04
89	52480	Maintenance and Repairs - Equipment	\$ 3,500.00	\$ 7,105.79	\$ 7,500.00	\$ (3,605.79)
90		Rental Expense Summary	\$ 4,500.00	\$ 707.44	\$ 1,200.00	\$ 3,792.56
91	52340	Rental - Vehicles	\$ 1,000.00	\$ 672.79	\$ 700.00	\$ 327.21
92	52360 52370	Rental - Equipment	\$ 3,500.00	\$ 34.65	\$ 500.00	\$ 3,465.35
93		Equipment and Fuel Expense Summary	\$ 4,500.00	\$ 5,472.06	\$ 6,000.00	\$ (972.06)
94	53700	Fuel for Vehicles	\$ 4,500.00	\$ 5,472.06	\$ 6,000.00	\$ (972.06)
95		On Road Fuel		\$ 3,378.41	\$ -	
96		Off Road Fuel		\$ 2,093.65	\$ -	
97		Board Expenses	\$ 2,250.00	\$ 582.98	\$ 1,000.00	\$ 1,667.02
98	52165	Mileage	\$ 250.00	\$ 70.92	\$ 500.00	\$ 179.08
99	52166	Misc.	\$ 2,000.00	\$ 512.06	\$ 500.00	\$ 1,487.94
100		Total	\$ 197,700.00	\$ 200,976.38	\$ 241,900.00	\$ (3,276.38)
101						
102	Project Expenses (Capital)					
103	52739.2 52800.2		Approved Revenues FY 2018/19	End of FY 06/30/2019	Approved Revenues FY 2019/20	Difference (Approved vs End of FY 6-30-2019)
104		UWGB AIS Studies	\$ -	\$ -	\$ 35,000.00	\$ -
105		Rapide Croche AIS Studies	\$ 10,000.00		\$ -	\$ 10,000.00
106		Intermediate Water Temperature Study	\$ 19,000.00	\$ 2,580.00	\$ 5,000.00	\$ 16,420.00
107		Monitoring(GB/River/Winnnebago)	\$ 19,000.00	\$ 30,363.28	\$ -	\$ (11,363.28)
108		Total	\$ 48,000.00	\$ 32,943.28	\$ 40,000.00	\$ 15,056.72
109		Menasha Boat Transfer Feasibility Study	\$ -	\$ -		\$ -
110		Visitor Center Design Study	\$ 25,000.00	\$ 38,339.42	\$ 30,000.00	\$ (13,339.42)

	A	B	C	D	E	F
111		Fundraising Expense	\$ 25,000.00	\$ 37,768.75	\$ 25,000.00	\$ (12,768.75)
112		Menasha Property Purchase	\$ -	\$ -	\$ -	\$ -
113		Total Special Studies/Projects	\$ 98,000.00	\$ 76,108.17	\$ 55,000.00	\$ 21,891.83
114	Project/Maintenance Expenses (Capital)					
115			Approved Revenues FY 2018/19	End of FY 06/30/2019	Approved Revenues FY 2019/20	Difference (Approved vs End of FY 6-30-2019)
116	53910 54200	Machinery/Equipment Purchases	\$ 50,000.00	\$ 49,909.37	\$ 10,000.00	\$ 90.63
117	52740.2	Owners Rep & Misc.	\$ 25,000.00	\$ 23,569.84	\$ 25,000.00	\$ 1,430.16
118		Total	\$ 25,000.00	\$ 23,569.84		\$ 1,430.16
119	Any Lock	Lock Emergency Repairs	\$ 51,959.72	\$ -	\$ 100,000.00	\$ 51,959.72
120		Emergency 1				\$ -
121		Total	\$ 51,959.72	\$ -		\$ 51,959.72
122	Any Lock	Unplanned Rehabilitation and Maintenance	\$ 40,067.90	\$ -	\$ -	\$ 40,067.90
123		unplanned item 1				
124		Total	\$ 40,067.90	\$ -		\$ 40,067.90
125	All Locks 52740.2	Property Inventory and Inspection Project	\$ 25,000.00	\$ 4,384.08	\$ -	\$ 20,615.92
126						\$ -
127		Total	\$ 25,000.00	\$ 4,384.08	\$ -	\$ 20,615.92
128	Lock 1 52701.2	Menasha Lock Summary	\$ -	\$ -		\$ -
158		Total	\$ 17,023.50	\$ 155,756.00	\$ 70,000.00	\$ (138,732.50)
159	Lock 2 52702.2	Appleton 1 Summary	\$ -	\$ -		\$ -
188		Total	\$ 16,416.00	\$ 16,792.76	\$ 1,500.00	\$ (376.76)
189	Lock 3 52703.2	Appleton 2 Summary	\$ -	\$ -		\$ -
218		Total	\$ -	\$ 2,701.36	\$ 4,500.00	\$ (2,701.36)
219	Lock 4 52704.2	Appleton 3 Summary	\$ -	\$ -		\$ -
248		Total	\$ 74,000.00	\$ -	\$ 77,000.00	\$ 74,000.00
249	Lock 5 52705.2	Appleton 4 Summary	\$ -	\$ -		\$ -
279		Total	\$ 1,200.00	\$ 1,487.66	\$ 70,000.00	\$ (287.66)
280	Lock 6 52706.2	Cedars Lock	\$ -	\$ -		\$ -
310		Total	\$ 5,000.00	\$ -	\$ 10,500.00	\$ 5,000.00
311	Lock 7 52707.2	Little Chute Guard Lock	\$ -	\$ -		\$ -
341		Total	\$ 25,000.00	\$ 529.00	\$ 5,000.00	\$ 24,471.00

	A	B	C	D	E	F
342	Lock 8 52708.2	Little Chute Lock 2	\$ -	\$ -		\$ -
373		Total	\$ 32,408.60	\$ 3,896.25	\$ 230,000.00	\$ 28,512.35
374	Lock 9 52709.2	Combined Locks	\$ -	\$ -		\$ -
403		Total	\$ 65,000.00	\$ 2,624.04	\$ 445,000.00	\$ 62,375.96
404	Lock 10 52710.2	Kaukauna Guard Lock	\$ -	\$ -		\$ -
434		Total	\$ -	\$ -		\$ -
435	Lock 11 52711.2	Kaukauna Lock 1	\$ -	\$ -		\$ -
467		Total	\$ -	\$ 407.49		\$ (407.49)
468	Lock 12 52712.2	Kaukauna Lock 2	\$ -	\$ -		\$ -
500		Total	\$ 35,000.00	\$ 1,925.58	\$ 35,000.00	\$ 33,074.42
501	Lock 13 52713.2	Kaukauna Lock 3	\$ -	\$ -		\$ -
531		Total	\$ 23,000.00	\$ 15,539.00	\$ 13,000.00	\$ 7,461.00
532	Lock 13 52713.2	Kaukauna Lock 3 Dry Dock	\$ -			\$ -
562		Total	\$ 5,000.00	\$ -	\$ 5,000.00	\$ 5,000.00
563	Lock 13 52713.2	Kaukauna Lock 3 Office	\$ -	\$ -		\$ -
574		Total	\$ 10,000.00	\$ -	\$ 10,000.00	\$ 10,000.00
575	Lock 14 52714.2	Kaukauna Lock 4	\$ -	\$ -		\$ -
606		Total	\$ 20,000.00	\$ -	\$ 25,000.00	\$ 20,000.00
607	Lock 15 52715.2	Kaukauna Lock 5	\$ -	\$ -		\$ -
636		Total	\$ 20,000.00	\$ -	\$ 12,000.00	\$ 20,000.00
637	Lock 16 52716.2	Rapide Croche Lock	\$ -	\$ -		\$ -
667		Total	\$ 5,000.00	\$ 100.00	\$ 5,000.00	\$ 4,900.00
668	Lock 17 52717.2	Little Kaukauna (Rapids) Lock	\$ -	\$ -		\$ -
698		Total	\$ 6,200.00	\$ 1,487.65	\$ 5,000.00	\$ 4,712.35
699	Lock 18 52718.2	De Pere Lock	\$ -	\$ -		\$ -
731		Total	\$ 52,824.28	\$ 19,917.81	\$ 48,000.00	\$ 32,906.47
732		Total Projects and Maintenance	\$ 605,100.00	\$ 301,027.89	\$ 1,081,500.00	\$ 304,072.11

	A	B	C	D	E	F
			Approved Revenues FY 2018/19	End of FY 06/30/2019	Approved Revenues FY 2019/20	Difference (Approved vs End of FY 6-30-2019)
733						
734		Revenue	\$ 1,291,340.00	\$ 1,142,076.58	\$ 1,142,076.58	\$ 149,263.42
		Total drawn from Unlock the Fox Fund	\$ 1,008,000.00	\$ 1,008,000.00	\$ -	\$ -
735						
		Total Revenue and Cash Flow Unlock the Fox Fund	\$ 2,299,340.00	\$ 2,150,076.58	\$ 1,142,076.58	\$ 149,263.42
736						
		Expense	\$ 1,405,300.00	\$ 1,142,709.67	\$ 1,931,364.00	\$ 262,590.33
737						
739	Draw					
740	46992	Unlock the Fox Fund	\$ 625,000.00	\$ 625,000.00		\$ -
	46992.2	Capital Draw - Unlock the Fox Fund	\$ 383,000.00	\$ 383,000.00		\$ -
741						
		Carryover-Operating Acct	\$ 95,420.43	\$ 95,420.43		\$ -
742						
743		Carryover-Capital Acct	\$ 6,802.40	\$ 6,802.40		\$ -
744		Total	\$ 1,110,222.83	\$ 1,110,222.83		\$ -

**Proposed AIS Control and Monitoring Plan
for the
Rapide Croche Boat Transfer Station**

Prepared by Philip B. Moy, Ph.D.
University of Wisconsin Sea Grant Institute

Executive Summary

State statute 237 authorizes the Fox River Navigational System Authority to repair and re-open 16 of the 17 locks on the lower Fox River. Reopening the Fox River locks brings the potential for economic development and revitalization of the river communities but also increases concern for the risk of upstream spread of aquatic invasive species. The lock at Rapide Croche is the site of a fixed barrier to prevent the upstream migration of sea lampreys into the Lake Winnebago chain of lakes. This lock will not be functional. Instead, a boat lift and transfer station will move boats overland from the downstream side of the lock and clean them prior to placement on the upstream side. Protecting the Lake Winnebago sturgeon population and native fisheries from the potential adverse impacts of aquatic invasive species (AIS) must be the primary consideration in the operation of the transfer station and at other system access points.

Boaters wishing to move upstream will have to comply with certain requirements prior to approaching the boat transfer station. The hull must be free of accumulated debris and fouling organisms. Live fish and bait must not be moved above the Rapide Croche lock. Each boat will be completely separated from the downstream water and will be washed with hot water prior to being moved upstream. Removal from the water will ensure that no fish are moved upstream during the transfer operation.

All upstream-bound boats will be first rinsed with sprayed upstream water to dislodge loosely adhering debris from the hull. The boat will then be floated in 110°F water for at least one minute. Water at this temperature will instantaneously kill zebra and quagga mussels as well as most other aquatic organisms. During the boat washing procedure, equipment onboard the boats will be removed, sprayed with a pressure washer then immersed in a tub of 110°F water for at least one minute. The measures recommended in this document will ensure that no live fish, invertebrates or plants are moved upstream at the transfer station. The station cleansing equipment will be designed such that additional cleansing agents can be added to the cleaning procedure as warranted by emerging Great Lakes AIS threats. An Aquatic Invasive Species Hazard Analysis and Critical Control Point (AIS-HACCP) plan and checklists will be developed for quality assurance of the boat cleansing protocol at the site.

Monitoring for aquatic invasive species will take place from May to September. The monitoring will be performed by Lawrence University students under the direction of Dr. Bart DeStasio and will include sampling in the navigation pools up and downstream from Rapide Croche Lock. Sampling methods will target fish and invertebrates. Monitoring has already begun to establish a baseline before the transfer operation commences.

