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ENVIRONMENTAL ASSESSMENT

LOCK AND DAM 14 MAJOR REHABILITATION

LE CLAIRE, IOWA

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JANUARY 1993

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US Army Corps
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Rock Island District

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DEPARTMENT OF THE ARMY
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ENVIRONMENTAL ASSESSMENT

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ENVIRONMENTAL ASSESSMENT

LOCK AND DAM 14 MAJOR REHABILITATION LE CLAIRE, IOWA

BACKGROUND. Lock and Dam 14 is a component of the inland waterway navigation system of the Upper Mississippi River Basin. Construction, operation, and maintenance of this facility was authorized by the River and Harbor Act of 1930. Construction of Lock and Dam 14 was completed in 1939.

An Environmental Impact Statement was prepared for *Operation and Maintenance of the Upper Mississippi River Nine-Foot Channel Project, Pools 11 Through 22*, with the Statement of Findings filed with the Council on Environmental Quality on January 28, 1975.

In 1978, the Inland Waterways Authorization Act (Public Law 95-502) was signed into law. Section 101 of the Act directed the Upper Mississippi River Basin Commission to prepare a *Comprehensive Master Plan for the Management of the Upper Mississippi River System* in cooperation with appropriate Federal, State, and local officials.

The U.S. Army Corps of Engineers, North Central and Lower Mississippi Valley Divisions; St. Paul, Rock Island, and St. Louis Districts are currently engaged in planning and construction activities on the Upper Mississippi and Illinois Rivers for the purpose of repairing and updating components of the navigation system on these rivers. Various site-specific environmental documents have been, or are being, prepared which discuss localized effects to natural and cultural resources from rehabilitation of Locks and Dams 2 through 22 on the Upper Mississippi River; and Lockport, T. J. O'Brien, Marseilles, Peoria, and La Grange Locks and Dams on the Illinois River. A Programmatic Environmental Impact Statement (PEIS) was prepared to assess the environmental impacts to the Upper Mississippi River System (UMRS) from the major maintenance/rehabilitation effort. The majority of the maintenance/rehabilitation work has consisted of repair and replacement items. However, the Comprehensive Master Plan identified certain measures, both structural and nonstructural, that may lead to increases in navigation capacity and possibly cause cumulative impacts to the UMRS.

The Rock Island District conducted a traffic analysis in the PEIS to ascertain whether operation of the proposed rehabilitation measures to existing structures would be likely to increase commercial navigation, which would lead to system-wide (cumulative) impacts on the UMRS. The traffic analysis concluded that during the navigation season and by the year 2040, a 1.3 percent increase in system traffic, or about 2.1 million tons, would occur with the proposed measures in place, versus without the proposed measures. This traffic increase translates into an average increase of about one tow per week on the Illinois Waterway and about two tows per week on the Mississippi River. It would be difficult to measure an increment this small in traffic from the environmental viewpoint. Also,

an increase in traffic of this size is within the normal variability of any navigation season.

The proposed maintenance/rehabilitation of Lock and Dam 14 covered by this Environmental Assessment includes maintenance and construction work to existing lock and dam features, such as concrete removal and replacement and electrical equipment replacement. As a result, the rehabilitated facilities will retain operating and performance characteristics similar to their original design. The only activity for this project that can be considered new construction is the bubbler system. Louis Berger & Associates, in their report for the St. Paul District entitled *Assessment of Cumulative Impacts of Major Rehabilitation of L/D 2 Through 10* (1987), stated "It is important to emphasize that the new bubbler system has no influence on the length of the navigation season. The beginning and the end of the navigation season are determined by the river conditions and not by the lock availability." (Emphasis added.) New construction will follow the Secretary of the Interior's *Standards for Rehabilitation and Restoration* for no adverse effect.

At such time as any other new construction features are proposed for Lock and Dam 14, they will be evaluated as to their impact on local and system traffic and any resulting cumulative environmental impacts. The Rock Island District concluded that this increase in system traffic during the navigation season caused by the proposed rehabilitation measures would not result in system-wide or cumulative impacts to the UMRS that are measurable over existing conditions. The Final PEIS was distributed for public review in March 1989, and the Record of Decision was signed on July 28, 1989.

ENVIRONMENTAL ASSESSMENT
LOCK AND DAM 14 MAJOR MAINTENANCE
LE CLAIRE, IOWA

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ENVIRONMENTAL ASSESSMENT

LOCK AND DAM 14 MAJOR MAINTENANCE LE CLAIRE, IOWA

I. PURPOSE AND NEED FOR ACTION.

Completed in 1939, Lock and Dam 14 has deteriorated due to weathering action and wear in over 50 years of service. Maintenance of the facilities is needed to retain operating, performance, and reliability characteristics similar to their original design.

II. PROJECT DESCRIPTION.

Lock and Dam 14 is located at Mississippi River mile 493.3, shown on Plate EA-1 - General Map.

The facilities are described as follows:

* The lock has a clear length of 600 feet and a width of 110 feet. The main lock consists of two walls: a land wall and a river wall. The land wall of the main lock chamber is 923 feet long and is supplemented by the 517-foot upstream and 500-foot downstream guidewalls. The river wall has a total length of 891.5 feet. The entire lock is keyed on a rock foundation. The filling and emptying of the lock chamber is by gravity from a tunnel within each wall. One tunnel and two tainter valves in each wall serve the lock. The lock is equipped with two vertically framed steel miter gates, each comprised on two leaves. The upper miter gate is 23 feet high, and the lower miter gate is 27 feet high.

* The dam consists of 13 tainter gates, 4 roller gates, and 1,357 feet of non-submersible earth dike. The 13 tainter gates are each 60 feet wide by 20 feet high, and the 4 roller gates are each 100 feet wide by 20 feet high. The gates operate between concrete piers that have gate operation material housed on top.

* The auxiliary lock is 320 feet long by 78 feet wide. The lock consists of a river wall, a land wall, and a downstream guidewall. The lock was constructed in 1922 and is located in the Le Claire Canal between Smith's Island and the Iowa shore. No further work is anticipated to be necessary as the lock was rehabilitated in 1979-1981 under the Major Rehabilitation Program, including improvements such as refacing the concrete walls, installing an anchored floor slab and mooring pins, replacing the top portion of the guidewall, and replacing the miter gates, control house, electrical systems, and operating machinery.

The proposed activity involves a variety of work such as concrete removal and replacement, steel work, sandblasting, painting, mechanical equipment replacement, and electrical equipment replacement.

Details of the proposed rehabilitation plan are as follows:

A. Lock Walls. The lock walls will be repaired by removing the deteriorated concrete in the lock chamber and around the miter gates and replacing it with new concrete and armor. The armor will consist of horizontal runs of steel T-section and horizontal and vertical steel corner protection. Bulkhead slots will be installed in the lock walls upstream of the upper miter gates. The tops of lock walls and most walking surfaces will be resurfaced.

B. Main Lock Miter Gates. There are two sets of miter gates on the main lock. The gates are riveted steel frame structures covered with steel buckle plate. The upper and lower gates will be overhauled and painted. Bulkheads and poiree dams will be used as cofferdams when lock repairs are made. These facilities are chemically stable and will be removed once work is completed.

C. Lock Miter Gate Machinery. The existing machinery will be removed and replaced with new machinery.

D. Lock Tainter Valve Machinery. The existing machinery will be removed and replaced with new machinery, and the tainter valves will be overhauled, cleaned, and painted.

E. Lock Electrical Equipment. The existing electrical equipment, including conduit, wiring, and the lighting system, will be removed and replaced with new equipment.

