

DRAFT ENVIRONMENTAL ASSESSMENT

of

**Grafton Harbor Marina
Grafton, Illinois**
(May 2005)

Submitted to:

Division of Federal Assistance
United States Fish and Wildlife Service, Region 3
Fort Snelling, Minnesota 55111

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August 3, 2004, Letter from Robert Rogers, P.E., Russell Engineering and
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Appendix 3 – May 7, 2004, Letter from John Mosby, City of Grafton

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DRAFT ENVIRONMENTAL ASSESSMENT

1.0 PURPOSE AND NEED

1.1 PURPOSE

The purpose of this Environmental Assessment (“EA”) is to consider the various alternatives for the construction of a marina in the vicinity of Grafton, Illinois. The United States Fish and Wildlife Service (“USFWS”) National Environmental Policy Act procedures were followed to develop this EA in accordance with 42 U.S.C. 4321-4347; 40 CFR 1500-1508; 516 DM 1-7, as revised; 30 AM 2-3 and 550 FW 3.

1.2 NEED

The Grafton area is a prime location for a full service marina because it is situated at the confluence of the Illinois and Mississippi Rivers. Currently, boaters launch at a public ramp in the City of Grafton (“City”). However, this ramp is not designed to accommodate transient boaters traveling the rivers. A marina in the City will allow transient boaters to dock their boat, find accommodations plus purchase goods and fuel. The nearest boating facility is more than 20 miles downriver in Alton, Illinois.

1.3 DECISIONS THAT NEED TO BE MADE

The USFWS Regional Director will select one of the alternatives analyzed in detail and will determine based on the facts and recommendations herein, whether this EA is adequate to support a Finding of No Significant Impact decision, or whether an Environmental Impact Statement will need to be prepared.

1.4 BACKGROUND

The City is located at the confluence of the Mississippi and Illinois Rivers approximately 35 miles upriver of St. Louis, Missouri (see Figure 1). Created in the 1830’s, Grafton is the first settlement in Jersey County. The City has been struggling economically since 1993 when the worst flood in the City’s history forced out nearly half the population. The remaining residents and businesses have suffered from the decrease in commerce and revenue.

In the wake of the flood, the City was left with a barren riverfront. For five full months most of the City was under water. The devastation and population loss reduced commerce and revenue. Most of the remaining businesses are dependant upon tourists and visitors. There are shops, restaurants, cafés, wineries, a water

park, bed and breakfast, and a hotel. The river way between Grafton and Alton is designated the “Meeting of the Great Rivers National Scenic Byway” and is a popular drive for tourists. There is a river ferry service which operates out of Grafton.

The City is in a perfect location to cater to transient boaters. Numerous vessels ranging from tugs and river boats to day boaters and transients travel the scenic river way past Grafton on a daily basis. The local boaters and those traveling the river systems require goods and services while on the water. The construction of a full-service marina is a key component to provide boater needs plus reverse the City’s economic struggle.

2.0 ALTERNATIVES

Three action alternatives are considered in this EA; construction of a full service marina (both transient and day boaters), construction of a transient boater only marina, and no action. These alternatives are further discussed in the following sections.

2.1 ALTERNATIVES CARRIED FORWARD FOR DETAILED ANALYSIS

2.1.1 ALTERNATIVE 1 – CONSTRUCT A FULL SERVICE MARINA (PROPOSED ACTION)

The proposed alternative is to construct a full service marina at a proposed site south of Water Street between Harrison Street and Maple Street within the Grafton City limits (see figure 2).

Approximately, 277 slips are expected to be constructed. Eighty-four (84) slips plus the floating breakwater (an additional 40 to 60 boats) are designated for transient boaters. The docks and piers float which allows a consistent amount of freeboard above the water. The floating piers and docks are designed to comply with the standards of the American Disabilities Act (“ADA”). Dock decks are made of concrete. The marina slips contain power pedestals with electric, water, phone, and television connections. All slips with the exception of the transient slips are covered. Pump out facilities are intended on all of the marina slips. The marina will be operated seasonally from March until October.

