

FOX RIVER NAVIGATIONAL SYSTEM

MANAGEMENT PLAN

Introduction/Agency Description

The Fox River Navigational System Authority (Authority) was created in 2001 to oversee the navigational system on the Fox River following the transfer of the system from the federal government to the state, which occurred on September 17, 2004. As outlined in Chapter 237, Wisconsin Statutes, the authority's primary responsibility is to repair, rehabilitate, replace, operate and maintain the navigational system. To meet this responsibility, the authority must develop and implement a plan to manage monies received from the federal government and the state to ensure that sufficient funds are available for repair and rehabilitation of the system. The authority will also partner 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. The other board members consist of the secretaries 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 by rehabilitating, maintaining, developing and operating the navigational system to:

- Promote tourism, recreational and commercial use of the navigational system through heritage parkway management and
- Maintain and improve the scenic, physical, historic and environmental character of the 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:

Program 1: Establishment and Operation (2006 / 2007)

Goal: Maintain and improve the navigational system to allow recreational use, ensure safety and control the spread of invasive species.

Objective/Activity: Develop and implement a management plan, including specific needs and costs, for the rehabilitation, repair and maintenance of the navigational system.

Objective/Activity: Stabilize existing facilities to address safety concerns and major infrastructure failure.

Objective/Activity: Prepare aquatic invasive species management plan and begin monitoring program.

Goal: Continue to operate the three locks that are currently open for public use.

Objective/Activity: Maintain the three locks in operable condition and ensure there are sufficient resources to operate them.

Program 2: Restoration and Maintenance (2006 / 2007)

Goal: Restore the locks and infrastructure to allow system navigation.

Objective/Activity: Restore Phase 1, Appleton locks 1-4 and canal system for operation in 2008.
Objective/Activity: Begin restoration of Phase 2, Cedars and Lt. Chute locks and canal.

Goal: Maintain the navigation system to prevent deterioration.

Objective/Activity: Provide basic maintenance to sustain the operating and restored infrastructure in a sound condition.

Objective/Activity: Provide basic maintenance to prevent additional serious safety hazards and deterioration of the un-restored portions of the navigational system.

Strategy Statement

The Authority has prepared a revised strategy for future management of the Fox River Navigation System. The recommended approach remains the same, to "restore the Fox Locks Navigation System in a phased manner consistent with long-term financial sustainability." This approach, dependant upon anticipated funding, includes the restoration, long term maintenance and operation of the lock system including the three major lock segments in Appleton, Little Chute and Kaukauna. This approach also includes the continued maintenance and operation of the three currently operating locks at DePere, Little Kaukauna and Menasha, the maintenance of the sea lamprey barrier at Rapide Croche, and the operation and maintenance of the four Appleton locks starting in 2008. The preferred restoration option includes an accelerated renovation schedule. A longer term basic or back-up schedule is also outlined. A fall-back alternative is also included to close part or all of the system in a phased manner if required. Key to the Authority's strategy is system sustainability; that being 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 A) for the navigational system that the Authority has signed with the State of Wisconsin. During this period all lands and facilities in the system will also be managed consistent with the Fox River State Heritage Parkway concept.

Deleted: n initial

Deleted: is

Deleted: and

Deleted: .

Funding/Financial Requirements

The Authority's management strategy is predicated upon financial sustainability of funding for the 30 year period. To accomplish this, the Authority has established an investment strategy that provides a base funding mechanism to support capital development and operating funds over a prolonged period as well as flexibility to adjust for additional funding sources.

Capital Development (Restoration) Funding

The basic financing for the Authority is provided in the 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 fund. 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 has 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. 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 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 B) between the Authority and the three foundations has been approved. An investment plan has been prepared by the foundations and financial transaction mechanisms between the foundations and the Authority have also been prepared. Approximately one half of the 2.8 million dollar local cost share has been raised and invested as of January 2007 with pledged amounts approximating 2.5 million dollars.

Deleted: are being
Deleted: 5

The foundations together with other local groups have a proactive fund raising effort underway. The intent of this effort is to commit additional dollars beyond the 2.8 million to expedite the restoration. The funds would be received over a four year schedule. These funds would be used to supplement the escrow fund and allow an expedited lock restoration schedule.