F. Dam Structure. The dam piers will be repaired by removing the deteriorated concrete and replacing it with new concrete. The inside and outside of the trunnion boxes will be cleaned and painted.

G. Roller Gates. The overall condition of the roller gates is good. The outsides of the gates were last painted in 1973. The insides of the gates have not been painted since they were built. The roller gates will be cleaned and painted, and structural steel repairs will be made as needed. Side seal plates and rubber seals will be replaced if necessary. The dam gate lifting chains and electrical system are in a deteriorated condition and will be replaced.

H. Tainter Gates. The overall condition of the tainter gates is good. The painting on the tainter gates has coincided with the roller gates. The tainter gates will be cleaned and painted, and structural steel repairs will be made as needed. The lifting chains and electrical system are in a deteriorated condition and will be replaced.

I. Service Bridge and Bulkhead Crane. The bridge structure will be cleaned and painted. Wooden walkways will be replaced with non-skid metal grating.

J. Emergency Bulkheads. The bulkheads will be repaired, cleaned, painted, and seals replaced.

K. Lock Control Stand Enclosures. The existing moveable, temporary type of control stand enclosures will be replaced with a permanent concrete or masonry structure that will be elevated approximately 2 feet.

L. Installation of Bubbler System. Low-volume bubbler systems are presently located at several lock sites on the Upper Mississippi River. These low-volume bubbler systems generate air through diffusers in the bottom of the lock to prevent ice accumulation on the miter gates. The proposed bubbler system would consist of dual capacity, low-volume and high-volume blowers, with piping systems located in the miter gate areas. The high-volume blower would be capable of producing 750 cubic feet per minute (cfm) of air at 100 pounds per square inch (psi), while the low-volume blower would produce 55 cfm of air at 12 psi. This dual capacity system would prevent ice accumulation on the miter gates and also would keep the gate recess clear of floating ice and debris. The piping system for the bubblers would be placed directly on the main lock structure. The upstream and downstream compressors would be placed on top of the lock wall.

No dredging or scour protection is proposed as a component of this rehabilitation project.

III. ALTERNATIVES. Alternatives which were considered include:

A. No Federal Action. This alternative was not selected because the facilities are approaching the limits of their serviceable life. Maintenance of Lock and Dam 14 is authorized by the River and Harbor Act of July 3, 1930.

B. Rehabilitation of the Facility to Original Design Specifications or Criteria. This alternative was not selected because review of the facilities under the Major Rehabilitation Program indicated that certain features are outdated or unsafe.

C. Rehabilitation of the Facility to Updated Specifications and Criteria. This is the preferred alternative.

D. New Lock and Dam 14. This alternative was rejected because the condition of the existing lock and dam is such that it is more economically feasible to continue repairs on the existing lock and dam than to build a new structure.

E. New 1,200-Foot Lock No. 14. The feasibility and need of improving the capacity of Locks and Dams 11-25 is being studied as part of the Upper Mississippi River Navigation Study in a long-term research effort. This alternative is not appropriate because it does not address the immediate maintenance needs of Lock and Dam 14.

F. Other Alternatives. Several other alternatives were considered but were not feasible due to economic, engineering, or environmental concerns:

1. Replacement of Selected Features
2. Major Maintenance Efforts
3. Repair As It Fails

IV. AFFECTED ENVIRONMENT.

A. Natural Resources. Lock and Dam 14 is situated on the Upper Mississippi River at River Mile 493.3 downstream of Le Claire, Iowa, just north of the Quad City Metropolitan Area. The river at this point forms the boundary between Rock Island County, Illinois, and Scott County, Iowa.

The entire complex is owned by the U.S. Army Corps of Engineers, including the locks and dam as well as storage facilities and parklands open to the public, and covers 64 acres, 14 of which are developed. These areas are shown on plate EA-2. The area generally consists of high density recreational uses. Some residential housing is located on the bluff overlooking the lock and dam on the Iowa side.

Smith's Island is located in the western portion of the river between the main and auxiliary locks (see plate EA-2). The northern section of the island consists of forested lands. The elevation of this portion of the island is higher than typical riverine islands due to the placement of dredged material on the site after the construction of Lock and Dam 14. As a result, Smith's Island supports upland tree species rarely found in comparable habitats throughout the Mississippi River system.

The northern end of the island, adjacent to the auxiliary lock, is dominated by woody vegetation averaging 90 years in age and trunk diameters of over 12 inches. Typical species include sugar maple, red oak, hickory, black cherry, shagbark hickory, black walnut, and hackberry. The central section of the island is dominated by trees averaging 60 years in age with trunk diameters over 18 inches wide. Typical species include cottonwood, river maple, and box elder. The far northern tip of the island supports trees generally younger with trunk diameters over 18 inches wide. Typical species include burr oak, black locust, honey locust, mulberry, and cottonwood. A fairly dense and diverse mix of understory vegetation colonizes Smith's Island. With heights ranging from 15 to 25 feet, typical species include sugar maple, slippery elm, mulberry, dogwood, box elder, black willow, hickory, and cherry. Species diversity is very high due to the unique characteristics of the site, as previously stated. Smith's Island supports an unusually diverse and high quality habitat.

A shallow pond area is located in the southern portion of the island, along with a section of mowed grass open space adjacent to the auxiliary and main locks. Picnic tables, shelters, a visitor's overlook point, and interpretive nature trails are available for recreational use. The Corps

of Engineers also manages 14 acres of developed land adjacent to the auxiliary lock which contain storage and other related facilities. Heavy equipment is stored in the Le Claire Canal.

On the Illinois side of the river just south of Lock and Dam 14 is the Illiniwek Forest Preserve. The Fisherman's Corner Recreational Area is located to the north (plate EA-2). Fisherman's Corner South, a popular fishing and picnicking spot, is heavily used during the day. Fisherman's Corner North provides facilities for fishing and low impact camping. Plans to upgrade the site to a Class A campground through improvement and enlargement will take place in the coming years. Restrooms, showers, and electric hookups for approximately 30 high intensity sites will be added.

B. Endangered Species. The following federally endangered and threatened species may be present in the project area:

| | |
|------------------------------|---------------------------------|
| Indiana bat | <i>Myotis sodalis</i> |
| Bald eagle | <i>Haliaeetus leucocephalus</i> |
| Higgins' eye pearly mussel | <i>Lampsilis higginsii</i> |
| Fat pocketbook pearly mussel | <i>Potamilus capax</i> |

The Indiana bat is not listed for Scott County, Iowa. Although the listed distribution for Illinois is statewide, no suitable habitat (loose bark on trees) is found at the project site. For this reason, no impact to the Indiana bat will occur as a result of this project.

Bald eagles overwinter in the Lock and Dam 14 area, but primarily downstream where there is less human activity. The large trees along the shoreline are used from mid-December through February as resting, feeding, and observation perches. Temporary disruption of eagle foraging behavior is the primary potential effect of construction activity around the project site. Given the mobility of the species and the proximity of available foraging habitat throughout the project area, it is anticipated that disturbance of foraging birds will not affect the wintering bald eagle population. However, winter activity on the project site near bald eagles will be kept to a minimum to reduce impacts to that species.

The project will not disturb mussel habitat. Therefore, there will be no impact to the Higgins' eye pearly mussel or the fat pocketbook pearly mussel.

There is no designated critical habitat in the project area.

