

1. **RFP NUMBER** EPA R5-GL2010-1
FOCUS AREA TOXIC SUBSTANCES AND AREAS OF CONCERN
PROGRAM Coordinated Implementation of Remedial Action Plan Programs and Processes
2. **NAME OF PROPOSAL** **RENARD ISLAND ENVIRONMENTAL CAPPING PROJECT**
3. **POINT OF CONTACT** Dean Haen, Brown County, Wisconsin,
2561 S. Broadway Street, Green Bay, WI 54304
Phone: 920.492.4953 Fax: 920.492.4957
Email: haen_dr@co.brown.wi.us DUNS Number: 04263634
4. **TYPE OF ORGANIZATION** Other Public or non-private agencies, institutions or organizations
5. **FUNDING REQUEST** \$2,000,000
6. **PROJECT DESCRIPTION**

In 1988, the Lower Green Bay Area of Concern (AOC) Remedial Action Plan (RAP) recommended closing Renard Island, located in the lower Green Bay to minimize exposure to 2.7M cubic yards of Polychlorinated Biphenyls (PCB) and other contaminants contained in sediments placed in the island. Brown County was approached by the RAP Biota and Habitat Workgroup and took a leadership role in pursuing environmentally closing Renard Island. The RAP work group includes representatives from U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers (USACE), UW- Sea Grant, UW-Green Bay, Wisconsin Department of Natural Resources (WDNR) and Brown County (County).

Renard Island is located in the lower Green Bay AOC. This AOC contains contaminated sediments (PCB and other pollutants) that have been dredged by the USACE for navigational purposes and placed on Renard Island. Renard Island is 54 acres constructed in 1978 and operational till 1997. The island is not eligible as part of the Fox River Clean-up Project albeit the contaminated sediments continue to be exposed posing possible human and ecological threats. The island needs to be closed in a manner that is protective of human health and environment. Proper closure of Renard Island would significantly contribute towards the delisting of this AOC and meeting actionable items of the RAP.

The County has invested over \$250,000 in developing a closure plan that resolves all USACE, WDNR and County issues. The facility remains unclosed due to a lack of federal funds. The USACE has identified closing Renard Island as a funding priority, however, the President's budget has not included any funding and Congress has been unable to add this project to the budget. The Great Lakes Restoration Initiative (GLRI) grant funds for this project may be the best chance for funding. For the past 13 years, humans, birds and animals continue to be in direct contact with the toxic sediments. With GLRI funding, the County is proposing to complete the environmental capping of Renard Island independent of the USACE, cost-effectively and within the WDNR deadline.

The County's goals for closure are:

- 1) Protection of human health and environment
- 2) Limit the release of PCBs and other contaminants of concern into the Bay of Green Bay
- 3) Prevent physical contact of PCBs and other contaminants of concern
- 4) Close the facility while maintaining structural stability
- 5) Close the facility allowing for future recreational development

The Closure Plan includes placement of 466,362 cubic yards (cy) of clean navigation channel sediments to facilitate drainage; but more importantly provide a barrier from the underlying toxic sediments. Closure would involve placement of previously dredged sediments which are dried and available to be trucked to Renard Island from the Bay Port Dredge Material Rehandling Facility.

Environmentally closing Renard Island will involve the beneficial reuse of clean dredged material as a remediation of a contaminated site located within the AOC. This WDNR-approved project will greatly enhance the habitat of the island for human and wildlife use. The County is partnering with the City of Green Bay to develop the property into a public recreational use and wildlife area. Renard Island, located on the historic Bay of Green Bay and at the mouth of the Lower Fox River, is viewed as a future asset to the community. Proposed recreational activities include an outdoor theatre, extension of Bay Beach, fishing piers, marina and an RV park.

7. **SITE LOCATION** HUC CODE: 04030204 CITY OF GREEN BAY, BROWN COUNTY, WISCONSIN
LONGITUDE/LATITUDE: 44.32 87.59

8. **FULL PROJECT DESCRIPTION**

A. **Background**

Renard Island is an existing Confined Disposal Facility (CDF) historically used by the USACE for disposal of navigational channel sediments from the Bay of Green Bay and the Lower Fox River. Renard Island, measuring approximately 54 acres, was constructed in the late 1978 and operated into 1997.

Brown County acts as the local sponsor for USACE projects. In a signed Agreement between the County and USACE, the County agreed to secure the lakebed and take ownership upon closure of the facility and the USACE agreed to fill the island and perform the final grade it before transferring ownership to Brown County. Since signing the Agreement in the early 1970's, public awareness and environmental regulations of PCBs and other contaminants of concern have changed resulting in prolonged delays in closing the island.