A dike consisting of large limestone rocks will be constructed on the east end of the marina perpendicular to and along the bank. Approximately 1,000 tons of rock will cover and protect over 1,500 linear feet of shoreline. The rock dike will extend approximately 270 feet from the riverbank into the Illinois River. An earthen berm will be constructed from the riverbank north

along Harrison Street to Main Street. The dike and berm protect the marina from swift water, ice and debris during high water events (see Figure 3). The top of the dike is above the 100 year flood elevation.

Approximately 54,000 cubic yards of soil will be excavated to create the harbor. The excavated material will be used to build the berm, and for contouring to ensure proper drainage of the site and the surrounding area. Additionally, approximately 51,000 cubic yards of material will be dredged from the Illinois River. The river material will be discharged back into the river channel.

A floating breakwater extends from the southern end of the dike down river 1,280 feet (see figures 4, 5 & 6). This protects the outside portion of the harbor and allows for the docking of large boats. The breakwater is constructed from recycled shipping crates. Each crate is 40 feet long, 8 feet wide, and 10 feet deep. Each crate floats from the addition of encapsulated foam, but will remain partially submerged from large holes cut into their sides. The floating breakwater will rise and fall with the river level along pipe piles anchored to the bottom of the river.

At the east end of the proposed marina are two floating buildings and a fuel dock. In addition to fuel sales, the building offers concessions, groceries, hardware, shower facilities and laundry. Access to the store is along an ADA compliant ramp from the sidewalk and nearby parking lot. A wheelchair lift is proposed to provide easy boat access for handicapped individuals. Other amenities include: electrical outlets, data ports, pay telephones, ATM, vending machines, visitor information, and maps, laundry service, convenience store, and restroom/shower facility. The parking lot will consist of approximately 100 parking spaces for cars and an additional 60 parking spaces for vehicle/trailers.

The site for the proposed alternative has been studied by numerous State and Federal Agencies for feasibility and impacts. In compliance with the Clean Water Act, the project is procuring a 404 permit from the United States Army Corps of Engineers. A 401 permit is expected from the Illinois Environmental Protection Agency. As part of the permit applications an environmental assessment and an anti-degradation assessment of the proposed site have been conducted.

Approximately one acre of low quality wetlands will be destroyed during construction. In order to mitigate the wetland destruction, approximately two acres of high quality wetlands will be created at

the historic Shafer's Wharf. The newly created wetlands are expected to contain an elevated boardwalk and classroom allowing visitors to experience a wide variety of native wetland plants and animals.

The fuel station is designed to minimize accidents and spills. Section 30A of the National Fire Protection Association requirements will be utilized to design the fuel facility. Containment booms and absorptive materials will be kept at the facility. Personnel are to be trained to minimize hazards and in spill containment techniques.

2.1.2 ALTERNATIVE 2 – CONSTRUCT TRANSIENT ONLY MARINA

In alternative 2, a marina will be designed and constructed for transient (traveling) boaters only. The marina will be built in the same location south of Water Street and east of Harrison Street within the Grafton City limits. However, the marina will be much smaller in size. The exact dimension of a transient only marina has not been determined.

Approximately, 90 slips are expected to be constructed. The floating breakwater will add spaces for potentially 20 more transient boaters. The docks and piers float allowing a consistent amount of freeboard above the water. The floating piers and docks are designed to comply with the standards of the ADA. Dock decks are made of concrete. None of the slips will be covered. The slips will not contain any utilities. Pump out facilities will be included in a small portion of the slips. The marina will be operated seasonally from March until October.

A dike consisting of large limestone rocks will be constructed on the east end of the marina perpendicular to and along the bank. Approximately 700 tons of rock will cover and protect over 1,000 linear feet of shoreline. The rock dike will extend approximately 270 feet from the riverbank into the Illinois River. An earthen berm will be constructed from the riverbank north along Harrison Street to Main Street. The dike and berm protect the marina from swift water, ice and debris during high water events (see Figure 3). The top of the dike is above the 100 year flood elevation.