C. Cultural Resources. In 1985, the U.S. Army Corps of Engineers' 1927-1940 Upper Mississippi River Nine-Foot Channel project was considered to be eligible for listing on the National Register of Historic Places (NRHP) since it possesses integrity of location, design, setting, materials, workmanship, feeling, and association as a significant national transportation system. It is the Corps of Engineers' policy to ensure that the overall historic character, integrity, and preservation of these significant qualities are preserved.

In 1987, a Programmatic Memorandum of Agreement (PMOA) (Appendix B) was executed by the Corps of Engineers, the Advisory Council on Historic Preservation, and the Illinois, Missouri, Wisconsin, and Iowa State Historic Preservation Officers (SHPO's). The Programmatic Environmental Impact Statement entitled, *Major Rehabilitation Effort: Mississippi River Locks and Dams 2-22 and Illinois Waterway from La Grange to Lockport Locks and Dams* (PEIS 1989) and the PMOA delineate significant cultural resources (PEIS 1989:EIS-88).

This PEIS also describes compliance with the PMOA by completion of historic, photographic, and architectural documentation for the Historic American Engineering Record (HAER) under direction of the National Park Service (PEIS 1989:99). The HAER documentation was completed by Rathbun and Associates, filed with the Library of Congress (accepted in November 1988), and sent to the SHPO signatories.

All subject actions have been previously documented as having no effect or no adverse effect.

V. ENVIRONMENTAL IMPACTS OF THE PREFERRED ACTION.

Effects of the preferred action on natural and cultural resources are summarized in table EA-1.

A. Socioeconomic Impacts of the Preferred Action.

1. **Community and Regional Growth.** No significant impacts to the growth of the community or region would be realized as a direct result of the project. However, the existence of a cost-effective, efficient transportation system provided by the Upper Mississippi River locks and dams has provided stimulus for growth of river communities and the entire Midwest region. Maintenance of Lock and Dam 14 indirectly will help to provide for continued growth opportunities in Le Claire, Iowa, and the region.

2. **Displacement of People.** The proposed maintenance activities at Lock and Dam 14 would necessitate no residential relocations.

TABLE EA-1

Effects of the Preferred Action
on Natural and Cultural Resources

| <u>Types of Resources</u> | <u>Authorities</u> | <u>Measurement of Effects</u> |
|--|--|---------------------------------------|
| Air quality | Clean Air Act, as amended (42 U.S.C. 165h-7, et seq.) | No significant effect |
| Areas of particular concern within the coastal zone | Coastal Zone Management Act of 1972, as amended | Not present in plan- ning area |
| Endangered and threatened species critical habitat | Endangered Species Act of 1973, as amended (16 U.S.C. 1531, et seq.) | No significant impacts anticipated |
| Fish and wildlife | Fish and Wildlife Coordi- nation Act (16 U.S.C. 661, et seq.) | No significant effect |
| Floodplains | Executive Order 11988, Flood Plain Management | No significant effect |
| Historic and cultural properties | National Historic Preserva- tion Act of 1966, as amended (16 U.S.C. 470, et seq.) | No significant effect |
| Prime and unique farmland | CEQ Memorandum of August 1, 1980; Analysis of Impacts on Prime or Unique Agricul- tural Lands in Implementing the National Environmental Policy Act | No significant effect |
| Water quality | Clean Water Act of 1977, as amended (33 U.S.C. 1251, et seq.) | No significant effect |
| Wetlands | Executive Order 11990, Protection of Wetlands, 24 May 1977 | Not present in plan- ning area |
| Wild and scenic rivers | Wild and Scenic Rivers Act, as amended (16 U.S.C. 1271, et seq.) | Not present in plan- ning area |

3. **Community Cohesion.** No impacts to community cohesion would be realized as a result of the project, given the limited residential or other development in the project vicinity.

4. **Public Facilities and Services.** Safety at the lock and dam facilities would improve following completion of the required maintenance. The rehabilitation would result in lower probability of service interruptions for maintenance and repairs, thus benefiting both commercial and recreational craft.

5. **Life, Health, and Safety.** The proposed maintenance activities would reduce safety threats to lock and dam personnel and towing industry personnel. The bubbler system will reduce the hazard now associated with chipping ice from the lock gates and walls and pushing ice and debris away from the gates with long poles.

6. **Property Values and Tax Revenues.** Limited, short-term effects on property values or tax revenues would result from the proposed maintenance activities at Lock and Dam 14. Long-term effects on property values and tax revenues would be related to community and regional growth.

7. **Business and Industrial Growth.** An increase in business and industrial activity would be noticed during the rehabilitation process. A portion of this increase would be attributable to purchases made for the rehabilitation of the lock and dam. The remaining increase would result from purchases made by construction workers (e.g., meals, lodging).

The Lock and Dam 14 rehabilitation will require no business relocations.

8. **Employment and Labor Force.** Rehabilitation of the lock and dam temporarily would increase area employment; an average of 100 workers would be employed for the maintenance efforts, with approximately 150 workers employed during the two peak months of construction. Workers would be hired through labor unions at Le Claire, Iowa, and other nearby communities.

Long-term impacts to employment or the labor force in the Le Claire, Iowa, area would be related to business and industrial growth resulting from indirect positive impacts of improved efficiency of the Upper Mississippi Navigation System as a whole.

9. **Farm Displacement.** No farms would be affected by the proposed construction activity and the lock and dam.

10. **Noise.** Heavy machinery would temporarily increase noise levels during project construction. The immediate project area features industrial and low density residential development. While construction noise potentially could disturb recreationists, it is unlikely that this noise level increase would significantly affect the surrounding population.

11. **Aesthetic Values.** The aesthetic appeal of any type of construction activity is low; however, construction will be temporary. The results of the proposed activity (i.e., concrete repair, machinery replacement, painting, and lighting improvement) should improve aesthetic values at facilities over the long term.

B. Environmental Impacts of the Proposed Action.

1. **Manmade Resources.** Pools 14 and 15 above and below the project site, respectively, may be considered manmade resources since they are natural resources modified by man to facilitate waterborne commerce on the Upper Mississippi River. They are created and controlled by operation of the lock and dam in concert with other components of the Upper Mississippi River Nine-Foot Channel Navigation project. The facilities are manmade resources and are a vital part of the national infrastructure.

At this time, rehabilitation of the facilities is anticipated to maintain existing navigation conditions in Pools 14 and 15. Completion of the project should contribute to alleviation of existing problems involving degradation of manmade resources of the Upper Mississippi River Nine-Foot Channel Navigation project.

2. **Natural Resources.** All project activities will take place on the facility structures themselves, and, therefore, will have a negligible effect on natural resources. No dredging is scheduled as part of this project. Potential sources of impacts from a project of this nature involve sandblast residue, paint-solvent overspray, concrete debris, and metal scrap. Asbestos insulating coverings from electrical components will require special handling and disposal as specified in 40 CFR 61.140. Sandblast residue and paint overspray will be controlled by the use of tarps or other containment devices, according to existing paint regulations.

Concrete debris and metal scrap will be removed and disposed of in compliance with applicable statutes. Guide Specification Civil Works Construction for Environmental Protection, CW-1430, July 1978, provides for submission of an environmental protection plan by successful contractors. Further guidelines in this document call for the Protection of Water Resources (Sec. 7.4) and Protection of Air Resources (Sec. 7.5). Rock Island District staff will review the Environmental Protection Plan submitted by the successful contractor prior to commencement of project activities. Corps inspectors will monitor adherence to this plan.

Winter work at the lock and dam may disrupt foraging behavior of migratory, or winter resident, bald eagles. The availability of foraging areas usually found at naturally occurring open areas, other locks and dams, and power station outlets indicates that foraging at Lock and Dam 14 is not critical to survival of this species. However, as stated earlier, winter activity on the project site near bald eagles will be kept to a minimum to reduce impacts to that species.