Deleted: an additional five million dollars during 2005.

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.

Deleted: While no grants have currently been applied for,
Deleted: s

The Authority has prepared two series of cost/income schedules, one for the expedited restoration and one for the basic restoration. These schedules outline 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. The preferred strategy outlines full system restoration in 5 years (2010). This strategy would require drawing the escrow fund down to a total of 5.5 million dollars during the last year of restoration. The accelerated and basic schedules are listed in Appendix C.

Deleted: 7

The Authority has also specified that sufficient funds will be reserved to partially close the system should the action be required. As an example, if a decision were made in 2005 not to restore the 14 inoperable locks, approximately 8.5 million dollars would be required for abandonment. If during the restoration process a decision for abandonment were made, the escrow account would address funds for closure options. The amount of funds depends upon how much of the system is closed and the timing of closure.

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. For 2007, daily permits are \$6.00 for boats under 26 feet and \$12.00 for boats over 26 feet. Annual permits are \$120.00 allowing unlimited lockage. Additional charges of fifty cents per person are assessed to tour boats for each lockage. For the 2007 season the Authority established a revised fee schedule.

Deleted: 5
Deleted: 5
Deleted: 0
Deleted: 0
Deleted: After the
Deleted: 2005
Deleted: will evaluate the

Rental income - The Authority currently leases space in the Kaukauna office to the Corps of Engineers. The Corps is renting on a month-to-month basis for \$2,365. The Corps is currently re-evaluating the need for space in the Kaukauna office.

Outgrant/property
Income -

The Authority has over 95 acres of real property and approximately 60 outgrants consisting of leases and easements. Some land parcels are outlying or may be declared excess and therefore may be sold for an indeterminate income. Outgrants are beginning to be 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 \$126,700 in annual operating assistance to the Fox River Management Commission. The Authority is requesting continuation of this allocation to offset operation.

Capital fund
Interest -

The capital fund investment is generating interest income. A portion of this income is scheduled to offset other sources of operating income when required. Whereas the capital fund interest income is a primary source of restoration funding, the draw on this source will be minimized where possible.

Restoration Process

The preferred restoration process involves phasing construction for major lock segments over a five year period. 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. In 2006 the major restoration phases began with proposed completion in 2010. The initiation of each succeeding phase is dependent upon adequate financial resources.

Appleton Phase 1 - The first, second, third and fourth locks restored in 2006.

Little Chute Phase 2 - The Cedars Lock and the Little Chute Levee, completed in 2007. The Guard Lock, Little Chute Lock and Combined Locks completed in 2008.

Kaukauna Phase 3 - The most complex, this phase would be completed in 2009. Five locks would be restored in Kaukauna.

The restoration process involves 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.

Appleton Phase 1 - 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.

Stabilization Work - The lock system has been evaluated to determine immediate stabilization needs. Various portions of infrastructure are beginning to collapse and pose either a safety hazard or, if not addressed, will lead to greater

- ~~Deleted: will begin~~
- ~~Deleted: will be~~
- ~~Deleted: will~~
- ~~Deleted: i~~
- ~~Deleted: 09~~
- ~~Deleted: ,~~
- ~~Deleted: Little Chute Guard lock, Lock 2, and Combined locks would be completed would be~~
- ~~Deleted: take two to three years to~~
- ~~Deleted: beginning~~
- ~~Deleted: 8~~
- ~~Deleted: and a boat lift installed at the Rapide Croche~~
- ~~Deleted: are proposed for restoration~~
- ~~Deleted: is proposing to~~
- ~~Deleted: is currently underway and a list of contractors will be selected before the end of~~
- ~~Deleted: June~~
- ~~Deleted: will be~~
- ~~Deleted: is targeted for~~
- ~~Deleted: October~~
- ~~Deleted: work potentially~~
- ~~Deleted: Nov~~

restoration costs. Examples are lock gates that may collapse, pop-outs in stone walls, and sink holes in dikes. The primary work is directed to the Kaukauna and Little Chute segments. The itemized list will be used to prepare a short-term contract proposal on a time and materials basis. The contract maximum is targeted for \$100,000. A contractor was selected and initial work completed in 2006 and 2006. Contractor selection is again scheduled for June, 2007.