Approximately 24,503 cubic yards of soil will be excavated to create the harbor. The excavated material will be used to build part of the earthen berm. Additional soil may be necessary to complete the berm and for contouring to ensure proper drainage.

Approximately 37,338 cubic yards of material will be dredged from the Illinois River. The river material will be discharged back into the river channel.

A floating breakwater extends from the southern end of the dike down river approximately 600 feet (see figures 4, 5 & 6). This protects the outside portion of the harbor and allows for the docking of large boats. The breakwater is constructed from recycled shipping crates. Each crate is 40 feet long, 8 feet wide, and 10 feet deep. Each crate floats from the addition of encapsulated foam, but will remain partially submerged from large holes cut into their sides. The floating breakwater will rise and fall with the river level along pipe piles anchored to the bottom of the river.

At the east end of the proposed marina are a floating building and a fuel dock. In addition to fuel sales, the building offers concessions, groceries, hardware, shower facilities and laundry. Access to the store is along an ADA compliant ramp from the sidewalk and nearby parking lot. A wheelchair lift is proposed to provide easy boat access for handicapped individuals. Other amenities include: electrical outlets, data ports, pay telephones, ATM, vending machines, visitor information, and maps, laundry service, convenience store, and restroom/shower facility. The parking lot will consist of approximately 50 parking spaces for cars and an additional 30 parking spaces for vehicle/trailers.

Presumably, the cost will be slightly less for alternative 2 than for alternative 1. This is because alternative 2 is smaller and requires fewer docks. Excavation and construction activities will essentially be the same for both alternatives. The quantities will be less for alternative 2.

Approximately one acre of low quality wetlands will be destroyed during construction. In order to mitigate the wetland destruction, approximately two acres of high quality wetlands will be created at the historic Shafer's Wharf. The newly created wetlands are expected to contain an elevated boardwalk and classroom allowing visitors to experience a wide variety of native wetland plants and animals.

The fuel station is designed to minimize accidents and spills. Section 30A of the National Fire Protection Association requirements will be utilized to design the fuel facility. Containment booms and absorptive materials will be kept at the

facility. Personnel are to be trained to minimize hazards and in spill containment techniques.

2.1.3 ALTERNATIVE 3 – NO ACTION

The no action alternative means nothing will be constructed on the site. There will be no berm and dike. No wetlands will be destroyed and wetlands mitigation at Shafer’s Wharf will not take place. The transient boater will be less likely to stop in Grafton. The project site will remain in its current grassy, park like state. The cost of the no action alternative is zero.

Table 1 – Alternative Analysis

Alternative	Build Full Marina	Build Transient Marina	No Action
# of Docks	9	4	0
Day Boater Slips	153	0	0
Transient Slips	124	90	0
Construct Dike	Yes	Yes	No
Construct Berm	Yes	Yes	No
Fuel Dock	Yes	Yes	No
Convenience Store	Yes	Yes	No
Dock Utilities	Yes	No	No
Wetlands Mitigation	Yes	Yes	No

3.0 AFFECTED ENVIRONMENT

3.1 PHYSICAL CHARACTERISTICS

The proposed site location is the north bank of the Illinois River, at river mile 0.7. The site is situated between Harrison Street and Maple Street along the south side of Water Street. Currently, the site is a vacant, grassy area designated for use as a “Public Landing”. The marina will utilize 1290 feet of riverbank. The site includes an existing, gravel public parking lot, an existing bike trail, roadways and grassy areas. There are no existing structures on the site. Access to the marina will be from several streets including Harrison, Union, Mulberry and Maple. Parking is located in the existing City lot plus the additional spaces along Water Street.

3.2 BIOLOGICAL ENVIRONMENT

3.2.1 HABITAT/VEGETATION

The site allocated for the marina is a highly floodable low land. It is owned by the City. Part of the proposed site is characterized by the United States Army Corps of Engineers as low grade wetlands. The wetland area is approximately one acre in size. It is comprised of several low areas which temporarily retain water after a rainfall or flood event. The area is routinely mowed to a park like setting. Festivals are held there on an annual basis. Several tree species exist on the proposed site including, but not limited to pecan, oak, and maple.