As stated in the PEIS, the bubbler system modification will have no significant impact to natural resources.

3. Cultural Resources. No impacts to cultural resources are anticipated.

This impact summary indicates that the major rehabilitation actions are required maintenance and proposed in compliance with the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Standards)*. Under Stipulation 2B of the Programmatic Agreement, the Corps determined that the work is in accordance with the Standards and will not affect any significant elements of the NRHP-eligible Upper Mississippi River Nine-Foot Channel project, nor any other eligible or NRHP-listed properties. Under the PMOA, the proposed rehabilitation actions require no formal coordination. Design plans and specifications will be preserved as evidence of compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

4. Air Quality. Impacts to air quality will occur from exhaust emissions, volatile paint solvents, fugitive particles from sandblasting, and dust particles from concrete removal. These impacts will be temporary and will not result in significant or permanent violations of air quality standards.

5. Water Quality. Construction materials will consist of physically stable and chemically noncontaminating material such as corrosion-resistant steel and concrete at Lock and Dam 14. No activities requiring processing under Sections 401 and 404 are planned for Lock and Dam 14.

While the contractor will be bound by the requirements and conditions set forth in *Guide Specification, Civil Works Construction for Environmental Protection*, CW-1430, July 1978, Section 7.3, certain loss of paint chips, residue, and other materials to the aquatic environment at the construction site is inevitable. Any effects, however, are anticipated to be minimal and short-term.

VI. COMPLIANCE WITH ENVIRONMENTAL QUALITY STATUTES.

Compliance is summarized in table EA-2.

A. Endangered Species Act. The U.S. Fish and Wildlife Service (USFWS) was formally consulted concerning federally endangered species, as required by the Endangered Species Act of 1973, as amended. As stated in a coordination letter (see Appendix A) the USFWS had no concerns or objections to the project as proposed.

TABLE EA-2

Relationship of Plans to Environmental Protection
Statutes and Other Environmental Requirements

| <u>Federal Policies</u> | <u>Compliance</u> |
|---|-------------------|
| Archaeological and Historic Preservation Act, 16 U.S.C. 469, et seq. | Full compliance |
| Clean Air Act, as amended, 42 U.S.C. 1857h-7, et seq. | Full compliance |
| Coastal Zone Management Act, 16 U.S.C. 1451, et seq. | Not applicable |
| Endangered Species Act, 16 U.S.C. 1531, et seq. | Full compliance |
| Estuary Protection Act, 16 U.S.C. 1221, et seq. | Not applicable |
| Federal Water Project Recreation Act, 16 U.S.C. 460-1(12), et seq. | Full compliance |
| Fish and Wildlife Coordination Act, 16 U.S.C. 601, et seq. | Full compliance |
| Land and Water Conservation Fund Act, 16 U.S.C. 460/-460/-11, et seq. | Not applicable |
| Marine Protection Research and Sanctuary Act, 33 U.S.C. 1401, et seq. | Not applicable |
| National Environmental Policy Act, 42 U.S.C. 4321, et seq. | Full compliance |
| National Historic Preservation Act, 16 U.S.C. 470a, et seq. | Full compliance |
| River and Harbor Act, 33 U.S.C. 403, et seq. | Full compliance |
| Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq. | Not applicable |
| Wild and Scenic Rivers Act, 16 U.S.C. 1271, et seq. | Full compliance |
| Flood Plain Management (Executive Order 11988) | Full compliance |
| Protection of Wetlands (Executive Order 11990) | Full compliance |
| Environmental Effects Abroad of Major Federal Actions (Executive Order 12114) | Not applicable |
| Farmland Protection Act | Full compliance |
| Analysis of Impacts on Prime and Unique Farmland (CEG Memorandum, 11 Aug 80) | Full compliance |

NOTES:

- a. Full compliance. Having met all requirements of the statute for the current stage of planning (either preauthorization or postauthorization).
- b. Partial compliance. Not having met some of the requirements that normally are met in the current stage of planning.
- c. Noncompliance. Violation of a requirement of the statute.
- d. Not applicable. No requirements for the statute required; compliance for the current stage of planning.

The states of Iowa and Illinois were consulted for comments as to impacts to State endangered species. Both State resource agencies concluded that there will be no impacts to any State-listed endangered species.

B. National Historic Preservation Act. Most of the rehabilitation actions are minor in scope and will have no adverse effect on characteristics which contribute to the significance of the navigation system as a whole or individual structures within it.

These improvement actions will not appreciably affect the overall appearance and operation of the navigation system, and will not affect those characteristics which contribute to the National Register significance of the Upper Mississippi River Nine-Foot Channel project. Many of the actions are necessary to ensure continued safe and efficient operation.

Beneficial effects that will accrue include the general upkeep of the system and the extension of its operating life. Safety, national defense, energy efficiency, and economic benefits are not strictly historical but are certainly in the public interest. These benefits are those for which the system initially was constructed and thus become intangible elements contributing to the overall significance of the system, fulfilling the requirements set forth by the NHPA.

C. Federal Water Project Recreational Act. The construction of the proposed project would have no effect on provisions of this act.

D. Fish and Wildlife Coordination Act. The U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, Iowa Department of Natural Resources, and Illinois Department of Conservation have been actively involved in this action. Letters of comment are reproduced in Appendix A.

E. Wild and Scenic Rivers Act. No rivers listed as "wild and scenic" or rivers in the inventory for listing as "wild and scenic" will be affected by the project.

F. Executive Order 11988 (Flood Plain Management). Executive Order 11988 directs Federal agencies to: (1) avoid development in the floodplain unless it is the only practical alternative; (2) reduce the hazards and risks associated with floods; (3) minimize the impact of floods on human safety, health, and welfare; and (4) restore and preserve the natural and beneficial values of the floodplain. The proposed action is in accordance with Executive Order 11988.

G. Executive Order 11990 (Protection of Wetlands). Executive Order 11990 directs Federal agencies to minimize the destruction, loss, or degradation of wetlands and enhance the natural and beneficial values of wetlands when a practical alternative exists. Wetland definitions may apply to bottomland and shoreline areas within the project area. No wetland or bottomland hardwood areas will be affected by the currently proposed action. The proposed action is in accordance with Executive Order 11990.

VII. ENVIRONMENTAL IMPACTS OF OTHER ALTERNATIVES.

1. No Action. This alternative would allow the deterioration of the subject facility to a potentially inoperable condition. Impacts could be incurred through loss of pool, flooding, rerouting of commodities to land-based transport, either short-haul around the facility or long-haul to final destination points, and a variety of other consequential activities resulting from the instability of Pool 14 and the remainder of the waterway system. Regulation of each pool would be hindered by lack of control at the dam.

2. Rehabilitation of the Facility to Original Design Specifications or Criteria. Other than essentially the same short-term effects as noted for the preferred alternative (proposed action), there would be no overall change from existing conditions.

3. New Lock and Dam No. 14. This alternative would result in significant impacts, affecting both cultural and natural resources. Removing the existing structure and constructing a new Lock and Dam 14 would disrupt the stability of Pool 14 as well as the remainder of the waterway system. Environmental impacts would be significant as well, due to the amount of disruption that unavoidably occurs with large-scale construction projects.

4. New 1,200-Foot Lock No. 14. The impacts of this alternative are being studied as part of the Upper Mississippi River Navigation Study.

5. Other Alternatives. These alternatives would result in unacceptable economic, engineering, and environmental impacts to both cultural and natural resources.