Despite the significant effort proposed herein to prevent the spread of AIS at the Rapide Croche boat transfer station, AIS may still be introduced to the Lake Winnebago system because Rapide Croche is not the sole access point. Over 60 boat access points around the lakes and upper and lower Fox River offer potential entry sites for invasive species on trailered boats. The connection with the Wisconsin River at Portage may also allow AIS access to the system. Law enforcement, education, outreach and cooperation with upstream anglers and boaters are essential for the overall success of the AIS prevention effort.

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AIS Control and Monitoring Plan for the Rapide Croche Boat Transfer Station

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Introduction

Prior to May, 2007, fourteen of the seventeen locks on the Fox River had not been operated since 1988. State statute 237 authorizes Fox River Navigational System Authority (FRNSA) to repair and re-open 16 of the 17 locks for navigation. Rehabilitation of the navigational system may provide economic benefits for the communities along the waterway and their residents (LDR Int'l. 993). The Authority has refurbished four of the locks and over the next several years the FRNSA will be rehabilitating nine of the seventeen locks on the Fox River between Lake Winnebago and Green Bay.

The Rapide Croche Lock (Figure 1) is the site of a fixed barrier that prevents upstream migration of spawning sea lamprey (*Petromyzon marinus*) into Lake Winnebago. At 137,708 acres, Lake Winnebago is the largest inland lake in Wisconsin. Lake Winnebago is home for one of the strongest populations of lake sturgeon (*Acipenser fulvescens*) in North America (Fred Binkowski, pers. comm.) and supports a strong walleye fishery (WI DNR 2006). Protecting the Lake Winnebago ecosystem, the lake sturgeon and walleye populations from sea lamprey and from the spread of other AIS is a primary consideration in developing a boat transfer facility at the Rapide Croche lock.

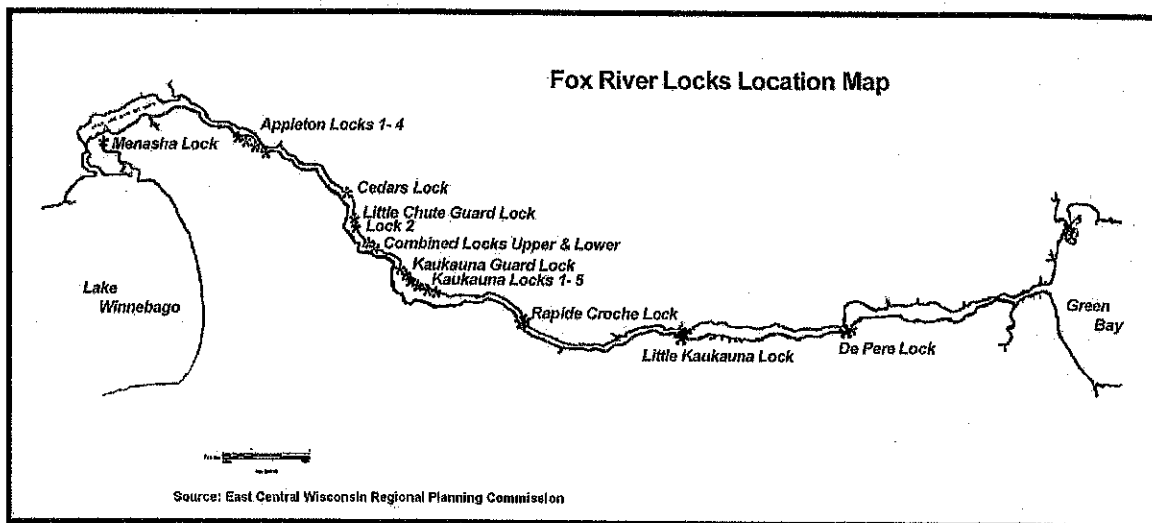


Figure 1. Map of the Fox River locks. North is towards the right of the map.

Goal: Prevent the upstream spread of aquatic invasive species (AIS) and safely transfer boats at the Fox River Rapide Croche Lock.

Objectives:

- 1) Maintain the effectiveness of the lamprey barrier currently in place at the Rapide Croche Lock
- 2) Move boats overland in an environmentally safe manner without moving AIS
- 3) Ensure that the boat cleansing process at the Rapide Croche transfer station meets or exceeds the Wisconsin State and Aquatic Nuisance Species Task Force recreational boating guidelines for AIS prevention.
- 4) Monitor for the presence of fish and invertebrate AIS above and below the Rapide Croche boat transfer station
- 5) Educate system users about AIS prevention

Aquatic Invasive Species

Species currently in the Great Lakes that should be prevented from spreading into the Lake Winnebago System include: lamprey, round goby, smelt, white perch, ruffe, and Great Lakes trout and salmon. Invertebrates include the quagga mussel and the non-indigenous waterfleas (fishhook and spiny waterfleas), rusty crayfish and the bloody red shrimp; plants should be removed because non-native organisms may be entrained with or attached to them. Pathogens that could be moved with fish include spring viremia of carp virus, infectious pancreatic necrosis, bacterial kidney disease and others. Other non-indigenous species or organisms of concern should be added to the list as they appear in Green Bay or the lower Fox River.

The spiny waterflea (*Bythotrephes cederstroemi*) will likely not thrive in the Lake Winnebago system or in Green Bay. This tiny, planktonic crustacean requires deep lakes that offer a summer thermal refuge. The shallow waters of lakes Winnebago, Winneconne, Poygan and Butte des Morts do not provide such refuge and so are unlikely to offer habitat suitable for this invasive zooplankton. Some shallow New York lakes in contact with spiny waterflea infested rivers have not yet exhibited invasive waterflea populations (Ed Mills pers. comm.) The fishhook waterflea (*Cercopagis pengoi*) can tolerate warm waters therefore reasonable steps to prevent the introduction of these nonnative crustaceans will be taken. The FRNSA recommends that similar precautions be implemented at the other Winnebago system access points.

This document considers the organisms most likely to be transferred with boats – those floating in the water column and likely to adhere to or become entrained on boats or associated with fish or aquatic vegetation. Benthic organisms such as New Zealand Mudsnaills or the diatom called “didymo” or “rock snot” (*Didymosphenia geminata*) are more likely to be spread via trailers or anglers as they come in contact with the bottom substrate of lakes and streams rather than by a floating boat.

Target Organisms

Fish

Prohibiting the movement of fish with boats is most easily accomplished by preventing the movement of bait and harvested fish, removing the vessel from the water for transfer and fencing the site to close it during off hours. A greater challenge lies in prohibiting the movement of microscopic resting eggs, larvae or pathogens that could remain in water adhering to equipment on board, the sides, interior spaces and crevices of the vessel. This challenge will be met through an aggressive vessel cleaning protocol that exceeds Wisconsin State and ANS Task Force recommendations.

No fish or bait live or dead will be transported above the Rapide Croche lock. Bait will be confiscated and discarded in the trash. Water in live wells, bilge and motors will be drained and flushed and the hull of the vessel and equipment will be rinsed with 110°F water prior to moving the boat and associated equipment to the upstream side of the lock. Boats moving downstream will not be inspected or cleaned prior to transfer but owners of boats moving downstream will be informed that they will have to meet the AIS prevention requirements to move the boat back upstream.

Quagga and Zebra Mussels

The application of sufficiently heated water can quickly exceed the thermal tolerance of organisms causing mortality within a very short time. The Rapide Croche transfer station will use water at 110°F to assure instantaneous kill of quagga mussels. McMahon et al (1993) determined that at raw water intake structures the maximum temperature required for instantaneous mortality of *Dreissena* is 43°C (109°F) when mussels were acclimated to 30°C and subjected to a “rapid” heating rate of 1°C/min. The temperature required for instantaneous mortality is reduced with lower acclimation temperatures. McMahon et al (1994) further established an equation for lethal temperatures for 15mm long zebra mussels based on acclimation temperature. Time in hours to achieve 100 percent mortality in *Dreissena* is described by the following equation:

$$\text{Total Mortality in Hrs} = 40.002 + 0.0514(\text{acclimation temp } ^\circ\text{C}) - 1.126(\text{test temp } ^\circ\text{C})$$

At the boat transfer site, the acclimation temperature would be the temperature of the river water; the test temperature would be the temperature of the wash water. Maximum summer water temperature for the Fox River at Rapide Croche Dam in 2005 was 85°F (29°C). At this maximum “acclimation” temperature the treatment temperature required for instantaneous mortality (death in zero hours) of zebra mussels would be about 98.6°F (37°C). Though similar information is not available for quagga mussels, it is likely this congeneric species has similar thermal tolerance.

Spiny Waterfleas

Spiny waterfleas, both *Bythotrephes* and *Cercopagis* are present in Green Bay. These species can reproduce parthenogenetically (without males). During most of the year they do not require males to establish a new population. In the fall as water temperatures fall below 61°F, males

appear and females produce resting eggs (Makarewicz et al 2002, MacNeill et al 2004). Resting eggs can survive desiccation for twelve hours before dying and can tolerate hotter water temperatures than adult zebra mussels. At Rapide Croche we need to prevent the movement of adult spiny and fishhook waterfleas and avoid the movement of resting eggs.

The upper lethal limit for spiny waterflea (*Bythotrephes longimanus*) has been documented as 74°F (23°C) (Yurista, 1999) due to inactivation of respiratory enzymes. The thermal tolerance of adult fishhook waterfleas is not precisely known (MacIsaac, pers. comm.; Aladin, pers. Comm.) Aladin reported the optimum temperature for fishhook waterfleas (*Cercopagis pengoi*) is 52-72°F (11-22°C) and that this cladoceran may be able to tolerate water temperatures as high as 102.2°F (39°C). However, in Russia, MacIsaac did not find adults in nuclear cooling reservoirs where water temperatures reach 95°F (35°C) and suggested 86°F (30°C) may be an ecological maximum for the organism (pers. comm.).

To avoid moving adult spiny and fishhook waterfleas into the upper Fox River basin, the boat hull, fittings, motor, live wells and water-cooled engine of the boat will be first sprayed with upstream water to dislodge any water fleas on the hull. The boat will then be floated in 110°F (43°C) water with motor and pumps running to insure that waterfleas interior systems are flushed out prior to moving the boat upstream. To avoid moving resting eggs the boat transfer station will not operate past Labor Day. This will avoid moving boats upstream as water temperatures begin to fall spurring the production of resting eggs. Early September water temperatures in Green Bay are still around 70°F. In the Fox River, early September water temperatures are around 75°F.

Other Invertebrates

The bloody red shrimp, *Hemimysis*, is a strong swimmer and is not likely to become entrained with a boat during operation. Rusty crayfish will be removed with other live bait.

Pathogens

Fish pathogens are most likely to move with fish or bait either dead or alive so preventing the movement of fish at Rapide Croche Lock will prevent the movement of most pathogens (Gary Whelan, MI DNR, pers. comm.). Equipment, for example nets that come into contact with fish are the next most likely vector for pathogen transfer. Nets and fishing equipment will be sprayed with a pressure washer and immersed in the hot water bath prior to being returned to the upstream-bound boat.

Plants and Algae

Fish larvae or other immature vertebrates are unlikely to adhere to the hull and if entrained in the motor or bilge will not survive the hot water bath. The pelagic invertebrates of concern are addressed above; benthic invertebrates are unlikely to be moved with a boat or will be washed off with sediment during the spray operation. Algae will be washed off to the extent possible during the initial spray-down of the vessel. It is possible that some algal cells will be missed and will not be killed in the hot water immersion step; however algae will remain a potential threat for introduction by other vectors as well. Macrophytes (large, visible plants) will be manually removed or washed off during the hull spraying portion of the cleansing operation.

Future AIS Risks

Until the influx of aquatic invasive species into the Great Lakes is stemmed, future introductions of new species may pose a risk for spread into the Lake Winnebago System. As these threats arise, the transfer station operation and cleansing protocol should be reviewed and modified as necessary to assure only clean boats are moved at the Rapide Croche boat transfer station and pose no additional threat for AIS introduction.