3.2.2 THREATENED, ENDANGERED AND CANDIDATE SPECIES

The IDNR has determined the Illinois Natural Heritage Database contains no records of threatened/endangered species or natural areas in close proximity to the project site. A copy of the August 22, 2003, letter is included in Appendix 1.

At the request of the IDNR, a mussel survey was conducted in the proposed dredge area. During to this survey, only 237 shells were found in an area of 9,000 square feet. All mussel species were common. After reviewing the report, the IDNR issued a letter on July 26, 2004, stating “Based on the survey, the Department does not expect the proposed dredging to result in significant direct mortality or to affect any listed mussel species”. A copy of the request and the mussel survey report is included in Appendix 2.

Table 2 lists the threatened or endangered species that may exist in the project area or pass along the river. Based on the fact that no suitable habitat for these species exists in the project area, it is expected that no impacts on these species or any other species are expected from the proposed marina.

Table 2 – Threatened, Endangered, and Candidate Species

Common Name	Scientific Name	Habitat
Endangered Gray Bat	<i>(Myotis Grisescens)</i>	Caves; feeding rivers/ reservoirs adjacent to forests
Endangered Indiana Bat	<i>(Myotis Sodalis)</i>	Caves, mines; small stream corridors with well developed riparian woods; upland and bottomland forests
Threatened Decurrent False Aster	<i>(Boltonia Decurrens)</i>	Disturbed alluvial soils
Threatened Bald Eagle	<i>(Haliaeetus Leucocephalus)</i>	Breeds and winters along major rivers and large Reservoirs
Endangered Least Tern	<i>(Sterna Antillarum)</i>	Bare alluvial and dredge spoil islands
Endangered Pallid Sturgeon	<i>(Scaphirhynchus Albus)</i>	Rivers

3.2.3 OTHER WILDLIFE SPECIES

The project area exhibits some development thus providing minimal habitat for wildlife. Terrestrial habitat is nearly non-existent and only common species of birds and small mammals that adapt readily to human disturbance are likely present near the project. Common fish species are no doubt present in the river at the proposed breakwater site. It is expected that the riprap berm will be beneficial to many aquatic species by providing shelter from predators. The proposed floating breakwater contains cavities which will be used for habitation and breeding of aquatic wildlife. These structures act as “artificial reefs” by supplying shelter and habitat for a number of plant and animal species.

3.3 LAND USE

The City owns the majority of the riverfront property within the corporate limits. Most of the land north of Water Street was obtained by the City after the 1993 flood with the aide of the Federal buyout program. The property contains explicit deed restrictions regarding land usage. Allowable uses are; open space, recreational and wetlands management. New structures must be for public facilities consistent with open use.

The portion of the City’s property leased to the Grafton Harbor Marina is designated “Public Landing”. The riverfront property upriver (west) and downriver (east) of the corporate limits is owned or controlled by the State of Illinois. See the May 7, 2004, letter from Mr. John R. Mosby, Mayor, City of Grafton, to Mr. Dennis Kennedy, Senior Water Resources Engineer, IDNR, located in Appendix 3. In August of 2002, the City of Grafton and Desherlia Enterprises entered into an agreement regarding the improvements, duration, public use, repairs and maintenance, permits,

taxes, liability, insurance, financing and other items in relation to the proposed marina. A copy of this agreement is Appendix 4.

Public use of the land in and around the marina is high priority. After construction, the relocated bike trail, public parking, swimming, boating, fishing, the walkway along the dike and floating breakwater are all designed for public use and easy access.

The wetlands mitigation area is proposed at the site of the existing, historic Shafer's Wharf. The proposed 2.0 acre area will consist of native plants, trails, and informational kiosks for the public to use. Native animal species will also benefit from the wetlands mitigation area.