VIII. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED.

Temporary impacts to air and water, such as fugitive dust, machinery exhaust, paint overspray, and sandblast residue are unavoidable.

IX. RELATIONSHIP BETWEEN SHORT-TERM USE OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY.

As a vital component in the national transportation infrastructure, Lock and Dam 14 will continue to serve navigation interests, as well as to maintain river aquatic and terrestrial habitat.

Without the short-term use of the environment for rehabilitation activities, the locks and dams will continue to deteriorate, eventually reaching unsalvageable condition.

X. ANY IRREVERSIBLE OF IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IF THE PROPOSED ACTION SHOULD BE IMPLEMENTED.

The property currently occupied by the lock and dam and formerly unpooled riverine habitat (pre-1930's condition) should be considered irretrievable for the life of the project. Time, labor, fuel, and other necessary construction materials also are irretrievable commitments.

XI. RELATIONSHIP OF THE PROPOSED PROJECT TO LAND-USE PLANS.

The operation and maintenance of Lock and Dam 14 does not conflict with any known Federal, State, or local land-use plans.

XII. CONCLUSIONS, CONTRIBUTIONS TO CUMULATIVE SYSTEM EFFECTS.

Environmental effects will not be significant. The project design will incorporate features designed to minimize or avoid impacts to natural and cultural resources. No project activities will take place prior to certification, or waiver of certification, under applicable purviews of the Clean Water Act.

The proposed maintenance/rehabilitation of Lock and Dam 14 involves maintenance and construction work to existing lock and dam features, such as concrete removal and replacement, steel work, sandblasting, painting, mechanical equipment replacement, and electrical equipment replacement. Based on this analysis, the rehabilitation structures will retain operating and performance characteristics similar to their original design.

XIII. COORDINATION.

Coordination for the project is being maintained with the following State and Federal agencies:

U.S. Fish and Wildlife Service
U.S. Environmental Protection Agency
Illinois Department of Conservation
Iowa Department of Natural Resources
U.S. Coast Guard

The Corps recognizes that the proposed construction of the hydropower facility by the City of Le Claire has the potential to affect the rehabilitation of Lock and Dam 14, as noted by the U.S. Environmental Protection Agency in comments dated January 2, 1992. At this time, the Federal Energy Regulatory Commission (FERC) has not issued an Environmental Assessment or Environmental Impact Statement for the hydropower project. The hydropower facility is proposed in the earth dike section of the dam. It is not anticipated that the hydropower facility will affect the need or conditions of the rehabilitation effort. The rehabilitation project, however, deals with maintenance and safety concerns that must be addressed regardless of the status of the proposed hydropower project. While acknowledging the concerns of the U.S. EPA, the hydropower project is

a separate issue and its impacts will be dealt with in a separate NEPA document which is being prepared by the FERC. The features being renovated or repaired as part of this rehabilitation project, the lock structure and the gated portion of the dam, will not change the current operational characteristics of Lock and Dam 14. It is therefore concluded that the cumulative impacts from the two projects would be the same as impacts from the hydropower project alone because the rehabilitation is solely on the structure itself and no significant impacts are anticipated from the rehabilitation project.

FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT
FOR
LOCK AND DAM 14 MAJOR REHABILITATION

I have reviewed the information provided by this Environmental Assessment, along with data obtained from Federal and State agencies having jurisdiction by law or special expertise, and from the interested public. I find that major rehabilitation of Lock and Dam 14 at Le Claire, Iowa, will not significantly affect the quality of the human environment. Therefore, it is my determination that an Environmental Impact Statement is not required. This determination will be reevaluated if warranted by later development.

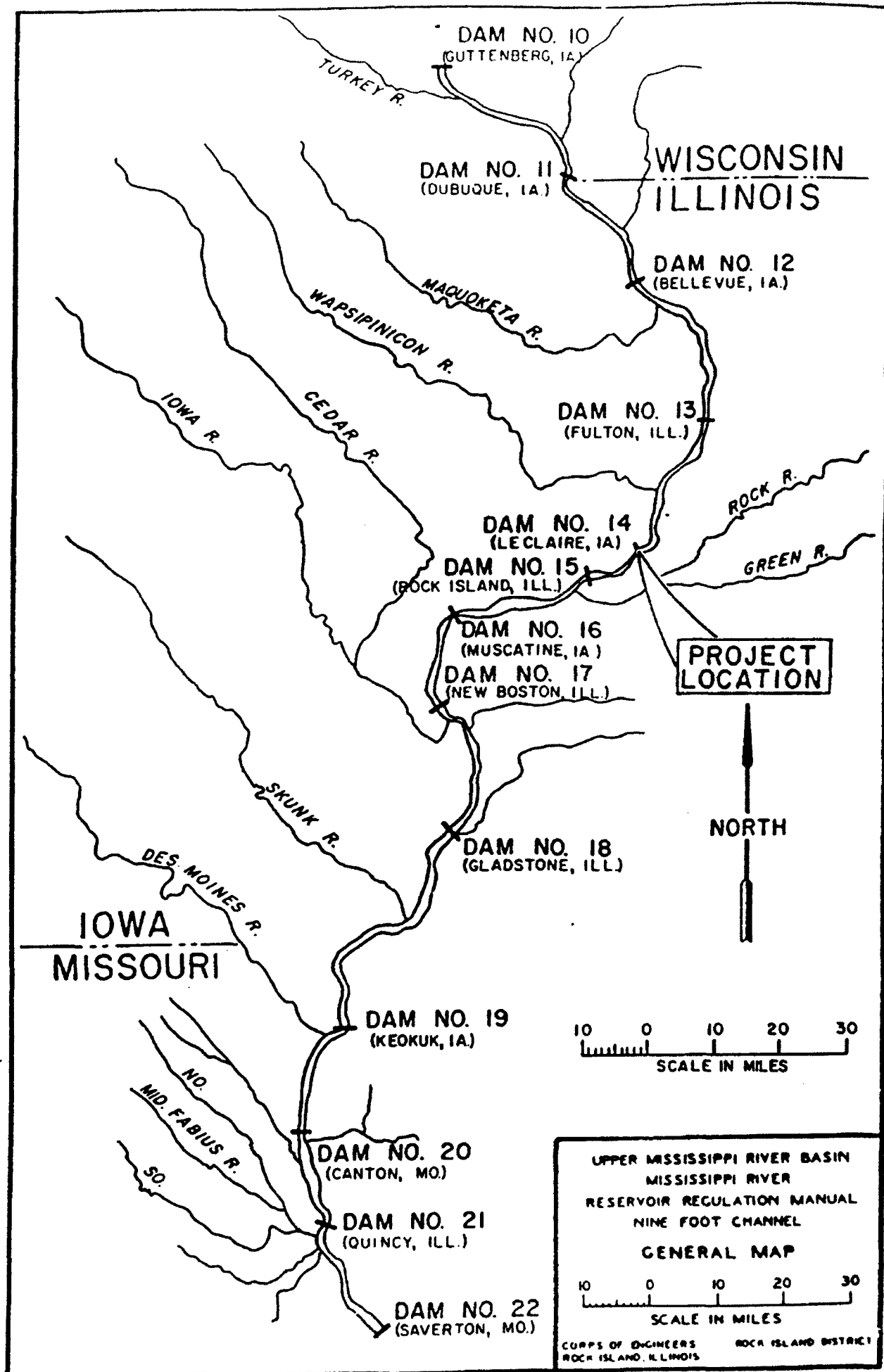
Alternatives considered include: (a) no Federal action; (b) rehabilitation of the facility to original design specifications and criteria; and (c) rehabilitation of the facility to updated specifications and criteria.