Other Vectors

Even with these stringent measures to prevent the movement of AIS at the Rapide Croche boat transfer station, at least two other significant AIS vectors remain: trailered boats access ramps and the canal connection at Portage. Recent AIS introductions into Lake Winnebago including Eurasian watermilfoil (*Myriophyllum spicatum*), zebra mussels (*Dreissena polymorpha*) and viral hemorrhagic septicemia virus (VHS) are logically attributable to introduction by trailered boats or anglers. There is a total of over 60 access points for boats on lakes Winnebago, Poygan, Butte des Morts, Winneconne, Little lake Butte des Morts, the upper Fox River to Eureka and the lower Fox River to Rapide Croche Dam. Unless boaters and anglers take precautions to prevent the spread of AIS from lake to lake via trailered boats, this vector will remain a serious threat to the Lake Winnebago ecosystem. Further, the number of trailered boats entering the Lake Winnebago system annually will greatly exceed the number of vessels passing through the Rapide Croche boat transfer station.

As long as there is an aquatic connection between the Wisconsin River and the Fox River invasive species in the Mississippi River drainage could enter the Winnebago system. At this time, Asian carps are the greatest AIS threat that could use this entry route. The round goby will eventually move into the Mississippi River and could use this backdoor to gain access to the Winnebago system, further there is concern regarding the use of gobies as bait. Serious consideration should be given to permanently closing the man-made connection to prevent the spread of invasive species to or from the Winnebago system.

Boat Transfer Options

Lifting boats by water is a proven, safe and economical means to move freight and passengers with the vessel in a controlled chamber. However, when considering a means of lifting a boat without moving AIS, the impracticality of treating or disinfecting large volumes of water and how to handle the discharge of the treated water becomes immediately apparent. For that reason boats passing upstream and downstream at the Rapide Croche Lock will be moved via mechanical means. Boat lift options are described in detail elsewhere in this proposal but include sling-type lifts, fork lifts, trailers, self-propelled trailers, and other bunk-type lifts.

Boat Cleansing Alternatives

Chemicals

Options considered as alternatives for the boat cleansing operation included chemicals such as chlorine, iodine, Vircon-S, Peroxyguard and ozone, high pressure water spray and hot water. Application of chemicals was not fully considered due to the cost and potential hazards

associated with storage and application. Chemicals must be either collected for disposal or detoxified (if possible) prior to discharge. Purchase of the chemical represents an additional cost for operation of the boat transfer facility as well as cost for disposal of a potentially hazardous waste. Further, some of the chemicals are not effective on all target organisms and treatment of the boat with a chemical would require some additional rinse take place prior to placement of the cleaned boat on the upstream side of the lock. Chemical treatment can be added at a later date if required by changing conditions.

High Pressure Spray

High pressure water spray has the potential to remove ablative paint from some boat hulls and can potentially damage some hulls made of relatively fragile materials. Also, some additional treatment would be required to address through-hull fittings, pumps and motor cooling water.

Hot Water

Hot water has the most desirable characteristics and the fewest drawbacks. Water is amply available onsite from the upstream side of the lock, can be heated, is not toxic and at moderate temperatures is not hazardous. At high enough temperatures, hot water is an effective cleansing agent on all organisms and all life stages.

Application of hot water to the boat and equipment for the required duration by spraying the hull is possible but requires additional steps to flush the motor cooling system and other on-board pumps, the bilge and through-hull fittings. A combination of spray with immersion in a pool of heated water allows thorough flushing of the motor and pumps with the hot water. Separate treatment of equipment in hot water, a chemical bath or high pressure spray will kill, remove or inactivate potential AIS threats.

One issue with very hot water is the potential effect on paint, gaskets and some hull materials. Some of the boat manufacturers contacted indicated immersion of the vessel in a water bath of 145°F or more even for a relatively short duration (2 minutes) could adversely affect gaskets, hull finish and would violate the warranty.

Recommended Approach

Given the array of organisms, their various tolerance for chemical and hot water treatments, it is clear a combination of cleansing methods incorporated into a boat transfer system is required to assure that to the greatest extent possible, no non-indigenous species are moved with boats from the downstream to the upstream side of Rapide Croche Lock. Operating the boat transfer station only during times of the year when resistant life stages are absent and using cleansing methods effective on target organisms will allow safe transfer of boats over the sea lamprey barrier. The cleansing station should be designed such that application of a chemical disinfectant phase can be added in the future if necessary.

In terms of options to treat the boat to remove AIS in an environmentally sound manner, hot water is the preferred method for this operation. Hot water is the method recommended by the Aquatic Nuisance Species Task Force in the Recreational Boating Guidelines for AIS removal:

- Inspect and remove aquatic plants animals and mud from the boat, trailer and equipment
- Drain all water from the equipment (boat, motor, bilges, transom wells, live wells etc.)
- Dispose of unwanted bait in the trash, not in the water
- Rinse the boat and equipment with hot (>104°F) and/or high pressure water OR
- Let the boat dry in the sun for five days

Boat Transfer Station Operation

The Rapide Croche boat transfer station will have posted hours and will not operate unless a trained transfer station staff member is present. The boat transfer station will be fenced such that no one may pass beyond the boat transfer station, including canoes and kayaks, when a boat transfer station staff member is not present. To facilitate the cleaning process, the approach channel should be kept free of vegetation to the maximum extent possible.

The lifting or transfer device will completely separate the boat from the water and allow inspection and treatment of the hull such that no organisms attached to the hull or lifting apparatus will go unnoticed during the transfer process. Water draining from the boat while it is being cleaned must not be allowed to drain to the upstream side of the transfer station.

Preparing the Boat for Transfer

Boaters wishing to have their boats transferred at the station will have to clean their hulls, bilge and equipment prior to approaching the transfer station. Live wells and bait buckets should be empty. Boats with hulls heavily encrusted with algae or organisms will be turned away. Boats with bladder bags, regardless of condition, will not be permitted to move above the transfer station. Fishing presents an elevated risk for transfer of organisms due to live wells, bait buckets and bait wells and associated fishing gear. These items will require particularly close attention prior to movement upstream.

Cleansing the Boat

Once the boat meets the established criteria to move above the Rapide Croche Lock, the boat will be lifted from the water by fork lift, hoist or some other mechanism. The boat will be moved to a location for the cleaning process that ensures the released water is not discharge to the upstream side of the transfer station.

The Hull

The transfer station is intended to be a disinfection station not a boat cleaning station; there will not be time for scrubbing or scraping of the hull. As such, boats with hulls heavily fouled with zebra or quagga mussels or thick encrustations of other organic matter will not be allowed to use the boat transfer station so only recently settled dreissenid mussels and minimal accumulations of other dried-on organisms should be present on the boat hull. The hull will be thoroughly sprayed to dislodge spiny waterfleas and other adhering AIS prior to being set in 110°F water for one minute which will kill more tightly attached dreissenid mussels. Wong (1991) reported that water pressure at 3000 psi will remove zebra mussels but not their byssal threads that can cause corrosion. For this reason the U.S. Army Corps of Engineers recommends that water pressure of 4,000 psi or greater be used to remove the zebra mussels. Ackerman et al (1995) determined that the force required to remove newly settled quagga mussels from various substrates was about

two orders of magnitude less than that required to remove adult dreissenid mussels. Applying this conversion factor (0.01) to the Army Corps recommended pressure for removing adult zebra mussels (3000 to 4000 psi) results in a suggests water pressure of 30 to 40 psi, roughly equal to that of tap water will be sufficient for the Rapide Croche boat washing facility.

Water at 30 to 40 psi will remove newly settled quagga mussels as well as zooplankton that may be adhering to the surfaces of the boat while avoiding removal of ablative anti-fouling paint and possible damage to boat hulls. Special attention will be paid to hull fittings, outdrives, lower units, sailboat centerboards, centerboard trunks and water intake and exhaust ports. Canoes and kayaks will be thoroughly rinsed inside and out then fully immersed in the 110°F water. The heat of the water will instantaneously kill any zebra or quagga mussels on the hull and will kill attached spiny waterfleas in the one-minute contact time.

Propulsion Systems

Lower units, outdrives and other protruding items with cracks or crevices that may house AIS will be sprayed with water then set in 110°F water to ensure removal and/or death of the organism. Jet skis or jet boats will be run for a few seconds to ensure removal of entrained vegetation and water in the drive system. The jet drive intake and exhaust ports must then be flushed with the hot water.

Intake and Exhaust Ports & Cooling System

Intake and exhaust ports of the cooling system on inboard motors must be sprayed thoroughly. Mechanical propulsion systems of all vessels will be operated while floating in the 110°F water bath to ensure removal of larval or planktonic organisms. Cooling systems of motors will be operated with the 110°F water to ensure removal or mortality of AIS. Other raw water systems will be operated while in the bath to ensure flushing of these systems.

Bilge

Water in the bilge could harbor invasive organisms. If the boat construction allows access to the bilge compartments the bilge will be visually inspected. If the bilge compartments cannot be visually inspected, the bilge plug will be removed from the boat prior to placement in the hot water bath.

Fishing Equipment, Anchors, Ropes, Chains, Skis etc

Equipment onboard including ropes, anchor, chains, water skis, rods, reels, lines, downriggers, tackle and lures must be visually checked by the transfer station staff. It must be dry and free of debris or encrusting organisms. All nets and equipment that is not dry or free of encrusting organisms clean must be sprayed with high pressure wash water then immersed in the 110°F water bath for one minute before being allowed to move upstream of the transfer site.

Live Wells & Bait Buckets

No live bait will be permitted to move upstream from below the Rapide Croche boat transfer station. Live wells and bait wells must be emptied. Once the boat is lifted from the water, the live well system will be flushed and operated with 110°F water. Bait brought in buckets may be emptied into a holding facility for distribution to downstream-headed boats. All bait buckets will be rinsed then immersed in the 110°F water bath for one minute.

Lifting Device

The lifting device will be treated with 110°F water for one minute along with the boat to ensure it too is free of AIS before being immersed in the upstream water. Alternatively, two lifting devices may be used, one for removing and replacing boats on the downstream side of the lock and a second for removing and placing boats on the upstream side of the lock. If a second boat is waiting to move downstream, the lifting device must be sprayed down and treated in the hot water bath.

Quality Assurance - Hazard Analysis and Critical Control Point Plan

Once a method is finalized for lifting and washing the boats, detailed protocols will be developed for each vessel type. In addition, an Aquatic Invasive Species Hazard Analysis and Critical Control Point (AIS-HACCP) plan and a protocol checklist should be developed for the Rapide Croche boat transfer station for quality assurance. The plan will clearly delineate the cleaning protocol to be followed for each type of craft, i.e. sailboat, cruiser, runabout, kayak, or fishing boat. A checklist should be completed for each craft transferred at the station. The AIS- HACCP plan should include thermal parameters for the heated pool, inspection points for each type of craft and equipment cleansing procedures.

Moving the Boat Upstream

Once the boat and equipment are cleaned, the boat will be moved to the upstream side of the lock, checked to ensure that the bilge plug is replaced and returned to the river. Equipment removed from the hot water bath should be allowed to cool and returned to the boat operator.

Operation of the Other Locks

When the doors of a lock remain open between lockages, fish and other organisms have an opportunity to enter the lock and be moved upstream with the next vessel that locks through. As an added step to slow the upstream spread of AIS, the downstream lock doors at the locks between Rapide Croche and Green Bay will remain closed except when a vessel is entering the lock. Though this is not a 100% effective prevention method, it significantly reduces the amount of time an organism has to enter the lock to move upstream.

Monitoring for AIS

Monitoring is essential to determine the effectiveness of any prevention effort. Monitoring for AIS will be carried out by Lawrence University students under the direction of Dr. Bart DeStasio. One student will be dedicated to the project throughout the summer months. Monthly sampling at stations in the Rapide Croche pool and the upstream and downstream navigation pools from May to September began in 2006. The monitoring effort includes sampling for invertebrates and fishes. Sampling methods include substrate samples, settling plates, minnow traps and seining. Periodic reports on the monitoring results will be submitted to FRNSA and forwarded to the Department of Natural Resources. Results of the monitoring effort will be posted on the FRNSA (or Friends of the Fox) website and will be presented at state or regional meetings.