3.4 CULTURAL/PALEONTOLOGICAL RESOURCES

The Illinois Historic Preservation Agency was notified of the project in September 2003. An archeological evaluation has not been conducted. In October 2004, a letter from the Illinois Historic Preservation Agency states the project is in compliance with Section 106 of the National Historic Preservation Act of 1966. Due to proximity to the river and the continual flooding, it is anticipated that the project will not impact any culturally significant resources.

3.5 LOCAL SOCIO-ECONOMIC CONDITIONS

After the flood in 1993, Grafton's population and tax base was cut in half. Residents and businesses suffered greatly. Since then, the City has struggled to reestablish a sound economic base.

The public has been notified of the proposed Grafton Harbor Marina during two 21-day public notice period to date. One was in August of 2003 and the other in May of 2004. No negative comments were received during either public comment period.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 ALTERNATIVE 1 – CONSTRUCT A FULL SERVICE MARINA (PROPOSED ACTION)

4.1.1 BIOLOGICAL ENVIRONMENT (HABITAT, THREATENED, ENDANGERED AND CANDIDATE SPECIES IMPACTS)

According to the IDNR and their review of the Illinois Natural Heritage Database, there are no records of threatened/endangered species or natural areas in close proximity to the project site.

Dredging activities may have a minor and temporary effect on a few benthic organisms and mussels. All expected impacts are only temporary. The effect of re-suspended silt on water quality will be negligible and temporary.

Dredged material will be discharged back into the Illinois River. There are no environmental impacts expected from this activity due to the fact that this action occurs along the river on a routine basis. The volume of dredged material expected from alternative 1 is 51,000 cubic yards which equates to 2.4 metric tons per hour. Approximately 9,000 metric tons of sediment are transported by the Mississippi River on an hourly basis.

The breakwaters will provide hiding and feeding habitat for small fish and attachment substrate for aquatic insects. These aquatic organisms will subsequently attract larger predatory fish. This is considered a positive biological impact that is permanent.

Concurrent with the public comment period and prior to dredging and disposal sampling of the proposed dredge material from the Illinois River substrate will be conducted. Sampling methods, locations, and laboratory analysis will be conducted in accordance with the current Illinois Department of Natural Resources and the United States Fish and Wildlife regulations. The purpose of this activity is to ensure that the proposed dredged material does not contain any target compounds in concentrations above levels of concern.

4.1.2 LAND USE

Impacts to the current land use from the construction of marina facilities include parking lot enhancement and topography changes. An earthen berm will be constructed within the right of way of Harrison Street. The berm will protect the facilities from high water levels and debris. The existing bike trail is to be moved to the north side of the Water Street right of way which will straighten and flatten the trail.

The existing wetland area will be destroyed. A new larger wetland area will be created at the Shafer's Wharf site.

4.1.3 CULTURAL RESOURCES

It is anticipated that no cultural resources will be impacted by alternative 1.

4.1.4 ENVIRONMENTAL JUSTICE

Executive Order 12899, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Federal Register 7629 (1994), directs Federal agencies to incorporate environmental justice in their decision making process. Federal agencies are directed to identify and address as appropriate, any disproportionately high and adverse environmental effects of their programs, policies, and activities on minority or low-income populations. No environmental justice issues exist for the alternative. No minority or low income populations will be impacted by the alternative.

4.1.5 FLOODPLAIN IMPACTS

A hydraulic analysis of the proposed harbor breakwater was prepared by Russell Engineering and Construction Services, Ltd. The HEC – 2 modeling program was used for a variety of flows and event frequencies. According to the analysis, no impact is expected from the proposed breakwater. No significant changes to the existing river surface elevations are predicted and a slight increase to the river velocities may occur at the project location. The results indicate that the breakwater will not have a negative effect on the river’s flood carrying capacity. A copy of the analysis is included in Appendix 6.

A plan has been developed to monitor the silt accumulation on the upriver side of the dike. The Illinois Department of Natural Resources (“IDNR”) has reviewed and approved the silt plan.