Approximately 2,700,000 cy of contaminated sediments have been placed on the island during its operating period. The contaminants of concern are polychlorinated biphenyls (PCBs), mercury and others. These sediments contain PCBs at concentrations generally less than 10 parts-per-million (ppm). Due to a lack of federal funding, the island, although fill to capacity since 1997, has remained unclosed by the USACE, allowing PCB-containing sediment to be in direct contact with the humans, birds and animals. With GLRI funding, Brown County is proposing to complete the environmental capping of Renard Island on its own, without USACE involvement. With GLRI grant funds, Brown County will complete the project more cost-effectively and within the WDNR deadline.

In an effort to resolve this long-standing problem, Brown County has invested over \$250,000 in developing a closure plan that resolves all the USACE, WDNR and County issues. Now the facility remains unclosed because of a lack of federal funds. In 2008, Brown County received an approved closure plan from the WDNR. This unclosed state of 13 years results in PCB containing sediment continuing to be in direct contact with the humans, birds and animals.

The County goals for closure of the island are:

- 1) Protection of human health and environment
- 2) Limit the release of PCBs and other contaminants of concern into the bay of Green Bay
- 3) Prevent physical contact of PCBs and other contaminants of concern, and
- 4) Close the facility such that structural stability will be maintained

The Closure Plan for Renard Island prescribes an engineered-earthen cover that will secure sediments, thereby protecting human health and the environment. In summary, the findings of these studies have determined the island has the structural integrity to handle the placement of additional material to provide an earthen cover constructed from clean outer harbor sediments and/or other sources of cover material. The Closure Plan stipulates the additional placement of 466,362 cy of cover material. An analysis has shown that the facility has the structural integrity to receive these additional sediments to provide a protective cap and barrier that will prevent human contact with the existing underlying sediments. Outer harbor sediments will be dried at the Bay Port Facility then trucked to Renard Island for placement. This plan will require a causeway to access to the island. The construction of a protective cap is expected to take 12-18 months.

Toxic substances, like those contained in Renard Island in this AOC, have negatively impacted habitat and wildlife in lower Green Bay. The ability to environmentally cap Renard Island will allow human use of the 54 acres of waterfront property and act as a healthy functioning ecosystem. Restoring Renard Island is an opportunity to remove an environmental problem in this AOC and enhance habitat. The Renard Island environmental capping project addresses many of the Great Lakes' needs and priorities established by the following federal, state and local agencies including; U.S. Environmental Protection Agency (USEPA), National Oceanic Atmospheric Administration, USACE, WDNR, Port of Green Bay and Brown County through documents including the USEPA Strategic Plan, Great Lakes Regional Collaboration, Lakewide Management Plan, Wisconsin Great Lakes Strategy, RAP and others. Locally this project has been identified in the RAP as the top priority with over 40 Green Bay and Great Lakes resource managers and scientists.

Green Bay of Lake Michigan is an elongated freshwater estuary over 100 miles long, oriented southwest to northeast and averages about 15 miles in width. At the head of Green Bay is the mouth of the Fox River, which is the outlet for the 6,385-square mile drainage of the Wolf-Fox River basin (USACE 1998), and the City of Green Bay, Brown County, Wisconsin. Green Bay has been referred to as the largest freshwater estuary in the world due to its estuarine-like nutrient and productivity gradients and the strong influence of the Fox River. Renard Island is located in the largest Great Lakes coastal wetland located in the lower Green Bay AOC. A 1994 *Nature Conservancy report indicated Green Bay islands* support habitat for critically-imperiled species and communities. Green Bay is a geographic feature known as a "leading line" that guides migrating birds from a broad northern opening to the southern tip of the Bay. Shallow waters and extensive beds of aquatic vegetation have provided a major stopover for waterfowl and other migrating birds as well as habitat for diverse populations of water birds, furbearers, invertebrates, and native fishes.

During extremely high water levels in the mid-1970's, a series of severe storms during ice breakup resulted in catastrophic erosion of the natural Green Bay islands and a resulting loss of habitat. Environmentally capping Renard Island would provide nesting and brood-rearing habitat for waterfowl, shorebirds and water birds. Although no federally-listed species are currently known to be present the endangered piping plover historically used the lower bay habitat during migration. A number of Wisconsin State-listed bird species such as the great egret, snowy egret, Caspian tern, Forster's tern, and common tern are regular summer residents and will nest in the lower bay. Surveys of Great Lakes