If a new invasive species is located downstream of the lock, the HACCP plan and transfer protocol will be reviewed to ensure that the methods applied at the transfer station are adequate.

to prevent the upstream movement of the organism. If the methods are determined to be inadequate, the HACCP plan and cleaning protocol will be modified appropriately.

If the monitoring effort finds a new aquatic invasive species in the pool above the Rapide Croche Lock, the Wisconsin DNR will be immediately notified. Though the source of the organism may be a trailered boat, if the organism is confined to the Rapide Croche pool consideration should be given to closing the Kaukauna Lock and to closing any boat ramps on the pool to prevent potential upstream spread of the organism until its distribution and appropriate response action can be determined (see AIS response below).

AIS Response

Because there are more than 60 access points on the Lake Winnebago system, presence of a new AIS in the Lake Winnebago system is not indicative of a failure in the boat transfer cleansing protocol. The monitoring program for the transfer station samples sites in the pools immediately above and below the Rapide Croche Lock. This monitoring program should be used to determine whether the source of the new species was indeed the transfer station. Discovery of the species farther upstream suggests another vector was involved.

The initial response if a new AIS that has been confirmed in the pool immediately downstream of the transfer station is then detected immediately upstream from the Rapide Croche boat transfer station should be to close the next lock upstream, Kaukauna Lock 5 and to suspend operation of the boat transfer station pending review of the transfer protocol. Planning for a rapid response should begin well in advance of full restoration and operation of the lock system so that swift action can be taken in the event of a new AIS discovery. Rapid response options are extremely limited and depend on the type of organism. Planning for the action will at a minimum include representatives of the Fox River Navigation System Authority and the FRNSA AIS Committee, the Friends of the Fox River, the Wisconsin Department of Natural Resources, U.S. Fish and Wildlife Service, Great Lakes Fishery Commission, communities that draw drinking water from the river and recreational interests on the river including Walleyes For Tomorrow, Sturgeon For Tomorrow, and the Winnebago Lakes Council.

Education and Outreach

Boaters on the Fox River will need to know about the boat transfer and cleaning procedure before they approach the Rapide Croche boat transfer station. They will need to have a clean hull and be prepared to allow their boat to be inspected, lifted and washed. They must be aware that fishing gear and ski equipment etc. will be removed and submerged in hot water.

Materials describing how boaters can prevent the spread of AIS should be available for distribution at all the FRNSA locks. A kiosk will be erected at the boat transfer station that includes educational materials about AIS, their impacts and preventing their spread, the lock system, the Fox River, Lake Winnebago ecosystem and the lake sturgeon.

Prevention at other access points must engage upper lakes' residents, anglers, boaters and other users in the AIS prevention effort. This will involve coordination with upstream partners such as UW Extension, angling clubs, marinas, bait shops, and schools to help in the effort. Distribution of information including posters, pamphlets, watch cards and the FRNSA FAQ brochure to ramp

owners, bars, restaurants and tackle shops around the lake and on the river will help disseminate the information. Engaging sportsmen's groups and educating them about the Rapide Croche boat transfer station will be an important project component. Dr. Bart DeStasio will help engage elementary, middle and high school students in AIS prevention. Dr. DeStasio leads the JASON project, a middle school outreach program in the Green Bay area. He has offered to work with local schools to enlist their participation on the Fox River AIS monitoring and control effort.

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FRNSA Board Information

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101 Waukau Avenue

Oshkosh, WI 54902-7299

Phone: 920-231-7370

E-mail: jlvsncmfg.com

Brown County Member 2

Bruce Enke

2774 Newcastle Court

Green Bay, WI 54313

Phone 920-737-9574

E-mail bgenke04@gmail.com

Board Members - State Agency Designees

Wisconsin DNR

Jean Romback-Bartels, Secretaries' Designee

2984 Shawano Ave

Green Bay, WI 54313-6727

Phone: 920-662-5114

E-mail: jean.rombackbartels@wisconsin.gov

Wisconsin DOT

Will Dorsey, Secretaries' Designee

(Capital Projects Committee Chairman)

944 Vanderperren Way

Green Bay, WI 54304

Phone: 920-492-5684

E-mail: will.dorsey@dot.state.wi.us

Wisconsin Historical Society

Daina Penkiunas, Director's Designee

816 State St

Madison WI 53706

608-264-6511

608-264-6504 (fax)

daina.penkiunas@wisconsinhistory.org

www.wisconsinhistory.org

Chief Executive Officer FRNSA

Jeremy Cords

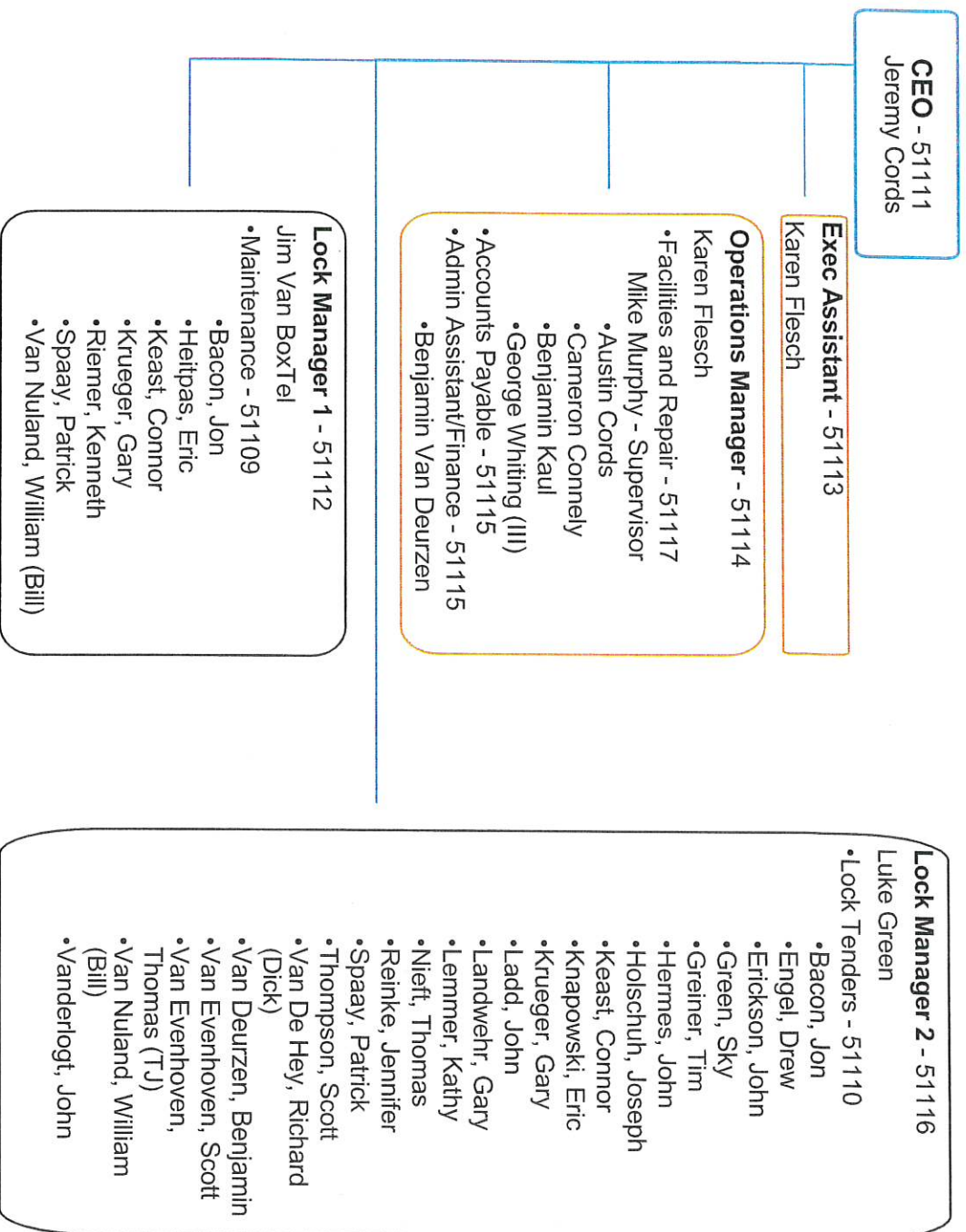
1008 Augustine Street

Kaukauna, WI 54130

920 759 9833

E-Mail: jcords@foxlocks.org

Org Chart



PARTNERSHIP AGREEMENT
BETWEEN THE U.S. ARMY CORPS OF ENGINEERS, DETROIT DISTRICT
AND
THE STATE OF WISCONSIN, FOX RIVER NAVIGATIONAL SYSTEM
AUTHORITY
FOR ACTIVITIES ASSOCIATED WITH THE TRANSFERRED NAVIGATION
PORTION OF THE FOX RIVER SYSTEM, WISCONSIN

This Partnership Agreement is entered into this 30th day of September 2004, by and between the U.S. Army Corps of Engineers, Detroit District, (hereinafter "the Corps") represented by the District Engineer, and the State of Wisconsin, Fox River Navigational System Authority (hereinafter "the State"), represented by the Chairman, Fox River Navigational System Authority.

WITNESSETH, THAT:

WHEREAS, on September 15, 2004, the Corps transferred to the State the locks and appurtenant features of the navigation portion of the Fox River System, Wisconsin, extending from Green Bay, Wisconsin to Lake Winnebago, Wisconsin, per the intention of the parties as provided in the Memorandum of Agreement entered into on 11 September 2000 by and between the Corps and the State; and

WHEREAS, the Corps and the State have the full authority and capability to perform as hereinafter set forth in accordance with the terms of this agreement.

NOW, THEREFORE, the Corps and the State agree as follows:

ARTICLE I. GENERAL PROVISIONS

- A. The State and the Corps shall meet once per calendar year in the Green Bay/Fox River, Wisconsin area to discuss the State's planned and/or proposed operational programs of the navigation portion of the Fox River System and the Corps' planned and/or proposed operational programs of the water regulation features of the Fox River System.
- B. It is the intent of the Corps to provide the State with information and/or institutional knowledge on the workings of the navigation portion of the Fox River System, Wisconsin.
- C. To discuss, as needed, any proposed real estate lease/license action that may impact either party at any lock and/or water regulation feature (dam).
- D. Either party may request in writing the need for additional meetings within the calendar year.

- E. Each party is responsible for their own costs associated with participating in the meeting(s).

ARTICLE II. POINTS OF CONTACT

To schedule meetings and/or to facilitate in the transfer of information between the Corps and the State, the individuals listed below will be the primary points of contact:

Corps

Charles A. Uhlarik
Project Manager, USACE, Detroit District
477 Michigan Avenue
Detroit, MI 48231
Phone: 313-226-6753
Cell: 313-319-3093

State


Ron Van De Hey
Interim Chairman of the Fox River
Navigational System Authority
1008 Augustine Street
Kaukauna, WI 54130
Phone: 920-740-6545

ARTICLE III. AMENDMENT AND TERMINATION

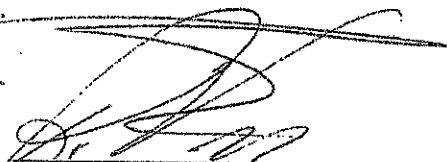
- A. This agreement may be amended by written agreement of both parties.
- B. Either party may terminate this agreement by written notice giving 100 days notice.

IN WITNESS HEREOF, the parties thereto have executed this agreement, which shall become effective upon the date it is signed by the Corps and the State.