The marina docks are designed to raise and lower with the water level thus minimizing flood water impacts. The height of the guide rails for all docks exceeds the 500 year flood elevation. The rock dike and earthen berm work in conjunction to protect the harbor area and its contents from high water and floating debris.

4.1.6 BOATING IMPACTS

Only positive impacts are expected for boaters from alternative 1. With a full service marina, boaters can dock, come ashore, and take advantage of the many attractions and services offered by the City and the surrounding area. The proposed alternative will provide slips with utilities for both day boaters and transient boaters. Boaters will have a place in which to moor their boats for the season.

Currently, the transient boaters do not have a place of this nature or magnitude to dock their boat in the City.

4.1.7 ECONOMIC IMPACTS

The new marina will increase jobs and bring in money from tourists who will shop, eat, buy gasoline, and use transportation linkages (car rentals, trolley, bike, bus charters, ferries, etc.) to get to other destinations and other recreational services. The creation of new jobs benefits not only Grafton but also the surrounding area. Ancillary services and additional development may spawn from the additional traffic generated by the marina. The new marina is projected to generate approximately \$33,600 per weekend. The marina will be open for 36 weekends from the first of March to the end of October, which could potentially generate \$864,000 per season.

An economic impact is also expected from the proposed alternative. The project will attract transient boaters and tourists to the area which, in turn, will spawn economic growth within the City and surrounding area.

4.1.8 CUMULATIVE IMPACTS

One cumulative impact may occur from the destruction of the one acre low grade wetlands. To compensate for the destruction, the area will benefit from a 2.2 acre wetland and nature study area that will be created in the Shafer's Wharf area. The created wetland will larger in size and of higher quality than the wetland to be destroyed by alternative 1.

The construction of a new marina in this location will increase the boating traffic in the immediate area. This may increase transient boating along both the Illinois and Mississippi Rivers which would create a need for more marina facilities.

4.2 ALTERNATIVE 2 – CONSTRUCT TRANSIENT ONLY MARINA

4.2.1 BIOLOGICAL ENVIRONMENT (HABITAT, THREATENED, ENDANGERED AND CANDIDATE SPECIES IMPACTS)

According to the IDNR and their review of the Illinois Natural Heritage Database, there are no records of threatened/endangered species or natural areas in close proximity to the project site.

Dredging activities may have a minor and temporary effect on a few benthic organisms and mussels. All expected impacts are only temporary. The effect of re-suspended silt on water quality will be negligible and temporary.

The breakwaters will provide hiding and feeding habitat for small fish and attachment substrate for aquatic insects. These aquatic organisms will subsequently attract larger predatory fish. This is considered a positive biological impact that is permanent.

Dredged material will be discharged back into the Illinois River. There are no environmental consequences expected due to the fact that this action occurs along the river on a routine basis. Since the size of the marina in alternative 2 is smaller than in the previous alternative, the volume of dredged material should be less than 51,000 cubic yards. This amount is miniscule in comparison to the amount of silt already in suspension in the river.

4.2.2 LAND USE

Since alternative 2 is designed for transient boaters only, the existing public parking lot should be sufficient to handle the expected traffic. Some paving may take place for aesthetics. A small parking facility for employees will be created closer to the marina store. Contouring will still take place to ensure proper drainage. The earthen berm will be constructed within the right of way of Harrison Street. The existing bike trail is to be moved to the north side of the Water Street right of way.

The existing wetland area will be destroyed. A new wetland area will be created at the Shafer's Wharf site.

4.2.3 CULTURAL RESOURCES

It is anticipated that no cultural resources will be impacted by alternative 2.

4.2.4 ENVIRONMENTAL JUSTICE

Executive Order 12899, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Federal Register 7629 (1994), directs Federal agencies to incorporate environmental justice in their decision making process. Federal agencies are directed to identify and address as appropriate, any disproportionately high and adverse environmental effects of their programs, policies, and activities on

minority or low-income populations. No environmental justice issues exist for the alternative. No minority or low income populations will be impacted by the alternative.