Factors considered in making a determination that an Environmental Impact Statement was not required were as follows:

- a. No long-term adverse impacts to natural or cultural resources are anticipated. No endangered species, either State or Federal, will be affected by the project action.
- b. No significant expansion in tow traffic or the navigation capacity of the 9-foot channel will result from the proposed activity.
- c. Land use after the project should remain unaltered, and no economic impacts to the project area are anticipated.

Date

Albert J. Kraus
Colonel, U.S. Army
District Engineer



IOWA
SCOTT
COUNTY

GREEN GABLES MARINA
FIA-20
THRU
FIA-34

ILLINOIS
ROCK ISLAND COUNTY

PLAT NO 5
PLAT NO 3
PLAT NO 2
PLAT NO 1
PLAT NO 4
LOCK & DAM
NO. 14
SM ISLAND
FIA-1
FIA-2
FIA-6
FIA-7
FIA-8
FIA-9
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FIA-100

CORNER
AREA

AMPTON



APPENDIX A
PERTINENT CORRESPONDENCE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

January 2, 1992

Colonel John R. Brown, USA
U.S. Army Engineer District, Rock Island
ATTN: Planning Division
Clock Tower Building - P.O. Box 2004
Rock Island, Illinois 612094-2004

Dear Colonel Brown:

RE: Major Rehabilitation of Lock and Dam 14, LeClaire, Iowa

This is in response to your December 16, 1991, request for comments on the project referenced above.

Your letter acknowledges that an Environmental Assessment (EA) will be prepared for this project. Please note that this EA should discuss the proposed construction of a hydropower facility at this dam by the City of LeClaire including engineering considerations which could minimize subsequent construction impacts.

Thank you for the opportunity to comment. Any questions on these comments should be directed to Mr. Mike Bronoski of my staff at 913-551-7291.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lawrence M. Cavin".

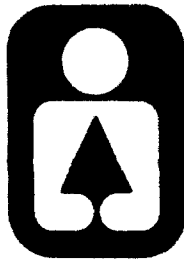
Lawrence M. Cavin
Chief, Environmental Review
and Coordination Section

Brent Manning
Director

John W. Comerio
Deputy Director

Bruce F. Clay
Assistant Director

Illinois



Department of Conservation

life and land together

LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62701-1787
CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601

January 10, 1992

Mr. Dudley M. Hanson, P.E.
Chief, Planning Division
Rock Island District, Corps of ENgineers
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

Dear Mr. Hanson:

Thank you for your December 16, 1991 letter regarding the Corp's major rehab plans for Lock and Dam 14 of the Mississippi River 9 - Foot Navigation Project.

We agree with your assessment that impacts to fish and wildlife resources should not be significant. Relative to Illinois listed threatened and endangered species, the Bald Eagle utilizes the Lock and Dam 14 area during the late fall, winter and early spring months however, it is our belief the rehab work will not adversely impact the eagles.

We look forward to receiving a copy of the EA when it becomes available.

Sincerely,

Richard W. Lutz
Acting Supervisor
Impact Analysis Division

RWL:ts

cc: USFWS, R.I.

U.S. Department
of Transportation
**United States
Coast Guard**



Commander
Second Coast Guard District

1222 Spruce Street
St. Louis, MO 63103-2832
Staff Symbol: (oan)
Phone: (314) 539-3714

16500/UMR LD14
January 24, 1992

Mr. Dudley M. Hanson, P.E.
Chief, Planning Division
U.S. Army, Corps of Engineers
Clock Tower Building, P.O. Box 2004
Rock Island, IL 61204-2004

Dear Mr. Hanson:

Reference is made to your letter dated December 16, 1991 regarding plans for the major rehabilitation of Lock and Dam 14 of the Upper Mississippi River located near Le Claire, Iowa.

We support the need for the rehabilitation of Lock and Dam 14 and based upon your needs will include in our local notice to mariners your work schedule and any impacts to navigation which may result from the work.

Thank you for the opportunity to comment on your rehabilitation plans for Lock and Dam 14.

Sincerely,

A handwritten signature in dark ink, appearing to read "S. F. Ogan".

S. F. OGAN
Aids to Navigation Specialist
Aids to Navigation and
Waterways Management Branch
By direction of the District Commander



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

LARRY J. WILSON, DIRECTOR

January 29, 1992

District Engineer
U.S. Army Engineer District, Rock Island
ATTN: Dudley M. Hanson, P.E., Planning Division
Clock Tower Building- P.O. Box 2004
Rock Island, Illinois 612094-2004

Subject: Rehabilitation of Lock and Dam 14, Mississippi River,
R.M. 493.3 in Le Claire, Iowa

Dear Mr. Hanson:

The Iowa Department of Natural Resources has reviewed your letter finalizing plans for the major rehabilitation of Lock and Dam 14 on the Mississippi River at river mile 493.3 in Le Claire, Iowa.

There is a significant winter bald eagle roost just below Lock and Dam 14 and the area is used heavily for feeding. Work should be scheduled to minimize disturbance to the eagles.

Thank you for the opportunity to comment on this proposed action during the final planning phase.

Sincerely,

Larry J. Wilson, Director
Iowa Department of Natural Resources

LJW:dh



IN REPLY REFER TO

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Rock Island Field Office (ES)
4469 - 48th Avenue Court
Rock Island, Illinois 61201

COM: 309/793-5800
FTS: 782-5800

February 13, 1992

Mr. Dudley M. Hanson, P.E.
U.S. Army Engineer District
Attn: Planning Division
Clock Tower Building, P.O. Box 2004
Rock Island, Illinois 61204-2004

Dear Mr Hanson:

This letter is in reference to proposed rehabilitation of Lock and Dam 14, described in your letter dated December 16, 1991. The project as described does not appear to involve new construction or significant modification of the existing structure. Our concerns for natural resources are limited to temporary disturbance during construction.

Bald eagle use of the project area to date has been limited to seasonal foraging during cold weather. No nesting is known to occur at the site or within the nearby Elton Fawks Eagle Refuge. The project will have no effect on the bald eagle provided appropriate measures are taken to minimize winter work and disturbance to foraging birds.

The project will result in disturbance and temporary benthos loss. In addition, some potential exists for the entry of paints, solvents, and lubricants into the water column during construction. Therefore we request that a copy of the contractor's environmental protection plan be provided to this office for review.

This precludes the need for further action on this project as required by the Endangered Species Act of 1973, as amended, provided the above conditions are incorporated into project plans. Should the project be modified, the above conditions not be incorporated, or new information becomes available that indicates that federally listed or proposed endangered species may be affected, consultation with this office should be initiated.

This letter provides comment under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended: 16 U.S.C. 661 et seq.) and the Endangered Species Act of 1973, as amended. If you have any questions, please contact Mr. Bob Clevenstine of my staff.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Richard C. Nelson', written over the printed name.