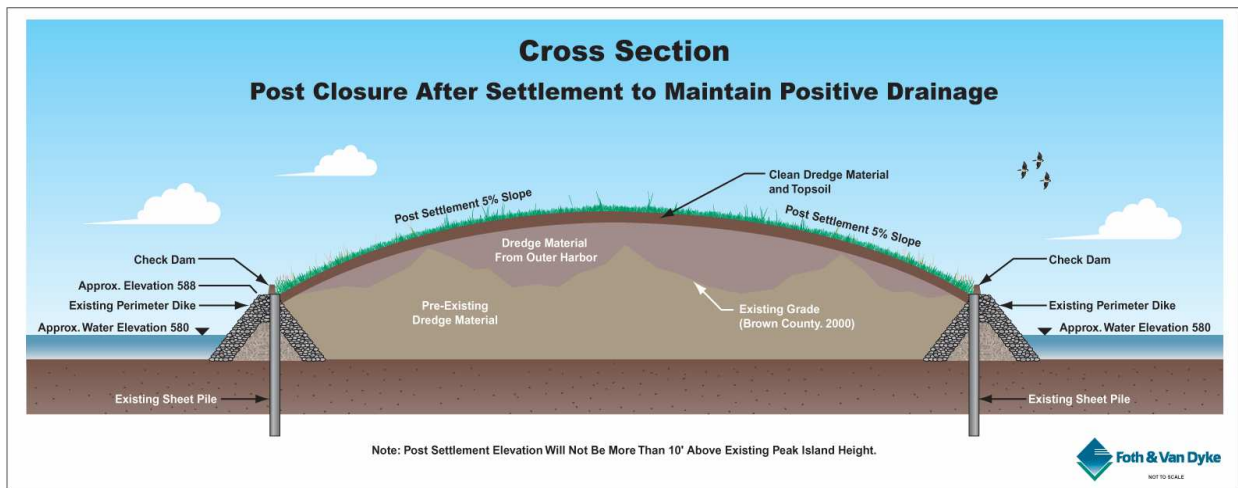
colonial nesting birds documented 13 species using lower Green Bay islands, the highest species diversity of any island in the Great Lakes.

The existence of Renard Island with an environmental cap provides an opportunity to provide quality habitat for avian species. Although the loss of wetland, island and gravel reef habitats has contributed to the general decline in species abundance and diversity in the lower Green Bay, the area still attracts a large number of avian species. Migrating waterfowl use remains depressed, although the number of ducks observed during migration has been increasing in recent years. The bald eagle is nesting again in the area.

Although no federally-listed threatened or endangered species are currently known to be present in the project area, the endangered piping plover (Great Lakes population) historically used lower Green Bay habitat during migration. The USFWS has indicated it is conceivable that during periods when the habitat is suitable, piping plovers could attempt to nest on the Renard island. A number of Wisconsin state-listed bird species, the great egret, snowy egret, Caspian tern, Forster's tern, and common tern are regular summer residents and nest in the lower bay.

B. Construction Design

The prime design criterion for the Renard Island closure is to design a cover system that will be protective to human health and the environment. Consistent with the closure of a CDF, an engineered cover will be constructed for the Renard Island CDF. Stormwater runoff and erosion of exposed sediment can be controlled through proper design of a cover that will be placed over the facility. The engineered soil cover will control the subsurface flux of PCBs into the Bay of Green Bay.



The final cover system is designed in accordance with the closure requirements pursuant to Wisconsin Administrative Code NR 506.08(3). The primary function of the final cover system design is containment of sediments and provide separation from sediments within the CDF facility which are determined to be contaminated. The proposed final cover system for the Renard Island CDF will consist of 2.5 feet of clean dredged navigation channel sediments from the outer harbor overlain by 6-inches of topsoil. The final cover system is 178,000 cy of the 466,362 cy of material approved for placement. The remaining 288,362 cy will be placed under the final cover system to fill the island to allow proper drainage

and provide a greater barrier between the final cover and the contaminated soil. Outer harbor sediments possess sufficient nutrient characteristics to be used as the 6-inch topsoil layer. Analysis of the outer harbor sediment, demonstrating suitability for final cover use, is provided in the following sections. The dredged material that will be used to fill and close Renard Island will originate from the outer harbor, beyond Long Tail Point. Analysis of PCBs in sediment samples from the outer harbor was conducted in 2005 showed PCB concentrations below detection limits with laboratory detection limits ranging from <0.05 to <0.29 mg/kg.

The placement of dry sediment is dependent upon a causeway to the island. The causeway has already been approved and funded by Congress. The causeway is expected to be constructed in 2010. All dried sediments will be transported from Bay Port by truck via the causeway. Because the sediments are dry, little if any, interstitial water release would occur. Sediments would be placed near the southeast corner of the island and graded and compacted using dozers in lifts not exceeding 6 feet.

Construction of the cover will occur in three to five separate phases depending on rate of filling progression, commencing from east to west or visa versa.. When any one phase area has reached final sediment grades, final cover construction will begin. Initially, top of sediment grades will be graded to be consistent with the design slopes. Low ground pressure vehicles will be employed during construction of the cover system to limit potential localized shear failures. The 2.5 foot cover will be placed and compacted and then the 6-inch thick topsoil layer will be graded across the site. Occasionally the final cover grades may be exceeded to allow for sediment drying prior to grading across adjacent fill areas, however, this will be temporary and only until the sediments have sufficiently dried.

The proposed final grading plan was developed based on the City of Green Bay end use plan shown in Drawing 2 of the Closure Plan. From this configuration Brown County developed the final closure grades which will slope at 3% to 10% from the peak elevation of approximately 608 msl to the inside edge of the perimeter dike. The final grading plan requires an additional 466,362 cy of material to be placed on the island to slope it properly and provide a significant protective barrier from the underlying contaminated soils.