4.2.5 FLOODPLAIN IMPACTS

The marina docks are designed to raise and lower with the water level thus minimizing flood water impacts. The height of the guide rails for all docks exceeds the 500 year flood elevation. The rock dike and earthen berm work in conjunction to protect the harbor area and its contents from high water and floating debris.

Although the number and size of docks will be less than the docks proposed in alternative 1, the impact or lack thereof will be the same.

4.2.6 BOATING IMPACTS

Only positive impacts are expected for boaters from alternative 2. Fewer slips without utilities are proposed with this alternative. Transient boaters will still have slips to dock for the day or overnight.

Currently, the transient boaters do not have a place of this nature or magnitude.

4.2.7 ECONOMIC IMPACTS

Although a smaller marina in size and number of slips, the new marina will increase jobs and bring in money from tourists who will shop, eat, buy gasoline, and use transportation linkages (car rentals, trolley, bike, bus charters, ferries, etc.) to get to other destinations and other recreational services. The economic benefit of alternative 2 will be less than with alternative 1.

4.2.8 CUMULATIVE IMPACTS

One cumulative impact will be the destruction of the one acre low grade wetlands. To compensate for the destruction, the area will benefit from a 2.2 acre wetland and nature study area that will be created in the Shafer's Wharf area. The created wetland will be larger in size and of higher quality than the wetland to be destroyed by alternative 2.

The construction of a new marina in this location will increase the boating traffic in the immediate area. This may increase transient

boating along both the Illinois and Mississippi Rivers which would create a need for more marina facilities. The Boating Infrastructure Grant Program of the USFWS was designed to increase transient boating by aiding in the construction of facilities for transient boaters which are non-trailerable boats 26 feet in length or greater.

4.3 NO ACTION

4.3.1 BIOLOGICAL ENVIRONMENT (HABITAT, THREATENED, ENDANGERED AND CANDIDATE SPECIES IMPACTS)

No impact to threatened, endangered, or candidate species is expected. The small fish and aquatic insect habitat that would be created by the addition of the breakwaters will not be experienced.

4.3.2 LAND USE

No impact.

4.3.3 CULTURAL RESOURCES

No impact.

4.3.4 ENVIRONMENTAL IMPACTS

No environmental justice issues exist on this project. No minority or low-income populations will be affected.

4.3.5 FLOODPLAIN IMPACTS

No impact.

4.3.6 BOATING IMPACTS

The identified needs of the transient and seasonal boater will not be met with this alternative. Boaters will continue to use other ports.

4.3.7 ECONOMIC IMPACTS

The potential revenue from increased boaters and tourists will not be realized with this alternative.

4.3.8 CUMULATIVE IMPACTS

Without additional marina facilities along the river system, the amount of transient boaters will remain at the current level.

4.4 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Table 3 - Environmental Consequences Summary

Alternative	Alternative 1 – Build Marina at Harrison and Maple	Alternative 2 – Build Transient only Marina	Alternative 3 – No Action
Biological	Negative short term impact from dredging.	Negative short term impact from dredging.	No impact.
Habitat	Positive impact with creation of habitat for small fish and aquatic insects. Negative impact from destroying wetlands. Positive impact by wetlands enhancement at Shafer’s pond.	Positive impact with the creation of habitat for small fish and aquatic insects. Negative impact from destroying wetlands. Positive impact by wetlands enhancement at Shafer’s pond.	No impact.
Listed Species	No impact.	No impact.	No impact.
Land Use	Positive impact by use for intended purposes.	Positive impact by using for intended purposes.	No impact.
Cultural Resources	No impact.	No impact.	No impact.
Environmental Justice	No impact.	No impact.	No impact.
Floodplain	No impact.	No impact.	No impact.
Economic	Increase in sales tax revenue.	Increase in sales tax revenue.	No increase in revenue
Boating	Positive for season and transient boaters.	Positive for transient boaters only.	No increase in boaters.
Cumulative Impacts	Low level wetlands destroyed. Shafer’s pond wetlands used as compensation. Boating traffic increase creates need for more marinas.	Low level wetlands destroyed. Shafer’s pond wetlands used as compensation. Boating traffic increase creates need for more marinas.	No increase in traffic means no increase in revenue plus no need for additional marinas along the river system.
Construction Cost (Estimated)	> \$4,000,000.00	> \$3,000,000.00	\$0.00