DETROIT DISTRICT,
CORPS OF ENGINEERS


Donald P. Lauzon
Lieutenant Colonel, U.S. Army
District Engineer

STATE OF WISCONSIN


Ron Van De Hey
Interim Chairman, Fox River
Navigational System Authority

Date: 30 sep 04

Date: SEP 30, 04

RESOLUTION NO. 4-04

**ADOPTION OF THE AFFIRMATIVE ACTION PROGRAM FOR EQUAL
EMPLOYMENT OPPORTUNITIES.**

WHEREAS, it is the policy of the Fox River Navigational System Authority not to discriminate against any employee or applicant for employment because of age, race, color, creed, sex, national origin or handicap, and

WHEREAS, job applicants and present employees shall be recruited, trained, assigned, promoted and compensated without discrimination as to age, race, color, creed, sex, national origin, or handicap, and

WHEREAS, it is recognized that the agency needs to maintain constant vigilance of its hiring practices and its past hiring experience, and

WHEREAS, the Authority is subject to non-discrimination policies as listed in Wisconsin Statutes 16.765, 104.39, 230.03 and 230.80 now therefore

BE IT RESOLVED BY THE FOX RIVER NAVIGATIONAL SYSTEM AUTHORITY:

Section 1: That the Authority adopts the following affirmative steps to promote equal employment opportunity within the agency:

1. The Authority's equal employment opportunity policy will be communicated to all employees, supervisors and management and to potential sources of employees. Officials who make the hiring, placement and promotion decisions will be instructed that minority applicants for all jobs, regardless of type, or applicants for promotion are to be considered without discrimination as to age, race, color, creed, sex, national origin or handicap.
2. The Chief Executive Officer is designated as the agency's Affirmative Action Officer responsible for coordination of its equal employment opportunity efforts.
3. The Authority establishes a goal to recruit applicants and hire employees in balance with the prevailing employment structure of the Appleton-Oshkosh-Neenah MSA and Green Bay MSA to the extent possible.
4. The Authority will take such steps as the following in its recruitment to assure non-discrimination:
 - a. Place employment advertisements in newspapers which serve the largest number of minority group people within the Authority's recruiting area and with the Wisconsin Job Service Center.


RESOLUTION No. 4-04

- b. Notice of staffing needs will be sent to schools and universities having substantial portions of minority students.
 - c. Systematic contacts will be made with minority and human relations organizations, leaders and spokesmen to encourage referral of qualified minority applicants to the Authority.
 - d. Present employees are to be encouraged to refer minority applicants to the Authority.
 - e. Recruitment sources will be informed that qualified minority members are being sought for consideration for professional, sub-professional, office and manual work whenever the Authority hires.
- 5. All persons on the staff involved in making recommendations or decisions on hiring will be personally informed by the Affirmative Action Officer that minority applicants for all jobs are to be considered without discrimination.
- 7. The Authority will not practice discrimination with regard to placement and promotion of any employee.
 - a. All members of the staff who are concerned with placement and promotion decisions will be instructed to act without discrimination toward minority employees.
 - b. The promotion of minority employees who have increased their skills and job potential will be consistent with the promotion of all other employees.
- 8. The Authority will assure non-discriminatory pay, other compensation and working conditions by taking such steps as:
 - a. Examining rates of pay and fringe benefits for present employees with equivalent duties, and adjusting any inequities found.
 - b. Not reducing the compensation of existing employees who have been converted to on-the-job training status.

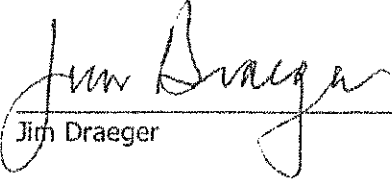
RESOLUTION No. 4-04

9. The Authority will not discriminate in its contracting and where possible will take appropriate steps such as encouraging minority group contractors and contractors with minority representation among their employees to submit proposals for contract work in order to promote equal opportunity.
10. The Authority will require all contractors to provide equal employment opportunity assurances.
11. The Authority will follow through by questioning, verifying, and making whatever changes or additions to this Equal Employment Opportunity Program as may be necessary to assure its effectiveness.


Effective Date: October 6, 2004


Ronald Van De Hey, Chair

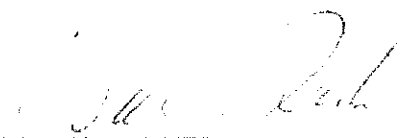

Will Dorsey


Jim Draeger

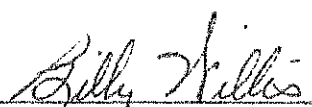

Jack Nelson


William Raaths


Robert Stark


Will Stark


Charles Vernhoeven


Billy Willis



Bylaws

ARTICLE I. OFFICES

- 1.01 Principle and Business Offices. The principle office of the Authority shall be in Kaukauna, Wisconsin. The Authority may have such other business offices, within or without the State of Wisconsin, as the Members may designate or as the business of the Authority may require from time to time.

ARTICLE II. MEMBERS

- 2.01 General Powers. The business and affairs of the Authority shall be managed by its Members consistent with Chapter 237 of the Wisconsin Statutes.
- 2.02 Tenure. Each Member shall hold office until his or her successor shall have been appointed, or until his or her prior death, resignation or removal. There shall be six (6) public members nominated by the Governor and with the advice and consent of the Senate appointed for staggered three (3) year terms commencing on the dates their predecessors' terms expire. If the Governor makes a provisional appointment of a Member and the appointee files the required oath of office, the appointee qualifies as a Member and may exercise all of the powers and duties of a Member. A provisional appointment shall lapse if the appointment is withdrawn or rejected by the Senate. If a Member's term expires and no successor shall have been appointed and qualifies, the Member shall continue to hold office until such time as the successor is appointed and qualifies. A member may resign at any time by filing his or her written resignation with the Secretary of the Authority at the Authority's principal offices. The secretary of the Department of Natural Resources, Secretary of the Department of Transportation, and director of the State Historical Society or their designees shall also serve as members.
- 2.03 Regular Meetings. A regular annual meeting of the Members shall be held on the fourth Tuesday in June at a time and place within the State of Wisconsin determined by a resolution of the Members or at such other time as set by resolution of the Members. Other regular meetings shall be held at times and places within or without the State of Wisconsin as may from time to time be determined by a resolution of the Members.
- 2.04 Special Meetings. Special meeting of the Members may be called by or at the request of the Chairperson, Secretary or any two Members. The Chairperson or Secretary calling any special meeting of the Members may fix any place, either within or without the State of Wisconsin, as the place for holding any special meeting of the Members called by them, and if no other place is fixed (and in the case of a special meeting called by Members) the place of meeting shall be the principal office of the Authority.
- 2.05 Notice: Waiver. Notice of such meeting of the Members (unless otherwise provided in or pursuant to Section 2.03) shall be given by written notice delivered personally or mailed or given by e-mail to each Member at his or her business address or at such other address as such Member shall have designated in writing and filed at the Authority's

principal offices. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail so addressed, with postage thereon prepaid. If notice be given by e-mail, such notice shall be deemed to be delivered when the e-mail is sent. Whenever any notice whatever is required to be given to any Member of the corporation under the bylaws or any provision of law, a waiver thereof, in writing, signed at any time, whether before or after the time of meeting, by the Member entitled to such notice, shall be deemed equivalent to the giving of such notice. The attendance of a Member at a meeting shall constitute a waiver of notice of such meeting, except where a Member attends a meeting and objects thereto to the transaction of any business because the meeting is not lawfully called or convened.

- 2.06 Quorum. Except as otherwise provided by these bylaws, a majority of the Members then in office shall constitute a quorum for the transaction of business at any meeting of the Members, but a majority of the Members present (though less than such quorum) may adjourn the meeting.
- 2.07 Manner of Acting. The act of the majority of the Members present at a meeting or present by means of a telephone conference call over a speaker telephone, at which a quorum is present, either in person or by telephone, shall be the act of the Members, unless the act of a greater number is required by these bylaws. A Member, in writing, may appoint a temporary alternate representative for a specific meeting. The voting on all questions at a meeting shall be by voice vote, unless a Member requests a roll call, in which case the Yeas/Nays shall be entered upon the minutes of the meeting. All resolutions shall be presented in writing or reduced to writing during or immediately after the meeting and shall be entered in full upon the minutes of the meeting.
- 2.08 Conduct of Meetings. The Chairperson, and in his or her absence, the Vice Chairperson, and in his or her absence, any Member chosen by the Members present, shall call meetings of the Members to order and shall act as chairperson of the meeting. The Secretary of the Authority shall act as secretary of all meetings of the Members, but in the absence of the Secretary, the presiding officer may appoint any Member or other person present to act as secretary of the meeting.
- 2.09 Presumption of Assent. A Member who is present at a meeting of the Members or a committee thereof of which he or she is a member at which action on any Authority matter is taken shall be presumed to have assented to the action taken unless his or her dissent shall be entered in the minutes of the meeting or unless he or she shall file his or her written dissent to such action with the person acting as the secretary of the meeting before the adjournment thereof or shall forward such dissent by registered mail to the Secretary of the Authority immediately after the adjournment of the meeting. Such right to dissent shall not apply to a Member who voted in favor of such action.
- 2.10 Committees. The Members by resolution adopted by the affirmative vote of a majority of the Members then in office may designate one or more standing committees, each committee to consist of two or not more than four members appointed by the Chairperson. Each such standing committee shall fix its own rules governing the conduct of its activities and shall make such reports to the Members of its activities as the Members may request.

The Members by resolution adopted by the affirmative vote of a majority of the Members then in office may designate one or more technical or advisory committees for a specified term, each committee to consist of not more than four Board Members and any number of non-Board members. The Chairperson shall have the authority to appoint the committee members. Each such technical or advisory committee shall fix its own rules governing the conduct of its activities and shall make such reports to the Members of its activities as the Members may request.

- 2.11 Unanimous Consent Without Meeting. Any action required or permitted by the bylaws or any provision of law to be taken by the Members at a meeting or by resolution may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the Members then in office.

ARTICLE III. OFFICERS

- 3.01 Number. The principal officers of the Authority shall be a Chairperson, a Vice Chairperson, a Secretary, a Treasurer, a Chief Executive Officer, and a Chief Operating Officer.
- 3.02 Election, Appointment and Term of Office. The Chairperson, Vice Chairperson, Secretary and Treasurer shall be elected by the Members from among the Members. Such other officers and assistant officers as may be deemed necessary may be elected or appointed by the Members. Any two or more offices may be held by the same person, except the offices of Chairperson and Vice Chairperson. The officers of the Authority to be elected by the Members shall be elected annually by the Members at the regular annual meeting of the Members. If the election of officers shall not be held at such meeting, such election shall be held as soon thereafter as conveniently may be. Each elected officer shall hold office until his or her successor shall have been duly elected or until his or her death, resignation or removal.
- 3.03 Removal. The Chairperson, Vice Chairperson, Secretary or Treasurer may be removed by the Members whenever in their judgment the best interest of the Authority will be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the person so removed. Election or appointment shall not of itself create contract rights.
- 3.04 Vacancies. A vacancy in the principal offices of Vice Chairperson, Secretary and Treasurer because of death, resignation, removal, or otherwise, shall be filled by the Chairperson for the unexpired portion of the term. A vacancy in the principal office of Chairperson shall be filled by the Members by special election at the next meeting.
- 3.05 Chairperson. The Chairperson shall, when present, preside at all meetings of the Members. He or she shall have authority, subject to such rules as may be prescribed by the Members, to appoint agents and employees. He or she shall have authority to sign, execute and acknowledge, on behalf of the Authority, all deeds, contracts, leases, reports and all other documents or instruments necessary or proper to be executed in the course of the Authority's regular business, or which shall be authorized by resolution of the Members; and except as otherwise provided by law or the Members, he or she may authorize any Vice Chairperson or other officer or agent of the Authority to sign, execute and acknowledge such documents or instruments in his or her place and stead. In general, he or she shall perform all duties incident to the office of Chairperson and

such other duties as may be prescribed by the Members from time to time; provided, however, that the Chairperson shall not be deemed hereby to participate in operating management of the Authority.