Deleted: 5

Deleted: 5

The Authority has used the Mead & Hunt engineering information to prepare the restoration strategy and schedule. As the detailed plans and costs are prepared, alternative restoration proposals may reflect additional cost savings. To validate the Mead & Hunt study, a major local contractor with historic lock reconstruction experience evaluated Appleton Locks 1&2 to taking into account at cost validation, constructability and risks. The contractor indicated that cost estimates appear to be within 10 percent of their estimate. The contractor indicated that one unknown was the availability of limestone lock wall blocks if replacements were necessary. Appendix D contains the contractor's response for the Appleton project.

While it is anticipated other improvements will be made to the land and facilities in accordance with the Heritage Parkway concept, their development and funding is not scheduled in this plan. The cost schedules for the preferred restoration process and the back-up alternative are included in Appendix C.

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 operation of the locks can be estimated from the historical records of the Fox River Management Commission. The number of locks, staffing, hours of operation and wages have been consistent over the last five years. The annual operating cost was approximately \$126,000. No significant change in these factors is anticipated for 2007 with the exception of small wage increases for the lock tenders.

Deleted: 5

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. dike repairs) was contracted out. Adequate historical records from the Corps for calculating annual costs are 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.

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 start-up 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 Closure

A fall-back alternative for partial or full closure of the system in a phased manner is incorporated into the management strategy. While the complete closure of the system is the worst-case option, partial closure is

the practical alternative selected by the Authority. The DePere, Little Kaukauna and Menasha locks are structurally sound and have low maintenance costs. They also have the only lockages in the system. The permanent closure costs of 3.5 million dollars 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 total 2005 system closure cost from 12 million dollars to 8.5 million dollars. As additional lock segments are also restored, the cost basis for closure becomes less significant because of the long-term maintenance/initial closure cost-benefit ratio.

If permanent closure of portions or all 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, 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 not pre-selected a closure alternative. While it is the worst-case scenario, Alternative B – Earth Filled Lock Chambers is the closure method selected for estimating the cost of closure for the purpose of a closure reserve fund. This alternative assumes the Authority makes the decision to partially or totally close the navigation system, properly abandoning the infrastructure and disposing the property. If closure is needed, the more likely closure option is Alternative C, Fixed Crest Gravity Dam. This option has less initial cost but higher long-term maintenance cost. The estimated closure cost schedules are included in Appendix F.

Management Timeline

The short-term strategy timeline includes:

- 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)
 - Website, June, 2005 (on-going)
 - Staffing, April, 2005 (completed)

Deleted: (completed)

The long-term strategy timeline includes:

- Continue three lock operation – 2005 to 2009
- Lock preventative capital maintenance (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,

Deleted: -

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 DePere, Lt. Kaukauna, Menasha
 - Limited (3 or 5 day) operation for Appleton segment

- Little Chute Restoration Phase – 2007 & 2008
 - Contract preparation, bid – spring 2007 & spring 2008
 - Cedars Lock and levee restoration, November 2007, remaining locks, December, 2008

- Begin 8 lock operation – 2008
 - Regular operation for DePere, Lt. Kaukauna, Menasha
 - Limited (3 or 5 day) operation for Appleton, Cedars segment

- Begin 11 lock operation – 2009
 - Regular operation for DePere, Lt. Kaukauna, Menasha
 - Limited operation (3 or 5 day) operation for Appleton and Lt Chute segments

- Begin Kaukauna Restoration Phase – 2009
 - Contract preparation, bid – October 2008
 - Lock restoration, November 2008 to May 2010

- Begin 16 lock operation – 2010
 - Regular operation for DePere, Lt. Kaukauna, Menasha
 - Limited operation (3 or 5 day) operation for Appleton, Lt Chute and Kaukauna segments

- Rapide Croche Lift Construction (dependant upon funding) – 2010
 - Contract preparation, bid – November 2009
 - Lift installation – December 2009 – December 2010

- Begin 16 lock and lift operation – 2011
 - Regular operation for DePere, Lt. Kaukauna, Menasha
 - Limited operation (3 or 5 day) for Appleton, Little Chute, Kaukauna segment
 - Limited (3 or 5 day) operation for boat lift