This project will be designed and constructed by Brown County. Brown County has extensive experience is highway construction and other related work activities. In addition, Brown County will use USACE plans and specifications for the design bid, utilizing private contractors. Brown County administration and use of private contractors is the most cost-effective manner in which to complete this project over a continuous 12 to 18 month period. The USACE cost of constructing the project is estimated at more than \$5M, while Brown County is confident the project can be County-constructed for \$4.3M or a 15% savings. Brown County administration and regular reporting to USEPA will minimize USEPA resources necessary for oversight and administration.

End-Use

Brown County is working with the City of Green Bay for subsequent development of the property into a public recreational use and wildlife area as an extension of the popular Bay Beach Amusement Park. This proposed Renard Island closure configuration represents a public-planned end use for the island which complies with the State Lakebed Grant. This type of recreational-use facility, located on the historic bay of Green Bay and at the mouth of the Lower Fox River, is viewed as a future asset to the community of Green Bay. The final height of the island was adjusted to accommodate future use by the City.



C. Implementation Plan

The timeline shown below documents actions undertaken and completed related to Renard Island as well as future actions required to environmentally cap Renard Island upon receipt of the GLRI grant.

FY77	State of Wisconsin, legislative Lakebed Grant for construction of island
FY80s	First community end-use planning committee
FY88	Green Bay RAP identifies Renard Island habitat restoration priority in AOC
FY94	Green Bay RAP identifies Renard Island habitat restoration priority in AOC
FY95	Second community end-use planning committee
FY97	USACE completes filling island
FY03	Baird & Associates end-use Study
FY05	Current end-use planning committee
FY08	WDNR approval of Brown County Closure Plan
FY08	USACE NEPA review & engineering Study
FY09	Causeway design
FY10	Causeway permitting
FY10	Construction of Renard Island Causeway
FY10	Plans and Specifications
FY11	Environmentally Cap Renard Island
FY12	Design Renard Isle End-Use Plan
FY13	WDNR closure completion deadline

D. Permits & Approvals

Brown County will seek a legislative Lakebed Grant from the State of Wisconsin in 2010 for construction of the causeway to the island. In addition, Section 404(b)(1) of the Clean Water Act (CWA) addressing the affects of the discharge of fill material into waters of the United States for the causeway will be completed in 2010. Evaluation of Green Bay Harbor channel sediments has been completed and the physical, chemical and biological testing conducted confirmed the harbor sediments are suitable for use as the environmental cap.

E. Outreach & Education

The Closure Plan development and approval process involved numerous Harbor Commission, County Board and City Council meetings and subcommittee meetings. All meetings were open to the public. The Closure Plan approval process also involved a public hearing and comment period. The hearing was attended by more than 100 people with all comments taken into account by the WDNR when issuing the Closure Plan approval.

Three end-use committees made up of local planners, park & recreations, citizens, neighbors, environmentalists and regulators have been established over time to determine the final use of the island. The first community end-use committee's decision on a marina and passive recreation was dismissed after years of lowering water conditions left the protected marina area without sufficient water levels. The second community end-use committee established a list of possible end-use options but disbanded awaiting closure to be completed. The third city end-use committee in 2006 determined Renard Island should be an extension of the adjourning Bay Beach Amusement Park. The land uses for the island would involve fishing piers, passive recreational trails, wildlife viewing areas and other low impact opportunities. Human-use activities are dependent upon access to the island. In 2009, the USACE determined that the most cost-effective means of accessing the island for closure activities was a temporary causeway which could be left in place for future access of the island.

Brown County has made nearly 40 presentations to civic groups and other organizations on the Renard Island closure and long-term use opportunities. Brown County has retained the public relations firm of Leonard & Finco to develop informational and educational materials related to the project and coordinate project outreach. Brown County holds monthly Harbor Commission public meetings at which the progress and results of the project are reported. This information is also made available on the Brown County (www.co.brown.wi.us) and Port of Green Bay (www.portofgreenbay.com) websites. In addition, the local media has taken great interest in the project and can be expected to cover the project as it progresses.

F. Relevance to Great Lakes Needs & Priorities

Environmental capping of Renard Island addresses many of the Great Lakes' needs and priorities established federally by the President of the United States, USEPA, NOAA, USACE, State of Wisconsin, Wisconsin's Governor and WDNR, as well as locally by the 1988 and 1993 Remedial Action Plan and the Port of Green Bay. The project clearly meets the needs and priorities of many federal, state and regional agencies and organizations. Relevance to the Great Lakes' needs and priorities is covered in greater detail under "Section 10 Collaboration and Partnerships".