- 3.06 The Vice Chairperson. In the absence of the Chairperson or in the event of his or her death, inability or refusal to act, or in the event for any reason it shall be impracticable for the Chairperson to act personally, the Vice Chairperson shall perform the duties of the Chairperson, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Chairperson. The Vice Chairperson may sign, with the Secretary or Assistant Secretary, notes of the Authority; and shall perform such other duties and have such authority as from time to time may be delegated or assigned to him or her by the Chairperson or by the Members. The execution of any instrument of the Authority by the Vice Chairperson shall be conclusive evidence, as to third parties, of his or her authority to act in the stead of the Chairperson.
- 3.07 The Secretary. The Secretary shall: (a) keep the minutes of the meetings of the Members in one or more books provided for that purpose; (b) see that all notices are duly given in accordance with the provisions of these bylaws or as required by law; (c) be custodian of the Authority records and of the seal of the Authority and see that the seal of the Authority is affixed to all documents the execution of which on behalf of the Authority under its seal is duly authorized; (d) act as registrar for the bonds of the Authority; (e) sign with the Chairperson or the Vice Chairperson, debt securities of the Authority, the issuance of which shall have been authorized by resolution of the Members; and (f) in general, perform all duties and exercise such authority as from time to time may be delegated or assigned to him or her by the Chairperson or by the Members.
- 3.08 The Treasurer. The Treasurer shall: (a) have charge and custody of and be responsible for all funds and securities of the Authority; (b) receive and give receipts for moneys due and payable to the Authority from any source whatsoever, and deposit all such moneys in the name of the Authority in such banks as shall be selected in accordance with the provisions of Section 4.04; and (c) in general, perform all of the duties incident to the office of Treasurer and have such other duties and exercise such other authority as from time to time may be delegated or assigned to him or her by the Chairperson or by the Members. If required by the Members, the Treasurer shall give a bond for the faithful discharge of his or her duties in such sum and with such sureties as the Members shall determine, the cost to be paid by the Authority.
- 3.09 Chief Executive Officer. The Chief Executive Officer shall be the principal executive officer of the Authority, be hired by the Authority members, be subject to the control of the Members, and shall in general supervise and control all of the business and affairs of the Authority. He or she shall have authority to sign, execute and acknowledge documents or instruments co-extensive with the Chairperson. He or she shall perform all duties prescribed by the Members from time to time.
- 3.10 Chief Operating Officer. The Chief Operating Officer is the secondary officer of the Authority, is approved by the Authority members, be subject of control by the Executive Director, and shall supervise and control all day-to-day business and affairs of the Authority. He or she shall have the authority to sign, execute, and acknowledge documents and instruments in the absence of the Chief Executive Officer.

3.11 Other Personnel. The Chief Executive Officer may, from time to time, appoint and employ a system operation supervisor and such other personnel as may be deemed necessary to exercise the powers, duties and functions of the Authority. The qualifications, duties and numbers of such personnel shall be consistent with the policies determined by the Members.

3.12 Salaries. The salary of the Chief Executive Officer and Chief Operating Officer shall be fixed from time to time by the Members or a duly authorized committee thereof. Salaries of other personnel shall be fixed from time to time by the Chief Executive Officer or by a duly authorized committee of Members and shall be consistent with policies determined by the Members. No officer or other employee or agent shall be prevented from receiving such salary by reason of the fact that he or she is also a Member of the Authority; provided, however, that Members of the Authority shall serve as such without compensation but shall be entitled only to reimbursement of actual expenses.

ARTICLE IV. CONTRACTS, LOANS, CHECKS AND DEPOSITS: SPECIAL AUTHORITY ACTS.

4.01 Contracts. The Members may authorize any officer or officers, agent or agents, to enter into any contract or execute or deliver any instrument in the name of and on behalf of the Authority, and such authorization may be general or confined to specific instances. In the absence of other designation, all deeds and instruments of assignment or pledge made by the Authority shall be executed in the name of the Authority by the Chairperson, Vice Chairperson or the Chief Executive Officer, Chief Operating Officer; the Secretary, when necessary or required, shall affix the Authority seal thereto; and when so executed no other party to such instrument or any third party shall be required to make any inquiry into the authority of the signing officer or officers.

4.02 Loans. No indebtedness for borrowed money shall be contracted on behalf of the Authority and no evidences of such indebtedness shall be issued in its name unless authorized by or under the authority of a resolution of the Members. Such authorization may be general or confined to specific instances.

4.03 Checks, Drafts, Etc. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the Authority, shall be signed or otherwise authenticated and verified by two officers or agents of the Authority and in such manner as shall from time to time be determined by or under the authority of a resolution of the Members.

4.04 Deposits. All funds of the Authority not otherwise employed shall be deposited from time to time to the credit of the Authority in such bank or banks, as may be selected by or under the authority of a resolution of the Members.

4.05 Investment Fund. The Authority will develop an investment fund Memorandum of Agreement (MOA) with the foundation consortium including the Green Bay, Fox Cities and Oshkosh Community Foundations.

4.06 The Authority will develop a Financial Plan and adopt an annual budget.

ARTICLE V. EVIDENCE OF INDEBTEDNESS

- 5.02 Facsimile Signatures and Seal. The seal of the Authority on any evidences of indebtedness may be a facsimile. The signatures of the Chairperson, Vice Chairperson, Secretary, Chief Executive Officer, Chief Operating Officer upon any evidence of indebtedness may be facsimiles provided that either: any one such signature appearing on the evidence is manually affixed; or the evidence is manually countersigned by the registrar. All signatures on coupons which are part of an evidence of indebtedness may be facsimiles.
- 5.03 Signatures by Former Officers. In case any officer, who has signed or whose facsimile signature has been placed upon any evidence of indebtedness, shall have ceased to be such officer before such evidence is issued, it may be issued by the Authority with the same effect as if he or she were such officer at the date of its issue.
- 5.08 Regulations. The Members shall have the power and authority to make all such further rules and regulations not inconsistent with the statutes of the State of Wisconsin as it may deem expedient concerning the issue, transfer and registration of evidence of indebtedness of the Authority.

ARTICLE VI. SEAL

- 6.01 The Members shall provide an Authority seal which shall be circular in form and shall have inscribed thereon the name of the Authority.

ARTICLE VII. AMENDMENTS

- 7.01 Express Amendments. These bylaws may be altered, amended or repealed and new bylaws may be adopted by the Members by affirmative vote of a majority of the number of Members present at any meeting at which a quorum is in attendance.
- 7.02 Implied Amendments. Any action taken or authorized by the Members which would be inconsistent with the bylaws then in effect but is taken or authorized by affirmative vote of not less than the number of Members required to amend the bylaws so that the bylaws would be consistent with such action, shall be given the same effect as though the bylaws had been temporarily amended or suspended so far, but only so far, as is necessary to permit the specific action so taken or authorized.

ARTICLE VIII. FISCAL YEAR

- 8.01 Fiscal Year. The fiscal year of the Authority shall commence on the first day of July in each year and close on the next succeeding June 30.

ARTICLE IX. RESOLUTIONS

- 9.01 Severability. Unless otherwise expressly provided, if any one or more of the provisions of any resolution of the Authority should be determined by a court of competent jurisdiction to be contrary to law, then such provision or provisions shall be deemed and construed to be servable from the remaining provisions therein contained and shall in no way affect the validity of the other provisions of such resolution.

9.02 Headings. Any heading preceding the texts of the several articles and sections of any resolution of the Authority, and any table of contents or marginal notes appended thereto, shall be solely for convenience of reference and shall not constitute a part of such resolution, nor shall they affect its meaning, construction or effect.

9.03 Effective Date. Unless otherwise expressly provided, each resolution of the Authority shall take effect immediately upon its adoption in the manner provided by law.

9.04 Priority. Unless otherwise expressly provided, each resolution of the Authority shall be deemed to rescind and repeal all prior resolutions, rules or other actions, or part thereof, of the Authority in conflict with such subsequent resolution insofar (and only insofar) as such conflict exists. This provision shall not apply to conflicts between resolutions and bylaws of the Authority.

9.05 No Recourse Under Resolutions. All covenants, stipulations, promises, agreements and obligations of the Authority contained in any resolution of the Authority shall be deemed to be the covenants, stipulations, promises, agreements and obligations of the Authority and not of any member, officer or employee of the Authority in his or her individual capacity, and no recourse shall be had for any claim based on any resolution of the Authority against any member, officer or employee of the Authority.

9.06 Authority Complete. The officers of the Authority, attorneys, agents or employees of the Authority shall be automatically authorized to do all acts and things required of them by any resolution of the Authority of the full, punctual and complete performance of all of the provisions of such resolution.

ARTICLE X. INDEMNIFICATION OF MEMBERS AND OFFICERS

10.01 Mandatory Indemnification. The Authority shall indemnify any person who was or is a party or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (including an action by or in the right of the Authority) by reason of the fact that expenses, including attorney's fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action, suit or proceeding; provided, that there is a determination that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interest of the Authority, and, with respect to any criminal action or proceeding, had not reasonable cause to believe his or her conduct was unlawful. If such determination is not made by final adjudication in such action, suit or proceeding, it shall be made by arbitration in Madison, Wisconsin, in accordance with the rules then prevailing of the American Arbitration Association by panel of three arbitrators. One of the arbitrators will be selected by the Members by a majority vote of a quorum consisting of Members who were not parties to such action, suit or proceeding (or, if such a quorum is not obtainable, by independent legal counsel), the second by the officers and Members who may be entitled to indemnification, and the third by the two arbitrators selected by the parties. The termination of any action, suite or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to

the best interests of the Authority, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.

10.01 Advance Payment. Expense, including attorney's fees, incurred in defending a civil or criminal action, suit or proceeding may be paid by the Authority in advance of the final deposition of such action, suit, or proceeding upon receipt of an undertaking by or on behalf of the Member or officer to repay such amount unless it shall ultimately be determined that he or she is entitled to be indemnified by the Authority in accordance with this Article.

10.02 Other Rights. The indemnification provided by this Article shall not be deemed exclusive of any other indemnity which the Members, or this Authority, may lawfully grant or any other rights to which any officer, Member, employee or agent may be entitled, and shall continue as to a person who has ceased to be a Member or officer and shall inure to the benefit of the heirs, executors and administrators of such a person.

10.04 Insurance. The Authority shall purchase and maintain insurance on behalf of any person who is or was a Member, officer, employee or agent of the Authority, against any liability asserted against him or her and incurred by him or her in any such capacity or arising out of his or her status as such, whether or not the Authority would be obligated to indemnify him or her against such liability under the provisions of this Article. Such insurance may, but need not, be for the benefit of all Members, officers, employees and agents.

LOWER FOX ABANDONMENT STUDY

Executive Summary

GENERAL

The Lower Fox Abandonment Study was completed in 1994. The study identified and evaluated abandonment strategies that could be used in case of lock closures. The preferred closure alternative was constructing a concrete or stone masonry fixed crest-gravity dam at the downstream end of each lock chamber.

In 2015, the Fox River Navigational System Authority (FRNSA) commissioned OMNNI Associates and Boldt Construction to update some of the costs identified in the 1994 study. Specifically, Boldt updated costs associated with the fixed crest-gravity dam construction. On a lock by lock basis, Boldt updated costs for general conditions; site work and restoration; removals, disposals, and disconnects; concrete fill of valve chamber, concrete gravity dam and precast access concrete bridge. OMNNI Associates updated costs relating to shoreland stability (rip-rap installation).

The attached spreadsheet illustrates the update. Operation and maintenance costs were not included in the update.

FINANCIAL ANALYSIS

A. Updated construction costs

Using 2034 as an end date for the analysis, the 2015 construction cost is extrapolated to 2034 using a 2% rate of construction inflation.

2015 Construction Cost	2034 Construction Cost
\$4,500,000	\$6,500,000

B. Ongoing Operation and Maintenance (O&M) costs

The 1994 Abandonment Study used a sinking fund over a 50 year life. The following analysis looks at O&M costs for a \$75,000, \$150,000, and \$225,000 annual expenditures scenarios starting at 2015 \$. A sinking fund would need to be established to provide the future dollars for O&M.