Richard C. Nelson
Field Supervisor

CC: IDOC (Dufford, Sallee)
IDNR (Roseland, Boland)
USEPA Region V (McMullen)
USEPA Region VII (Bronoski)

BC:hw

APPENDIX B
PROGRAMMATIC MEMORANDUM OF AGREEMENT

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

PROGRAMMATIC AGREEMENT LOCKS AND DAMS 3 THROUGH 22, UPPER MISSISSIPPI RIVER

WHEREAS, the U.S. Army Corps of Engineers, Rock Island and St. Paul Districts, (Corps) proposes to administer a program to rehabilitate the locks and dams under their jurisdiction on the Mississippi River (locks and dams 3 through 22); and,

WHEREAS, the Corps has determined that the program may have an effect upon properties included in or eligible for inclusion in the National Register of Historic Places and has consulted with the Advisory Council on Historic Preservation (Council) and the State Historic Preservation Officers (SHPO) of Missouri, Illinois, Iowa, Wisconsin, and Minnesota pursuant to Section 800.13 of the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (16 U.S.C 470f),

NOW THEREFORE Corps, the Council, and the SHPOs agree that the program shall be administered in accordance with the following stipulations to satisfy the agency's Section 106 responsibilities for all individual undertakings of the program.

Stipulations

The Corps will ensure that the following measures are carried out.

1. In implementing this Agreement and in carrying out all work on the locks and dams, the Corps will seek to ensure that the overall historic character and appearance of the lock and dam system is preserved and restored.
2. Actions which do not affect potentially significant features of the locks and dams, as identified in table 12 (attached) of Major Rehabilitation Program, Mississippi River Locks and Dams 11 through 22 (Rock Island District) and Major Rehabilitation Program, Mississippi River Locks and Dams 3 through 10 (St. Paul District) will be carried out as proposed.

3. Actions which may affect significant features, as identified in table 12, will be carried out as follows:

A. Where the Corps determines that work will be in accordance with the "Secretary of the Interior's Standards for Rehabilitation," the actions will be carried out. The Corps will maintain records of all work performed, which shall be open to inspection by the relevant SHPO, upon request, to verify that the "Standards" are being interpreted in a manner consistent with the policies of the SHPO.

B. Where the Corps determines that work will not be in accordance with the "Secretary of the Interior's Standards for Rehabilitation", or where any guidewall extension; addition of lock structure; or removal, relocation or major alteration of control stations are proposed, the Corps will consult with the relevant SHPO to determine an acceptable treatment. Where the Corps and the SHPO reach agreement, the Corps may proceed in accordance with the agreed upon treatment. Where the Corps and the SHPO cannot reach agreement, the Corps will notify the Council to obtain help in resolving the disagreement and may request the comments of the Council in accordance with 36 CFR Section 800.5(e)(6).

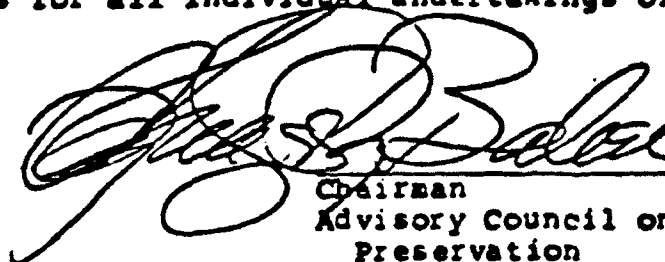
4. The Corps shall ensure that a record is made of locks and dams 3 through 22. The Corps shall request the National Park Service (Historic American Engineering Record) to determine appropriate documentation for the locks and dams. Prior to conducting any rehabilitation, the Corps shall ensure that documentation specified by the National Park Service is completed. Copies of the documentation of the locks and dams within each State's jurisdiction shall be provided to the relevant SHPO. Copies of the documentation of the locks and dams within each Corps district shall be maintained in each district office of the Corps.

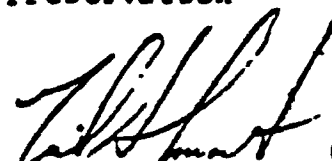
5. Rehabilitation work anticipated, but not yet planned, including work at locks and dams 11, 14, and 19 (only the c. 1913 portion or lock and dam complex 19), will be reviewed by the Corps, the relevant SHPO, and the Council at the time planning begins. If the Corps, the SHPO, and the Council agree, such work may be carried out in accordance with the terms of this Agreement.

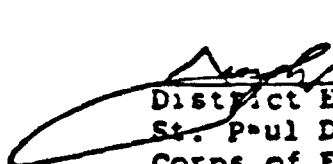
6. Nothing in this Agreement is intended to prevent the Corps, the SHPOs, or the Council from consulting more frequently or informally concerning any questions that may arise or on the progress of any projects falling under this Agreement.

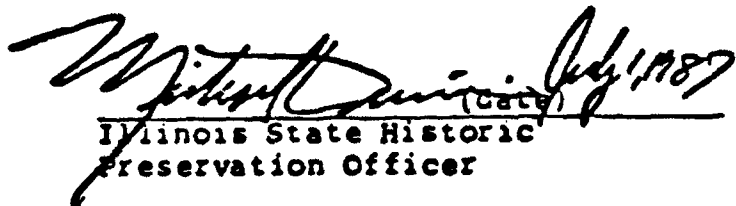
7. Any of the signatories to this Agreement may request a reconsiderations of its terms or revoke the Agreement upon written notice to the other signatories. In the event the Agreement is revoked or for other reasons is not implemented, the Corps will follow the procedures set out in 36 CFR Part 800 to obtain the Council's comments on individual undertakings of the program.

Execution of this Programmatic Agreement and carrying out its terms evidences that the Corps has satisfied its Section 106 responsibilities for all individual undertakings of the program.

 (date) 30 May '87
Chairman
Advisory Council on Historic
Preservation

 (date) 24 June 1987
District Engineer
Rock Island District
Corps of Engineers

 (date) 12 June 1987
District Engineer
St. Paul District
Corps of Engineers

 (date) July 1, 1987
Illinois State Historic
Preservation Officer

 (date) 7/24/87
Iowa State Historic
Preservation Officer

 (date) 8/5/87
Minnesota State Historic
Preservation Officer

(date) Aug. 21, 1957
Missouri State Historic
Preservation Officer

(date) Aug. 31, 1957
Wisconsin State Historic
Preservation Officer

TABLE 12 (Cont'd)

| Action | Affect to Significant Fed. | Affect to Potential RHP Element | Adverse Effect Criteria | No Adverse Effects | Compliance w/Sec'y Interior's Standards | Beneficial Effects |
|-------------------------------|----------------------------|---------------------------------|---|--------------------|--|---------------------|
| Roller Gates | Yes | Yes | None apply | All actions | Cleaning, painting, wiring, chain work conform | Routine maintenance |
| Tainter Gates | Yes | Yes | None apply | All actions | Cleaning, painting, wiring, chain work conform | Routine maintenance |
| Service Bridge | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Piezometers | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Emergency Bulkheads | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Scour Protection | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Storage Yard Tracks | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Overflow Section | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Storage Yard Embankment | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Non-Overflow Section | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Abutments | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Davenport Small/Storm Sewer | No | No | None apply | No Effect | Full compliance | Routine maintenance |
| Powerhouse Generator | Yes | Yes | Criteria 1 could apply for roofs and windows | All actions | Normal wear repairs; roofs and windows could be designed to comply and preserve appearance, profile, and configuration | Routine maintenance |
| Maintenance Storage Shed | No | No | None apply | No Effect | Normal wear repairs; roofs and windows could be designed to comply and preserve appearance, profile, and configuration including doors | Routine maintenance |
| Lock Control Stand Enclosures | Yes | Yes | Criteria 1 and 3 for new enclosures could apply | All actions | New enclosures can be designed to blend in with overall concrete matrix and be an improvement over the existing metal ones | Routine maintenance |