9. OUTCOMES, OUTPUTS AND EXPECTED RESULTS

Environmentally capping Renard Island will essentially eliminate or significantly reduce exposure to toxic substances, such as PCBs and mercury, currently contained in the island. The health and integrity of wildlife populations and habitat will be protected by the cap from the underlying toxic substances. The continuing availability of dust- containing toxic substances is eliminated by environmentally capping. The uptake of toxic substances by plants and animals will also be eliminated by environmentally capping.

Environmentally capping Renard Island will contribute towards restoring lower Green Bay AOC and removing the beneficial reuse impairment. The island and wetlands will provide nesting and brood rearing habitat for waterfowl, shorebirds, and water birds.

This project is engineeringly feasible, technically sound, safe, and will provide historic ecological benefits

along with navigational benefits. This project has been extensively studied and engineered to ensure project goals and objectives are met. Project performance will be measured by Brown County and public opinion.



A. Environmental Outcomes, Outputs & Expected Results

Habitat destruction and degradation due to fluctuating lake levels have negatively impacted habitat and wildlife in this AOC. This destruction has led to altered food webs, a loss of biodiversity, and a poorly functioning ecosystem. Environmentally capping Renard Island is an opportunity for the protection and restoration in the largest and most critical habitat in the Great Lakes.

The project would provide beneficial use for clean dredged material and would help restore terrestrial and aquatic habitat lost over time as the former islands in Green Bay were destroyed by storms and high water levels. Vegetation should quickly become established on the island from existing seed bank in the sediments, which also have sufficient nutrients to support the vegetation.

Long-term monitoring opportunities exist for our partners. UW-Green Bay has utilized graduate students to quantify and document current submergent and emergent vegetation in the area behind the island. This information will be used as the baseline for future graduate students to measure the ecological outcomes of environmental capping of the island. Existing grant opportunities exist for Brown County, WDNR, UW-Green Bay and UW-Sea Grant to measure benthos, invasive species management and measure outcomes.

The Lower Green Bay and Fox River have been deemed an AOC by the International Joint Commission (IJC) and the WDNR. The area has been designated an AOC because many of the beneficial uses are restricted or impaired due to the degradation of habitat and the persistence of pollutants. The proposed

environmental capping of Renard Island project are within the AOC which is comprised of the section of the Fox River below the De Pere dam extending 7 miles to the mouth of the river and a 21 square mile area of southern Green Bay from the mouth of the Fox River north to Long Tail Point and Point au Sable.

In 1988, a RAP was developed for the lower Bay of Green Bay and the Fox River. The RAP made specific recommendations on how to restore beneficial uses to the AOC. Unfortunately at this time, the AOC is not meeting any of the RAP targets.

AOC Impairment	Cause
Fish consumption advisories	Toxic substances, PCBs
Degradation of fish and wildlife populations	Excess phosphorus and suspended sediments
Bird and animal deformities	Toxic substances, PCBs
Degradation of sediment	Toxic substances, PCBs, excess phosphorus, & suspended sediments
Restriction on dredging	Toxic substances, PCBs
Eutrophication	Excess phosphorus and suspended sediments
Drinking water restrictions due to taste and odor problems	Toxic substances
Beach closings	Bacteria
Degradation of phytoplankton and zooplankton populations	Phosphorus and toxic substances
Loss of fish and wildlife habitat	Excess phosphorus and suspended sediments

The RAP recommended that nesting islands be restored and/or stabilized, submerged aquatic vegetation be reestablished, and native fish spawning habitat be enhanced, where feasible. In conjunction with the RAP process, an environmental risk assessment for lower Green Bay identified wetland losses and near-shore habitat destruction as posing the greatest long-term risks to the health of the lower Green Bay ecosystem. In 1994, as part of RAP implementation, a habitat restoration workshop was held, where over 40 Green Bay area and Great Lakes resource managers and scientists identified the top priorities for habitat restoration and rehabilitation in lower Green Bay. Environmental capping of Renard Island would contribute greatly toward achieving these RAP objectives and restoring associated beneficial uses in the AOC.

B. Economic Outcomes, Outputs & Expected Results

The 13 port businesses that currently ship more than 2.5M tons of cargo valued at over \$315M via 200+ ships annually will continue viability. Maintenance dredging of the Green Bay Harbor is the foundation of the economic vitality of the Port of Green Bay. In 2008, the Port of Green Bay had an annual economic impact in Northeastern Wisconsin of over \$75M. The Port handles cargo such as coal, limestone, cement, forest products and other commodities that are the raw materials for Northeast Wisconsin’s agricultural, construction, papermaking and manufacturing industries. In order to keep commerce moving, dredging and placement locations for dredged material are necessary. Environmental capping of Renard Island provides economic and environmental impacts that support port businesses, which have \$829M in property and capital as well as \$715M in annual operating budgets, employing over

4,000 people, while making available 54 acres of waterfront property for human and wildlife opportunities.