Yearly O&M Expenditure (\$ 2015)	Fund Requirement	2034 Fund Balance
\$75,000	\$1,600,000	\$1,900,000
\$150,000	\$3,200,000	\$3,800,000
\$225,000	\$4,800,000	\$5,700,000
(Assuming growth at 6%, construction inflation at 2%, and a residual fund balance of \$0.)		

Lower Fox Abandonment Study 2015 Cost Updates

Item	Description	Menasha 1 Cost	Appleton 1 Cost	Appleton 2 Cost	Appleton 3 Cost	Appleton 4 Cost	Cadmus Cost	Little Chute 2 Cost	Combined Cost	Kaukauna 1 Cost	Kaukauna 2 Cost	Kaukauna 3 Cost	Kaukauna 4 Cost	Kaukauna 5 Cost	Rapid Croche Cost	Little Kaukauna Cost	De Pere Cost
SUBTOTAL		\$ 21,635.63	\$ 213,154.88	\$ 198,534.25	\$ 211,315.00	\$ 204,743.00	\$ 213,154.88	\$ 220,833.13	\$ 206,733.75	\$ 190,373.25	\$ 137,940.88	\$ 194,868.00	\$ 204,903.50	\$ 214,817.88	\$ 55,955.00	\$ 215,713.00	\$ 259,823.88
7	CONTINGENCY (10%)	\$ 2,163.56	\$ 21,315.49	\$ 19,853.43	\$ 21,131.50	\$ 20,474.30	\$ 21,315.49	\$ 22,083.31	\$ 20,673.38	\$ 19,037.33	\$ 13,794.09	\$ 19,486.80	\$ 20,494.35	\$ 21,481.79	\$ 5,595.50	\$ 21,521.30	\$ 25,982.59
8	CONSTRUCTION FEE (2.5%)	\$ 5,413.98	\$ 5,361.76	\$ 5,459.69	\$ 5,311.16	\$ 5,630.43	\$ 5,361.76	\$ 6,072.91	\$ 5,686.83	\$ 5,235.26	\$ 5,168.37	\$ 5,358.87	\$ 5,636.11	\$ 5,907.49	\$ 1,538.76	\$ 5,918.36	\$ 7,145.21
9	DESIGN & ENGINEERING (1.5%)	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35	\$ 3,245.35
10	SHORELAND STABILITY RIP RAP (VARIES)	\$ 10,000.00	\$ 65,000.00					\$ 165,000.00					\$ 50,000.00				\$ 10,000.00
	TOTAL LOCK COST	\$ 284,412.04	\$ 341,381.94	\$ 257,424.47	\$ 273,996.31	\$ 265,474.89	\$ 276,381.94	\$ 451,237.75	\$ 268,133.95	\$ 246,842.72	\$ 243,688.84	\$ 250,670.72	\$ 315,742.65	\$ 278,538.23	\$ 72,552.65	\$ 279,050.56	\$ 346,896.73
	TOTAL CONSTRUCTION COST	\$ 4,454,526.37															

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Menasha Lock No. 1

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam	1	lsum	\$ 10,000.00	\$ 10,000.00
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	2	each	\$ 1,000.00	\$ 2,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	15	ton	\$ 1,550.00	\$ 23,540.63
5b	Water Stop	68	lnft	\$ 75.00	\$ 5,100.00
5c	Erect and Strip Forming	1139	sqft	\$ 30.00	\$ 34,170.00
5d	Cast-in-Place Concrete (4000 psi)	225	cuyd	\$ 100.00	\$ 22,500.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	0	sqft	\$ 25.00	\$ -
6b	Railing	0	lnft	\$ 35.00	\$ -
SUBTOTAL				\$	211,635.63
7	CONTINGENCY (10%)			\$	21,163.56
8	CONSTRUCTION FEE (2.5%)			\$	5,819.98
9	DESIGN & ENGINEERING (15%)			\$	35,792.88
10	SHORELAND STABILITY 200' OF RIP RAP @ \$50/FT			\$	10,000.00
TOTAL LOCK COST				\$	284,412.04

Total Project Cost \$ 4,470,176.64

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Appleton Lock No. 1

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam	1	lsum	\$ 10,000.00	\$ 10,000.00
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	1	each	\$ 1,000.00	\$ 1,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	13	ton	\$ 1,550.00	\$ 19,564.88
5b	Water Stop	67	lnft	\$ 75.00	\$ 5,025.00
5c	Erect and Strip Forming	1120	sqft	\$ 30.00	\$ 33,600.00
5d	Cast-in-Place Concrete (4000 psi)	187	cuyd	\$ 100.00	\$ 18,700.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	320	sqft	\$ 25.00	\$ 8,000.00
6b	Railing	84	lnft	\$ 35.00	\$ 2,940.00
SUBTOTAL					\$ 213,154.88
7	CONTINGENCY (10%)				\$ 21,315.49
8	CONSTRUCTION FEE (2.5%)				\$ 5,861.76
9	DESIGN & ENGINEERING (15%)				\$ 36,049.82
10	SHORELAND STABILITY 1,300' OF RIP RAP @ \$50/FT				\$ 65,000.00
TOTAL LOCK COST					\$ 341,381.94

1994 Abandonment Study included \$1,164,200 for dike restoration and bank slope stabilization.
Much of that work has been completed. The update includes \$65,000 for bank slope stabilization (RIP RAP).

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Appleton Lock No. 2

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	Isum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam (at Appleton Lock No. 1)	0	Isum	\$ 10,000.00	\$ -
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	Isum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	2	each	\$ 1,000.00	\$ 2,000.00
3d	Electrical Disconnect	1	Isum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	14	ton	\$ 1,550.00	\$ 21,134.25
5b	Water Stop	69	lnft	\$ 75.00	\$ 5,175.00
5c	Erect and Strip Forming	1190	sqft	\$ 30.00	\$ 35,700.00
5d	Cast-In-Place Concrete (4000 psi)	202	cuyd	\$ 100.00	\$ 20,200.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	0	sqft	\$ 25.00	\$ -
6b	Railing	0	lnft	\$ 35.00	\$ -
SUBTOTAL				\$	198,534.25
7	CONTINGENCY (10%)			\$	19,853.43
8	CONSTRUCTION FEE (2.5%)			\$	5,459.69
9	DESIGN & ENGINEERING (15%)			\$	33,577.11
TOTAL LOCK COST				\$	257,424.47

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Appleton Lock No. 3

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam (at Appleton Lock No. 1)	0	lsum	\$ 10,000.00	\$ -
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	2	each	\$ 1,000.00	\$ 2,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	14	ton	\$ 1,550.00	\$ 20,925.00
5b	Water Stop	71	lnft	\$ 75.00	\$ 5,325.00
5c	Erect and Strip Forming	1260	sqft	\$ 30.00	\$ 37,800.00
5d	Cast-in-Place Concrete (4000 psi)	200	cuyd	\$ 100.00	\$ 20,000.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	320	sqft	\$ 25.00	\$ 8,000.00
6b	Railing	84	lnft	\$ 35.00	\$ 2,940.00
SUBTOTAL					\$ 211,315.00
7	CONTINGENCY (10%)				\$ 21,131.50
8	CONSTRUCTION FEE (2.5%)				\$ 5,811.16
9	DESIGN & ENGINEERING (15%)				\$ 35,738.65
TOTAL LOCK COST					\$ 273,996.31

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Appleton Lock No. 4

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	Isum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site SuperIntendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam	1	Isum	\$ 10,000.00	\$ 10,000.00
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoll	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	Isum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	2	each	\$ 1,000.00	\$ 2,000.00
3d	Electrical Disconnect	1	Isum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	10	ton	\$ 1,550.00	\$ 15,903.00
5b	Water Stop	65	lnft	\$ 75.00	\$ 4,875.00
5c	Erect and Strip Forming	1050	sqft	\$ 30.00	\$ 31,500.00
5d	Cast-in-Place Concrete (4000 psi)	152	cuyd	\$ 100.00	\$ 15,200.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	320	sqft	\$ 25.00	\$ 8,000.00
6b	Railing	84	lnft	\$ 35.00	\$ 2,940.00
SUBTOTAL					\$ 204,743.00
7	CONTINGENCY (10%)				\$ 20,474.30
8	CONSTRUCTION FEE (2.5%)				\$ 5,630.43
9	DESIGN & ENGINEERING (15%)				\$ 34,627.16
TOTAL LOCK COST					\$ 265,474.89

1994 Abandonment Study included \$18,750 for dike restoration and bank slope stabilization.
Much of that work has been completed.

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Cedars Lock

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam	1	lsum	\$ 10,000.00	\$ 10,000.00
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	1	each	\$ 1,000.00	\$ 1,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	13	ton	\$ 1,550.00	\$ 19,564.88
5b	Water Stop	67	lnft	\$ 75.00	\$ 5,025.00
5c	Erect and Strip Forming	1120	sqft	\$ 30.00	\$ 33,600.00
5d	Cast-in-Place Concrete (4000 psi)	187	cuyd	\$ 100.00	\$ 18,700.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	320	sqft	\$ 25.00	\$ 8,000.00
6b	Railing	84	lnft	\$ 35.00	\$ 2,940.00
SUBTOTAL					\$ 213,154.88
7	CONTINGENCY (10%)				\$ 21,315.49
8	CONSTRUCTION FEE (2.5%)				\$ 5,861.76
9	DESIGN & ENGINEERING (15%)				\$ 36,049.82
TOTAL LOCK COST					\$ 276,381.94

1994 Abandonment Study included \$174,170 for dike restoration and bank slope stabilization.
Much of that work has been completed.

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Little Chute Lock No. 2

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam	1	lsum	\$ 10,000.00	\$ 10,000.00
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	1	each	\$ 1,000.00	\$ 1,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	17	ton	\$ 1,550.00	\$ 25,633.13
5b	Water Stop	73	lnft	\$ 75.00	\$ 5,475.00
5c	Erect and Strip Forming	1330	sqft	\$ 30.00	\$ 39,900.00
5d	Cast-in-Place Concrete (4000 psi)	245	cuyd	\$ 100.00	\$ 24,500.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	0	sqft	\$ 25.00	\$ -
6b	Railing	0	lnft	\$ 35.00	\$ -
SUBTOTAL					\$ 220,833.13
7	CONTINGENCY (10%)				\$ 22,083.31
8	CONSTRUCTION FEE (2.5%)				\$ 6,072.91
9	DESIGN & ENGINEERING (15%)				\$ 37,348.40
10	SHORELAND STABILITY 3,300' OF RIP RAP @ \$50/FT				\$ 165,000.00
TOTAL LOCK COST					\$ 451,337.75

1994 Abandonment Study included \$1,008,750 for dike restoration and bank slope stabilization.
Much of that work has been completed. The update includes \$165,000 for bank slope stabilization (RIP RAP).

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Combined Locks

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	install and Remove Cofferdam (at Little Chute No. 2)	0	lsum	\$ 10,000.00	\$ -
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	6	each	\$ 3,000.00	\$ 18,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	1	each	\$ 1,000.00	\$ 1,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	13	ton	\$ 1,550.00	\$ 19,878.75
5b	Water Stop	74	lnft	\$ 75.00	\$ 5,550.00
5c	Erect and Strip Forming	1368	sqft	\$ 30.00	\$ 41,040.00
5d	Cast-in-Place Concrete (4000 psi)	190	cuyd	\$ 100.00	\$ 19,000.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	0	sqft	\$ 25.00	\$ -
6b	Railing	0	lnft	\$ 35.00	\$ -
SUBTOTAL				\$	206,793.75
7	CONTINGENCY (10%)			\$	20,679.38
8	CONSTRUCTION FEE (2.5%)			\$	5,686.83
9	DESIGN & ENGINEERING (15%)			\$	34,973.99
TOTAL LOCK COST				\$	268,133.95

1994 Abandonment Study included \$42,000 for dike restoration and bank slope stabilization.
Much of that work has been completed.