5.0 LIST OF PREPARERS

Russell Engineering and Construction Services, Ltd., 122 West Pearl Street,
Jerseyville, Illinois 62052

Robert C. Rogers, P.E. – Ten years experience in the Civil Engineering Environmental field.

Cory A. Freand – Engineering Technician

6.0 CONSULTATION AND COORDINATION WITH THE PUBLIC AND OTHERS

The City of Grafton, Illinois

Honorable John R. Mosby, Mayor of Grafton

Carol Wallace, Administrative Manager

Charlie Juneau, Juneau Associates, Inc. P.C., City Engineer

Illinois Department of Natural Resources

Rose Ragland, Grant Administrator

Robert W. Shanzle, Permit Program Manager, Office of Realty and Environmental Planning

Dennis L. Kennedy, Senior Water Resources Engineer

Illinois Department of Transportation

Melissa R. Hendricks, Special Programs Manager, Planning and Systems Section

Illinois Environmental Protection Agency

Bruce Yurdin, Manager Watershed Management Section

Robert Mosher, Anti Degradation

Missouri Department of Natural Resources

Peter Goode, P.E., Chief, NPDES Permits and Engineering Section

United States Army Corps of Engineers

Alan Edmondson, Project Manager, Rivers Permitting/Evaluation Section

Danny D, McClendon, Chief, Regulatory Branch

United States Fish & Wildlife Service

Ann Schneider, Division of Federal Aid, Fort Snelling, Minnesota

John Mabry, Refuge Manager

The following meetings, public notices and public hearings have been held to date on the development of the project.

Public Notices

August 1, 2003 – August 22, 2003

May 12, 2004 – June 2, 2004 Meetings

July 7, 2004 – City of Grafton Planning Commission Meeting

July 19, 2004 - Meeting at Juneau Associates, Inc.

August 4, 2004 – City of Grafton Planning Commission Public Hearing

August 23, 2004 – Illinois Environmental Protection Agency, Bureau of Water, Watershed Unit

Once the USFWS has accepted the Draft EA, a news release soliciting public comments on the draft will be prepared by the USFWS and distributed statewide by the External Affairs Office. The EA will also be posted on the USFWS website. The City of Grafton will also prepare a news release soliciting comments on the draft EA. After the required 30-day comment period, and assuming no additional revisions are necessary, the EA and supporting grant documents will then be considered eligible for approval.

All comments will be collected by Ms. Rose Ragland, Illinois Department of Natural Resources, One Natural Resources Way, Springfield, Illinois 62702-1271. Phone: 217/782-2602 Email: rragland@dnrmail.state.il.us

7.0 PUBLIC COMMENT ON DRAFT EA AND RESPONSE

This chapter is to be completed once the public comment period is completed.

8.0 REFERENCES

Grafton Marina Master Plan, Grafton, Illinois, Sheppard, Morgan, Schwaab, Inc. in association with Freeman Consulting, April 2001

Boating Infrastructure Grant Program, Grafton Harbor Project, Grafton, Illinois, City of Grafton Illinois, September 2003

Draft Environmental Assessment, Clinton City Marina Renovations, Mississippi River Mile 519, Abonmarche Consultants, Inc., August 2002

Final Environmental Assessment, City of Alton, Madison County, Illinois, Marina Breakwater Extension, Mississippi River Mile 202.5, Stanley Consultants, Inc., June 2004.

Final Environmental Assessment, City of Fulton, Whiteside County, Illinois, Marina Renovations, Mississippi River Mile 519.5, Abonmarche Consultants, Inc., September 2003.