The Green Bay Harbor has a congressionally-authorized outer channel width of 500 feet. In several locations, the width is currently less than 100 feet. Ships are refusing to enter Green Bay, or are light loading cargo, for fear of grounding. For example, Sanimax Corporation has ceased exporting 5 to 7 ships of tallow (animal fat) per year to North Africa. Another company that has been affected is KK Integrated Logistics (KK). KK employs 200 people and provides warehousing and trucking services and has a local economic impact of more than \$1M annually. KK imports foreign forest products for use in construction and papermaking. Because of the lack of maintenance dredging, 23 international vessels had to off-load a large portion of their cargos 60 miles away in Menominee, Michigan. The remaining cargo was trucked to Green Bay, at an increased cost of more than \$100,000 annually. According to the USACE, the loss of one and two feet of channel depth in Green Bay results in an increased transportation cost of between \$452,000 and \$1.2M annually. The channel condition has contributed to other lost business development opportunities such as importing wind turbine generation equipment, plate and coiled steel, gypsum, fertilizer and kalonite clay. A backlog of dredged material exists in the navigational channel in excess of 1M cubic yards. This dredge material is suitable for environmental capping of Renard Island. The bay and the Fox River also serve a variety of commercial interests including power generation, industry, and deep-draft navigation as well as recreation. The Federal Green Bay Harbor navigation project extends 7 miles up the Fox River and nearly 12 miles into the bay of Green Bay. The character of the dredged material from most of the outer harbor is classified as suitable for unrestricted use.

Recreation and aesthetics would be enhanced through the environmental capping of Renard Island. Recreational activities such as fishing, boating, bird watching, and other outdoor activities near the waterfront are important to the local economy. Various private and public docking facilities, bait shops, sporting goods stores, and service industries cater to these resource uses. Water recreation and related service industries are vital during the spring and summer months. Increased fishing, bird watching, and other fish and wildlife related recreational activities in the lower bay are anticipated as well as increased revenues associated with those activities. Waterfowl hunting is anticipated in the vicinity of the islands as habitat conditions improve and waterfowl use of the area increases during the fall migration. .

10. COLLABORATION, PARTNERSHIPS AND OVERARCHING PLANS

A. Collaboration & Partnerships

Since 1998 the project has been the focus of a partnership including the USACE, Brown County, WDNR, UW-Green Bay, UW-Sea Grant, USFWS. In addition, to the various ecological benefits, environmental capping of Renard Island will provide the USACE, Brown County, and 13 port businesses a safe and beneficial place to deposit clean navigational sediments. This project is an excellent example of providing environmental benefits while promoting economic initiatives.

Representatives of the above-mentioned parties participate in a Biota & Habitat Work Group which is part of the Science & Technical Advisory Committee to the Lower Fox River Basin Partner Team. Among other interests, the team is dedicated to implementing recommendations of the Lower Green Bay/Fox River RAP. The work group will provide ongoing input in carrying out restoration implementation using an adaptive management approach and will conduct public outreach and post-construction monitoring. Baseline information on existing submerged aquatic vegetation, coastal wetlands, colonial nesting water birds, waterfowl use, benthic macro invertebrates, and water quality has been documented through studies by participating agencies. The process of creating a closure plan for

Renard Island began in 2003 and has brought together industry, regulators and the public in creating a plan that meets everyone needs.

Brown County has been the recipient of numerous federal and state grants and has the qualifications and administrative experience necessary to administer all aspects of the project, including request of bids, request for qualifications, contracting, reporting, construction management, and administrative oversight. Brown County will write a competitive request for proposals and hire engineering consulting firms and construction contractors with the expertise, manpower and equipment necessary to successfully complete the *Cat Island Restoration Project*.

In each of the above-mentioned agencies, high level administrators and field personnel have continued to work to see this project to fusion. Letters of support and resumes of key personnel are attached as supplemental information. The following list the names and titles of key individuals associated with this project.

Brown County

Dean Haen, Port Manager
Brian Lamers, Highway Commissioner
Charles Larscheid, Port & Solid Waste Director
Section Chief
Neil McKloskey, Harbor Commission President

USACE, Detroit District

Dave Bowman, Project Manager
Terry Long, Planning Director
Wayne Schloop, Navigation

WDNR

Jon Brand, Water Management Specialist
Specialist
David Rowe, Fisheries Biologist
George Boronow, Lower Fox River Supervisor
Specialist
Richard Stoll, Green Bay Basin Supervisor
John Huff, Wildlife Biologist

UW-Sea Grant

Vicki Harris, Water Quality
Phillip Moy, Fisheries Specialist
Gene Clark, Coastal Engineering

USFWS

Louise Clemency, Field Supervisor
Gary Van Vreede, Wildlife Biologist

UW-Green Bay

Bud Harris, Professor
Tara Reid, Professor

RAP Biota and Habitat Work Group/Science & Technical Advisory Committee
to the Lower Fox River Basin Partner Team

Janet Smith (retired USFWS Field Supervisor)