Deleted: October, 2006

Deleted: 6

Deleted: -

Deleted: 7

Deleted: 11

Deleted: Little Chute

Formatted: Bulleted + Level: 1 + Aligned at: 0.75" + Tab after: 1" + Indent at: 1"

Formatted: Bulleted + Level: 2 + Aligned at: 1.25" + Tab after: 1.5" + Indent at: 1.5"

Deleted: 2007 to

Deleted: 7

Deleted: 7

Deleted: 09

Formatted: Indent: Left: 1.25"

Formatted: Bullets and Numbering

Deleted: 08-2009

Deleted: 8

Deleted: 8

Deleted: July

Deleted: 09

Deleted: 09

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 is maintaining the current sea lamprey barrier at Rapide Croche until an agreement is made for Authority control.

The Authority is dedicated to exotic species control and management and will incorporate management practices on the navigation system wherever feasible. According to SS237.10(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.”

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

Deleted: ¶
¶

Fox River Heritage Parkway Plan

The Authority is managing the navigational system with guidance from the *Fox River Heritage State Parkway Concept Plan* prepared by the East Central Wisconsin Regional Planning Commission in 1997. This plan demonstrates the potential for establishing a state heritage parkway on historic Corps of Engineers navigational lands along the Fox River from DePere to Portage. The plan reviews river resources, outlines the history of the river and the parkway concept, and establishes goals and objectives for parkway development.

The principal areas of the parkway include the 26 historic and existing locks and three harbors of refuge at 20 sites along the Fox River. Land areas total over 350 acres. The core area of the parkway is the 17 locks on 95 acres of land along the Lower Fox River as most of the nine locks along the Upper Fox River were abandoned in 1960.

The transfer of the Fox River Navigational System from the Corps of Engineers to the State of Wisconsin, Fox River Navigational Authority, in 2004 was a predominant recommendation in the Parkway Concept Plan. Once restoration of the navigation system is underway additional recommendations for formal establishment of the Parkway can be initiated.

Annual Budget

The annual budget is scheduled for adoption at the annual meeting held the last Wednesday in June. The development of a preliminary budget is scheduled each January. Due to initial year start-up activities an operating fund was established on September 9, 2004 and the 2005 annual budget through June 30, 2005 was adopted on January 5, 2005. The year 2006 and 2007 budgets were approved on June 25th. The adopted 2006/2007 budgets are included in Appendix H.

Property Insurance

Property insurance has been purchased through the Department of Administration. State Risk Management has determined the coverage and cost based upon the values of the Fox River office and out-buildings. Lock tender houses and accessory structures are not insured.

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 officials 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.

Deleted: Wisconsin Municipal Mutua
 Deleted: I
 Deleted: (WMMIC)
 Deleted: WMMIC

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 SS237.02(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. All employees are currently 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 SS237.08(2) and from contributions raised from the foundations under SS237.08(3).

The Authority has contracted a firm to maintain the financial accounting system. The Authority has also selected a financial auditor to perform the annual audit required in SS237.07. The Authority has selected the State Fiscal Year of July 1st through June 30th. The annual audit will be prepared in July, approved by the Authority in August and submitted to the Wisconsin Department of Administration.

Inter-agency Coordination

The Fox River Navigational System Authority is coordinating its activities with state, federal and local agencies. A Cooperative Agreement (Appendix J) has been approved between the Fox River Navigational System 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.

The Authority will also be initiating cooperative agreements with the Department of Administration Division of State Facilities for issues such as new outgrant approval; The Department of Natural Resources for contamination clean-up including asbestos and lead paint; the Department of Transportation for bridge operation; and the State Historical Society for historic preservation of National Register sites.

The Authority is also working with various local municipalities and organizations. Examples include bridge issues in the City of Appleton and Village of Little Chute; adjacent site development planning with the City of Menasha; pedestrian trail planning with the Fox Cities Greenways organization; and lock tender house reuse with the Friends of the Fox organization.

Deleted: ¶

Administrative Matters

The Wisconsin Statutes Chapter 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 K.

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

The Authority will address and adopt responses to additional statutory requirements as they arise.