TABLE 12
Impact Summary for Major Rehabilitation Actions
(see also table 11)

| Action | Affect to Significant Pgs. | Affect to Potential WHMP Element | Adverse Effect Criteria | No Adverse Effects | Compliance w/Sec'y Interior's Standards | Beneficial Effects |
|---|----------------------------|----------------------------------|--|---|---|---|
| Lockwalls, Guidewalls Walking Surfaces | Yes | Yes | Potentially 1 and 3 for guidewall extensions | All actions except guidewall extensions | Concrete and armor replacement will essentially match existing conditions; guidewall extension will match those already in place at some locations and will appear clearly different from original lock walls | Except guidewall extension, required upkeep of structures |
| Main Lock Miter Gates | Yes | Yes | None apply | All actions | Cleaning and painting essentially as existing | Required maintenance |
| Lock Dewatering System | No | No | None apply | No effect | Straight forward inspection and repair as existing/original | Required maintenance |
| Emergency/Auxiliary Lock Miter Gates | No | No | None apply | No effect | Straight forward inspection and repair as existing/original | Required maintenance |
| Main Lock Miter Gate Machinery | Yes | Yes | None apply | New machinery on lockwall will be a minor intrusion | New machinery on top of lock wall will only be about 2 ft. high and visually unobtrusive; replacement parts for 50-yr.-old equipment cannot be obtained | Required maintenance and removal of machinery from flood susceptible pits |
| Lock Tailwater Valve Machinery | Yes | Yes | None apply | New machinery on lockwall will be a minor intrusion | New machinery on top of lock wall will only be about 3 ft. high and visually unobtrusive; replacement parts for 50-yr.-old equipment cannot be obtained | Required maintenance and removal of machinery from flood susceptible pits |
| Main Lock Outlet | No | No | None apply | No effect | Not required | Required resolution of safety hazard |
| Lock Electrical Equipment | No | No | None apply | No effect | Not required; replacement parts unavailable for 50-yr.-old equipment; unobtrusive alteration | Required maintenance to improve operation |
| Dee Structure | Yes | one at L/D 15 and L/D 17 | None apply | All actions | Repair, no overall appearance or function changes | Required maintenance |

APPENDIX C
DISTRIBUTION LIST

CONGRESSIONAL AND SENATORIAL ADDRESSES

01/15/93

ENVIRONMENTAL ASSESSMENT
LOCK AND DAM 14 MAJOR REHABILITATION
LE CLAIRE, IOWA

HONORABLE ALAN J DIXON UNITED STATES SENATOR
117 POST OFFICE AND COURTHOUSE 6TH AND MONROE STREETS
SPRINGFIELD IL 62701

HONORABLE ALAN J DIXON UNITED STATES SENATOR
331 HART SENATE OFFICE BLDG WASHINGTON DC 20510-1301

HONORABLE BOB RAFERTY IOWA REPRESENTATIVE-39TH DISTRICT
STATEHOUSE DES MOINES IA 50319

HONORABLE CHARLES E. GRASSLEY UNITED STATES SENATE
135 HART SENATE OFFICE BLDG WASHINGTON DC 20510-1501

HONORABLE CHARLES E. GRASSLEY UNITED STATES SENATOR
210 WATERLOO BUILDING 531 COMMERCIAL STREET
WATERLOO, IA 50701

HONORABLE DAVID MILLAGE IOWA REPRESENTATIVE-40TH DISTRICT
STATEHOUSE DES MOINES IA 50319

HONORABLE DENNY JACOBS ILLINOIS SENATOR
604 19TH STREET MOLINE IL 61265

HONORABLE JIM EDGAR GOVERNOR OF ILLINOIS
STATE CAPITOL SPRINGFIELD IL 62706

CONGRESSIONAL AND SENATORIAL ADDRESSES

01/15/93

HONORABLE JIM LEACH HOUSE OF REPRESENTATIVES
1514 LONGWORTH HOUSE OFFICE BLDG WASHINGTON DC 20515-1501

HONORABLE JIM LEACH REPRESENTATIVE IN CONGRESS
209 WEST 4TH STREET DAVENPORT IA 52801

HONORABLE JOEL BRUNSVOLD ILLINOIS REPRESENTATIVE
303 18TH STREET ROCK ISLAND IL 61201

HONORABLE LANE EVANS REPRESENTATIVE IN CONGRESS
1535 47TH AVENUE #5 MOLINE IL 61265-7022

HONORABLE LANE EVANS HOUSE OF REPRESENTATIVES
1121 LONGWORTH HOUSE OFFICE BLDG WASHINGTON DC 20515-1317

HONORABLE M BOB DEJAEGHER ILLINOIS REPRESENTATIVE
209 19TH STREET EAST MOLINE IL 61244

HONORABLE MARGARET TINSMAN IOWA SENATOR-20TH DISTRICT
2865 HICKORY HILL LANE BETTENDORF IA 52722

HONORABLE MATTHEW WISSING IOWA REPRESENTATIVE-41ST DISTRICT
STATEHOUSE DES MOINES IA 50319

HONORABLE PAUL SIMON UNITED STATES SENATOR
462 DIRKSEN SENATE OFFICE BLDG WASHINGTON DC 20510-1302

CONGRESSIONAL AND SENATORIAL ADDRESSES

01/15/93

.....

HONORABLE PAUL SIMON UNITED STATES SENATOR
SUITE 13 WEST OLD CAPITAL PLAZA
SPRINGFIELD IL 62701

HONORABLE ROBERT C. ARNOULD IOWA REPRESENTATIVE-42ND DISTRICT
715 N PINE DAVENPORT IA 52804-4129

HONORABLE STEVE GRUBBS IOWA REPRESENTATIVE-58TH DISTRICT
STATEHOUSE DES MOINES IA 50319

HONORABLE TERRY BRANSTAD GOVERNOR OF IOWA
STATE CAPITOL DES MOINES, IA 50319

HONORABLE TOM HARKIN UNITED STATES SENATE
531 HART SENATE OFFICE BUILDING WASHINGTON DC 20510-1502

HONORABLE TOM HARKIN UNITED STATES SENATOR
314B FEDERAL BLDG 131 E 4TH ST
DAVENPORT IA 52801

LOCK AND DAM 15 MAJOR REHABILITATION

01/19/93

BERNARD P KILLIAN - DIRECTOR IL ENVIRONMENTAL PROTECTION AGENCY
2200 CHURCHILL ROAD
SPRINGFIELD IL 62706

BERNARD SCHONOFF DEPARTMENT OF NATURAL RESOURCES
FAIRPORT FISH HATCHERY RR 3 - BOX 434
MUSCATINE IA 52761

BETTENDORF PUBLIC LIBRARY 2950 18TH ST
BETTENDORF IA 52722

BRENT MANNING - DIRECTOR ILLINOIS DEPT OF CONSERVATION
LINCOLN TOWER PLAZA 524 SOUTH 2ND STREET
SPRINGFIELD IL 62701

CHARLES WHITMORE STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE 1902 FOX DRIVE
CAMPAIGN IL 61820

CHRIS NEED - CHAIRMAN BAY ISLAND DRAINAGE & LEVEE DIST. #1
R.R. #2
NEW BOSTON IL 61272

COMMANDER US ARMY ENGINEER DIVISION
NORTH CENTRAL 111 W CANAL - 12TH FLOOR
CHICAGO IL 60606

LOCK AND DAM 15 MAJOR REHABILITATION

01/19/93

.....

COMMANDER US ARMY ENGR DIST-ST PAUL
ATTN: MCSFD-M/J BAILLEN 1421 USPO & CUSTOMHOUSE
ST PAUL MN 55101

COMMANDER US ARMY ENGR DIST-ST LOUIS
ATTN: LMSFD-A/O DUTT 1222 SPRUCE STREET
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