B. Project Application to Overarching plans for Protection of the Great Lakes

Environmental capping of Renard Island addresses many of the Great Lakes needs and priorities established federally by the President of the United States, USEPA, NOAA, USACE, by the State of Wisconsin, Governor and WDNR and locally by the Port of Green Bay, Brown County and the RAP. The project clearly meets the needs and priorities of many federal, state and regional agencies and organizations results. The following is a summary of the relevance to Great Lakes Needs and Priorities:

Council of Great Lakes Governor's Priorities

<http://www.cglg.org/projects/priorities/index.asp>

- Promote programs to protect human health against adverse effects of pollution in the Great Lakes ecosystem.
- Control pollution from diffuse sources into water, land and air.
- Continue to reduce the introduction of persistent bioaccumulative toxics into the Great Lakes ecosystem.
- Enhance fish and wildlife by restoring and protecting coastal wetlands, fish and wildlife habitats.
- Restore to environmental health the AOC identified by the International Joint Commission as needing remediation.
- Adopt sustainable use practices that protect environmental resources and may enhance the recreational and commercial value of our Great Lakes.

2009 USEPA 2009-2014 Strategic Plan Change Document

http://epa.gov/ocfo/plan/pdfs/strategic_plan_change_document_9-30-08.pdf

- 4.3.3 Improve the health of the Great Lakes
 - Through 2014, maintain or improve an average 7% annual decline for the long-term trend in average concentrations of toxic chemicals (PCBs) in the air in the Great Lakes basin.
 - By 2014, restore and delist a cumulative total of at least 7 AOC within the Great Lakes basin
 - By 2014, remediate a cumulative total of 8 million cubic yards of contaminated sediment in the Great Lakes
 - By 2014, remove 46 beneficial use impairments within AOC within the Great Lakes.

2009 Wisconsin's Great Lakes Strategy

http://dnr.wi.gov/org/water/greatlakes/wistrategy/GLStrategy2009_final_wcover.pdf

- **Wisconsin Strategy:** Set priorities for funding and implementation of remedial actions to meet AOC-specific BUI delisting goals for the five AOCs in Wisconsin. Priority actions differ for each AOC but address elements such as: Complete delisting targets, Evaluate and delist BUIs when monitoring demonstrates that targets have been met, Use the strategy to support resource requests for AOC clean up and habitat restoration and support polychlorinated biphenyls (PCB) remedial actions
- Lower Fox River/Green Bay is a priority area for tributary restoration and protection
- Set priorities for funding and implementation of RAP to meet AOC-specific BUI delisting goals for Fox River/Lower Green Bay AOC.
- Use the strategy to support resource requests for AOC clean up and habitat restoration

2009 Great Lakes Multi-Year Restoration Action Plan Outline

<http://www.epa.gov/greatlakes/glri/glmyrapo.pdf>

Proposed Long Term Goals for Toxic Substance Reduction

- Goal 1: The discharge of toxic substances in toxic amounts is prevented and the discharge of any or all persistent toxic substances to the Great Lakes basin ecosystem is virtually eliminated
- Goal 2: Exposure to toxic substances from historically contaminated sources is significantly reduced through source reduction and other exposure reduction method.
- Goal 3: Environmental levels of toxic chemicals are reduced to the point that all restrictions on the consumption of Great Lakes fish can be lifted
- Goal 4: The health and integrity of wildlife populations and habitat is protected from adverse chemical and biological effects associated with the presence of toxic substances in the Great Lake Basin
- Goal 5: AOCs are cleaned up, restoring the areas and removing the beneficial use impairments

Interim Objectives

- By 2014, x Beneficial Use Impairments will be restored in AOCs
- By 2014, 7M cy of contaminated sediments will be remediated
- Through 2014, an average annual 5% annual decline will be maintained or improved for the trend (year 2000 and on) in average concentrations of PCBs in whole
- Lake trout and walleye samples
- Through 2014, an average 7 percent annual decline will be maintained or improved for the long term trend in average concentrations of PCBs in the air in the Great Lakes basin

The environmental cap for Renard Island will address several focus areas identified in the GLRI Actions Plan including:

ID #116	Beneficial Reuse of Dredged Material
ID #123	Regional Sediment Management
ID #223	Strategic & Environmental Dredging
ID #201	Coastal Projects to Benefit Waterways & Habitats
ID #204	Restoring Aquatic Ecosystems
ID #205	Restoring Great Lakes AOCs
ID #220	Habitat Enhancement at AOCs
ID #146	Coordinated implementation of RAP programs

2005 Great Lakes Regional Collaboration Strategy Goals to Restore and Protect the Great Lakes

http://glrc.us/documents/strategy/GLRC_Strategy.pdf

Area of Concern (AOC) Goals:

- By the end of 2006, U.S. EPA should expand the existing USEPA-State RAP Workgroup into a Federal-State AOC Coordinating Committee to better coordinate efforts and optimize existing programs and authorities to advance restoration of the AOCs
- By the end of 2010, ten AOCs should be delisted and restored to target goals
- By 2020, all known contaminated sediment sites in the AOC should be remediated. Coupled with restoration measures identified in other chapters, this will facilitate complete restoration of the AOCs.
- Significantly more habitat conservation and species management with a focus on coastal shore and upland habitats

Toxic Pollution Strategy Goals:

- Virtually eliminate the discharge of any or all persistent toxic substances (PTS) to the Great Lakes basin ecosystem
- Significantly reduce exposure to persistent toxic chemicals from historically contaminated sources through source reduction and other exposure reduction methods
- Reduce environmental levels of toxic chemicals to the point that all restrictions on the consumption of Great Lakes fish can be lifted
- Protect the health and integrity of wildlife populations and habitat from adverse chemical and biological effects associated with the release of PTS

2005 Port of Green Bay Strategic Plan

http://www.portofgreenbay.com/uploadedFiles/Home_Page/Website_Contents/Strategic_Plan/StrategicPlan05.pdf

- Close Renard Island in a manner that is protective of human health and the environment
- Beneficially reuse clean dredge material to close Renard Island for environmental benefit

1988 Lower Green Bay Remedial Action Plan

http://www.seagrant.wisc.edu/WaterQuality/Portals/9/Lower%20Green%20Bay%201988%20RAP%20Complete_2.pdf

- Key Action #4 - Reduce availability of toxic substances from contaminated sediments
- 4.7 Adequately evaluate and contain, as necessary, existing dredge material disposal sites so that contaminants do not re-enter the ecosystem
- 4.10 Minimize the impacts of ultimate disposal of toxic contaminants
- Establish breeding sanctuaries and management programs for endangered tern populations.
 - a. Protect Renard Island
- 14.7 Through cooperative efforts, develop management plan and program for Renard Island (Kidney Island)

1993 Lower Green Bay Remedial Action Plan

http://www.seagrant.wisc.edu/WaterQuality/Portals/9/Lower%20Green%20Bay%20RAP%201993%20Update_Complete_2.pdf

11. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE

Brown County, a municipal government, is involved in human services, public safety, port, airport, highway and many other areas that routinely deal with federal assistance through block grants and specialized grant programs. Brown County has successfully completed numerous projects involving project cooperative agreements, project administration and oversight, payments, reimbursement requests and fulfilling reporting requirements such as percent completion and confirmation of the project items completed within budget.

Environmental capping of Renard Island is a large earthmoving effort commonly experienced in highway construction. Brown County has constructed numerous highway projects using federal, state and local dollars. Recent projects include 2009 construction of 1.27 miles of Shawano Ave at a cost of \$2.4M; 2008 construction of 1.4 miles of Waube Avenue at a cost of \$1.3M; and 2007 construction of seven lanes on Lombardi Avenue at a cost of \$3.35M. Over the past 15 years, the Brown County Port & Solid Waste Department has received over \$12M in Wisconsin Department of Transportation Harbor Assistance Program grants. Most recently in 2006, Brown County constructed a \$5M dockwall/dredging project at Georgia-Pacific which addressed many difficult aspects including numerous studies of design concepts, simulations, value engineering and others.

The development of plans and specifications, issuing a construction bid and administering the construction, although challenging, are well within the capabilities of Brown County. Brown County has the organizational and personnel experience to successfully fill and close Renard Island on time and within budget. Brown County will fully utilize existing or in-house engineers and project managers while retaining specialized engineering consultants to assist in the construction of this project.

12. BUDGET

Overall Project Costs

Item	Quantity	Unit	Unit Price	Total
Excavation	466,362	cubic yard	\$1.00	\$ 466,362
Hauling	466,362	cubic yard	\$5.25	\$ 2,448,401
Placement	466,362	cubic yard	\$1.75	\$ 816,134
Construction Subtotal				\$ 3,730,896
Engineering & Design				\$ 373,089
Construction Management				\$ 279,817
Total Project Costs				\$ 4,383,802

Project Budget by Budget Object Classes	
Personnel/Salaries	\$ 112,500
Fringe Benefits	\$ 56,250
Travel	\$ 5,000
Equipment	\$ 0
Supplies	\$ 0
Contract Costs	\$ 3,730,896
Other Costs	\$ 0
Total Direct Charges	\$ 3,904,646
Indirect Charges	\$ 479,156
Total Cost	\$ 4,383,802

Funding Source	Contribution
GLRI Grant	\$ 2,000,000
Brown County	\$ 932,556
USACE (217 Agreement)	\$ 1,282,496
Brown County In-Kind Contribution	\$ 173,750

Brown County has also escrowed over \$400,000 for the long-term maintenance of the island for the next 40 years upon closure.

13. ACORN STATEMENT

Brown County affirmatively indicates that the Association of Community Organizations for Reform Now (ACORN) will not be involved in this project and no funds for this project will be awarded to ACORN.

14. ATTACHMENTS

15. LETTERS OF SUPPORT