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Kaukauna Lock No. 1

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam (at Kaukauna Guard)	0	lsum	\$ 10,000.00	\$ -
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	1	each	\$ 1,000.00	\$ 1,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	12	ton	\$ 1,550.00	\$ 18,623.25
5b	Water Stop	67	lnft	\$ 75.00	\$ 5,025.00
5c	Erect and Strip Forming	1120	sqft	\$ 30.00	\$ 33,600.00
5d	Cast-in-Place Concrete (4000 psi)	178	cuyd	\$ 100.00	\$ 17,800.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	0	sqft	\$ 25.00	\$ -
6b	Railing	0	lnft	\$ 35.00	\$ -
SUBTOTAL				\$	190,373.25
7	CONTINGENCY (10%)			\$	19,037.33
8	CONSTRUCTION FEE (2.5%)			\$	5,235.26
9	DESIGN & ENGINEERING (15%)			\$	32,196.88
TOTAL LOCK COST				\$	246,842.72

1994 Abandonment Study included \$67,200 for dike restoration and bank slope stabilization.
Much of that work has been completed.

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Kaukauna Lock No. 2

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam (at Kaukauna Guard)	0	lsum	\$ 10,000.00	\$ -
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	0	each	\$ 1,000.00	\$ -
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	12	ton	\$ 1,550.00	\$ 17,890.88
5b	Water Stop	67	lnft	\$ 75.00	\$ 5,025.00
5c	Erect and Strip Forming	1120	sqft	\$ 30.00	\$ 33,600.00
5d	Cast-in-Place Concrete (4000 psi)	171	cuyd	\$ 100.00	\$ 17,100.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	0	sqft	\$ 25.00	\$ -
6b	Railing	0	lnft	\$ 35.00	\$ -
SUBTOTAL				\$	187,940.88
7	CONTINGENCY (10%)			\$	18,794.09
8	CONSTRUCTION FEE (2.5%)			\$	5,168.37
9	DESIGN & ENGINEERING (15%)			\$	31,785.50
TOTAL LOCK COST				\$	243,688.84

1994 Abandonment Study included \$5,600 for dike restoration and bank slope stabilization.
Much of that work has been completed.

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Kaukauna Lock No. 3

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam (at Kaukauna Guard)	0	lsum	\$ 10,000.00	\$ -
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	2	each	\$ 1,000.00	\$ 2,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	13	ton	\$ 1,550.00	\$ 20,088.00
5b	Water Stop	69	lnft	\$ 75.00	\$ 5,175.00
5c	Erect and Strip Forming	1136	sqft	\$ 30.00	\$ 34,080.00
5d	Cast-in-Place Concrete (4000 psi)	192	cuyd	\$ 100.00	\$ 19,200.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	0	sqft	\$ 25.00	\$ -
6b	Railing	0	lnft	\$ 35.00	\$ -
SUBTOTAL				\$	194,868.00
7	CONTINGENCY (10%)			\$	19,486.80
8	CONSTRUCTION FEE (2.5%)			\$	5,358.87
9	DESIGN & ENGINEERING (15%)			\$	32,957.05
TOTAL LOCK COST				\$	252,670.72

1994 Abandonment Study included \$22,400 for dike restoration and bank slope stabilization.
Much of that work has been completed.

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Kaukauna Lock No. 4

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam (at Kaukauna Guard)	0	lsum	\$ 10,000.00	\$ -
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	1	each	\$ 1,000.00	\$ 1,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	13	ton	\$ 1,550.00	\$ 19,669.50
5b	Water Stop	69	lnft	\$ 75.00	\$ 5,175.00
5c	Erect and Strip Forming	1168	sqft	\$ 30.00	\$ 35,040.00
5d	Cast-in-Place Concrete (4000 psi)	188	cuyd	\$ 100.00	\$ 18,800.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	320	sqft	\$ 25.00	\$ 8,000.00
6b	Railing	84	lnft	\$ 35.00	\$ 2,940.00
SUBTOTAL					\$ 204,949.50
7	CONTINGENCY (10%)				\$ 20,494.95
8	CONSTRUCTION FEE (2.5%)				\$ 5,636.11
9	DESIGN & ENGINEERING (15%)				\$ 34,662.08
10	SHORELAND STABILITY 1,000' OF RIP RAP @ \$50/FT				\$ 50,000.00
TOTAL LOCK COST					\$ 315,742.65

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Kaukauna Lock No. 5

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam (at Kaukauna Guard)	0	lsum	\$ 10,000.00	\$ -
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	1	each	\$ 1,000.00	\$ 1,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	15	ton	\$ 1,550.00	\$ 22,912.88
5b	Water Stop	72	lnft	\$ 75.00	\$ 5,400.00
5c	Erect and Strip Forming	1278	sqft	\$ 30.00	\$ 38,340.00
5d	Cast-In-Place Concrete (4000 psi)	219	cuyd	\$ 100.00	\$ 21,900.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	320	sqft	\$ 25.00	\$ 8,000.00
6b	Railing	84	lnft	\$ 35.00	\$ 2,940.00
SUBTOTAL				\$	214,817.88
7	CONTINGENCY (10%)			\$	21,481.79
8	CONSTRUCTION FEE (2.5%)			\$	5,907.49
9	DESIGN & ENGINEERING (15%)			\$	36,331.07
TOTAL LOCK COST				\$	278,538.23

1994 Abandonment Study included \$16,800 for dike restoration and bank slope stabilization.
Much of that work has been completed.

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Rapid Croche Lock

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	10	hour	\$ 75.00	\$ 750.00
1c	Site SuperIntendent	80	hour	\$ 90.00	\$ 7,200.00
1d	Project Coordinator	5	hour	\$ 65.00	\$ 325.00
1e	Crane	2	weeks	\$ 2,500.00	\$ 5,000.00
1f	Equipment	2	weeks	\$ 1,200.00	\$ 2,400.00
1g	Hand Tools and Consumables	2	weeks	\$ 500.00	\$ 1,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam	0	lsum	\$ 10,000.00	\$ -
2b	Dewatering	0	weeks	\$ 2,500.00	\$ -
2c	Soil Fill and Grading	0	cuyd	\$ 25.00	\$ -
2d	Topsoll	0	cuyd	\$ 35.00	\$ -
2e	Seed, Mulch and Fertilizer	0	sqyd	\$ 9.00	\$ -
2f	Fencing	0	lnft	\$ 15.00	\$ -
2g	Filling Hot Water Dip Tank	232	cuyd	\$ 40.00	\$ 9,280.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	0	each	\$ 3,000.00	\$ -
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	0	lsum	\$ 8,000.00	\$ -
3c	Remove/Dispose Framed Buildings	0	each	\$ 1,000.00	\$ -
3d	Electrical Disconnect	0	lsum	\$ 1,000.00	\$ -
3e	Equipment Removal	1	lsum	\$ 20,000.00	\$ 20,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	0	sqft	\$ 30.00	\$ -
4b	Lean Concrete Fill (2000 psi)	0	cuyd	\$ 100.00	\$ -
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	0	ton	\$ 1,550.00	\$ -
5b	Water Stop	0	lnft	\$ 75.00	\$ -
5c	Erect and Strip Forming	0	sqft	\$ 30.00	\$ -
5d	Cast-in-Place Concrete (4000 psi)	0	cuyd	\$ 100.00	\$ -
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	0	sqft	\$ 25.00	\$ -
6b	Railing	0	lnft	\$ 35.00	\$ -
SUBTOTAL					\$ 55,955.00
7	CONTINGENCY (10%)				\$ 5,595.50
8	CONSTRUCTION FEE (2.5%)				\$ 1,538.76
9	DESIGN & ENGINEERING (15%)				\$ 9,463.39
TOTAL LOCK COST					\$ 72,552.65

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
Little Kaukauna Lock

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam	1	lsum	\$ 10,000.00	\$ 10,000.00
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	1	each	\$ 1,000.00	\$ 1,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	13	ton	\$ 1,550.00	\$ 20,088.00
5b	Water Stop	68	lnft	\$ 75.00	\$ 5,100.00
5c	Erect and Strip Forming	1152	sqft	\$ 30.00	\$ 34,560.00
5d	Cast-in-Place Concrete (4000 psi)	192	cuyd	\$ 100.00	\$ 19,200.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	320	sqft	\$ 25.00	\$ 8,000.00
6b	Railing	84	lnft	\$ 35.00	\$ 2,940.00
SUBTOTAL				\$	215,213.00
7	CONTINGENCY (10%)			\$	21,521.30
8	CONSTRUCTION FEE (2.5%)			\$	5,918.36
9	DESIGN & ENGINEERING (15%)			\$	36,397.90
TOTAL LOCK COST				\$	279,050.56

For River Navigational System Authority
2015 Abandonment Study
Fixed Crest Gravity Dam Option
DePere Lock

Item	Description	Qty	Units	Cost/Unit	Cost
1	GENERAL CONDITIONS				
1a	Mobilization/Demobilization	1	lsum	\$ 10,000.00	\$ 10,000.00
1b	Project Manager	15	hour	\$ 75.00	\$ 1,125.00
1c	Site Superintendent	160	hour	\$ 90.00	\$ 14,400.00
1d	Project Coordinator	10	hour	\$ 65.00	\$ 650.00
1e	Crane	4	weeks	\$ 2,500.00	\$ 10,000.00
1f	Equipment	4	weeks	\$ 1,200.00	\$ 4,800.00
1g	Hand Tools and Consumables	4	weeks	\$ 500.00	\$ 2,000.00
2	SITE WORK AND RESTORATION				
2a	Install and Remove Cofferdam	1	lsum	\$ 10,000.00	\$ 10,000.00
2b	Dewatering	4	weeks	\$ 2,500.00	\$ 10,000.00
2c	Soil Fill and Grading	100	cuyd	\$ 25.00	\$ 2,500.00
2d	Topsoil	50	cuyd	\$ 35.00	\$ 1,750.00
2e	Seed, Mulch and Fertilizer	400	sqyd	\$ 9.00	\$ 3,600.00
2f	Fencing	300	lnft	\$ 15.00	\$ 4,500.00
3	REMOVALS, DISPOSALS AND DISCONNECTS				
3a	Remove/Dispose Lock Gates	4	each	\$ 3,000.00	\$ 12,000.00
3b	Remove/Dispose Gears, Valves, Spurs, Tripods, Misc. Metals	1	lsum	\$ 8,000.00	\$ 8,000.00
3c	Remove/Dispose Framed Buildings	1	each	\$ 1,000.00	\$ 1,000.00
3d	Electrical Disconnect	1	lsum	\$ 1,000.00	\$ 1,000.00
4	CONCRETE FILL OF VALVE CHAMBER				
4a	Erect and Strip Forming	400	sqft	\$ 30.00	\$ 12,000.00
4b	Lean Concrete Fill (2000 psi)	160	cuyd	\$ 100.00	\$ 16,000.00
5	CONCRETE GRAVITY DAM				
5a	Steel Reinforcement	22	ton	\$ 1,550.00	\$ 34,630.88
5b	Water Stop	82	lnft	\$ 75.00	\$ 6,150.00
5c	Erect and Strip Forming	1656	sqft	\$ 30.00	\$ 49,680.00
5d	Cast-in-Place Concrete (4000 psi)	331	cuyd	\$ 100.00	\$ 33,100.00
6	PRECAST CONCRETE ACCESS BRIDGE				
6a	Precast Deck	320	sqft	\$ 25.00	\$ 8,000.00
6b	Railing	84	lnft	\$ 35.00	\$ 2,940.00
SUBTOTAL					\$ 259,825.88
7	CONTINGENCY (10%)				\$ 25,982.59
8	CONSTRUCTION FEE (2.5%)				\$ 7,145.21
9	DESIGN & ENGINEERING (15%)				\$ 43,943.05
10	SHORELAND STABILITY 200' OF RIP RAP @ \$50/FT				\$ 10,000.00
TOTAL LOCK COST					\$ 346,896.73

1994 Abandonment Study included \$109,300 for dike restoration and bank slope stabilization.
Much of that work has been completed. The update includes \$10,000 for bank slope stabilization (RIP RAP).