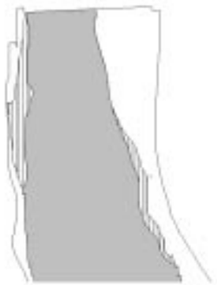
Appendix F

Tailwater Assessment Results

Lake Sturgeon
Foraging
50,000 CFS

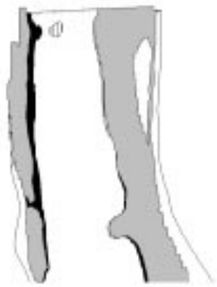
Lake Sturgeon
Spawning
95,000 CFS

Channel Catfish
Year-Round
50,000 CFS



Paddlefish
Spawning
95,000 CFS

Paddlefish
Adult
50,000 CFS



Emerald Shiner
High Spring Flow
95,000 CFS

Lock & Dam 20

Sauger/Walleye
Spawning
95,000 CFS

Sauger/Walleye
Wintering
50,000 CFS

Largemouth Bass
Spawning
95,000 CFS

Largemouth Bass
Fry
50,000 CFS

Largemouth Bass
Adult/Juvenile
50,000 CFS

Emerald Shiner
Low Flow
50,000 CFS

Tailwater Fisheries Habitat Analysis

This assessment was completed to address potential fisheries effects with construction of a 1200-foot lock and guidewall at location 4. Potential aquatic habitat in the tailwater was determined using output from calibrated depth and velocity models (TABS). Velocity and bathymetric data were imported into Arc Info and queried to identify and quantify potential habitat and to determine changes in habitat with the project.

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Discussion of this assessment is included within the body of the report and description of TABS modeling are included in Appendix E.

Gain in Habitat With Project

Loss in Habitat With Project

No Change in Habitat With Project

2000 0 2000 4000 Feet

500 0 500 1000 Metres

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ST. PAUL, MINNESOTA

US Army Corps of Engineers
Rock Island District
St. Louis District
St. Paul District

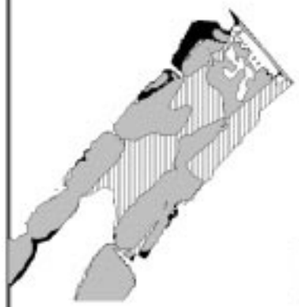
UPPER MISSISSIPPI RIVER & ILLINOIS WATERWAY SYSTEM NAVIGATION STUDY

SITE SPECIFIC HABITAT ASSESSMENT LOCK AND DAM NO. 20

Scale: AS SHOWN

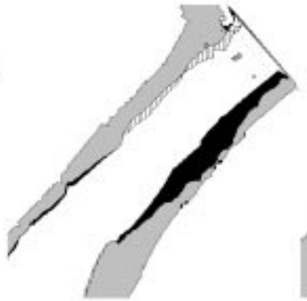
Date: 30 APRIL 1998

APPENDIX F

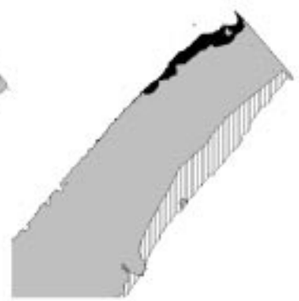


Lake Sturgeon
Foraging
50,000 CFS

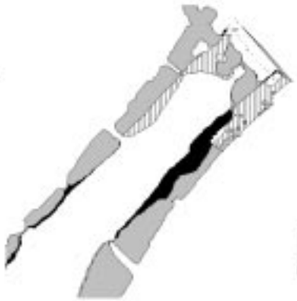
Lake Sturgeon
Spawning
100,000 CFS



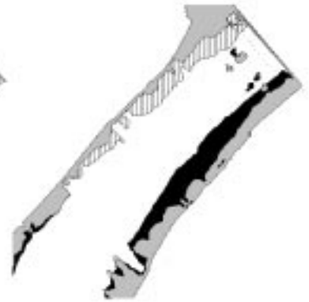
Channel Catfish
Year-Round
50,000 CFS



Paddlefish
Spawning
100,000 CFS

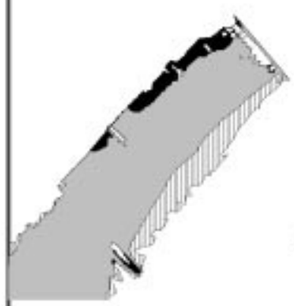


Paddlefish
Adult
50,000 CFS



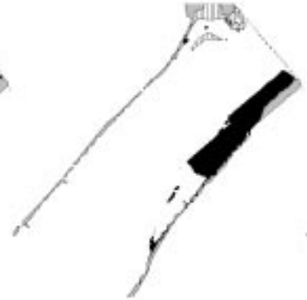
Emerald Shiner
High Spring Flow
100,000 CFS

Lock & Dam 21



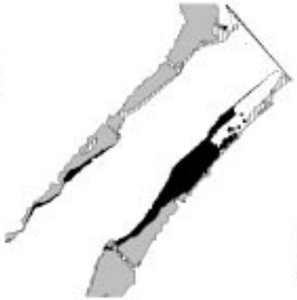
Sauger/Walleye
Spawning
100,000 CFS

Sauger/Walleye
Wintering
50,000 CFS

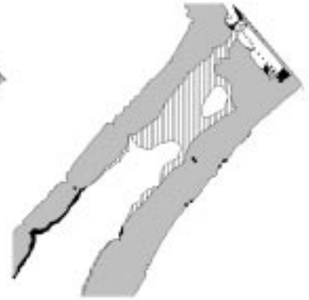


Largemouth Bass
Spawning
100,000 CFS

Largemouth Bass
Fry
50,000 CFS



Largemouth Bass
Adult/Juvenile
50,000 CFS



Emerald Shiner
Low Flow
50,000 CFS

Tailwater Fisheries Habitat Analysis

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Gain in Habitat With Project

Loss in Habitat With Project

No Change in Habitat With Project

2000 0 2000 4000 Feet

500 0 500 1000 Metres

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ST. PAUL, MINNESOTA

US Army Corps of Engineers
Rock Island District
St. Louis District
St. Paul District

UPPER MISSISSIPPI RIVER & ILLINOIS WATERWAY SYSTEM NAVIGATION STUDY

SITE SPECIFIC HABITAT ASSESSMENT LOCK AND DAM NO. 21

Scale: AS SHOWN

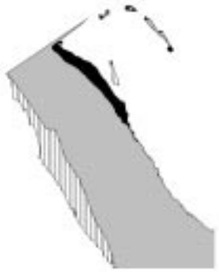
Date: 30 APRIL 1998

APPENDIX F

Lake Sturgeon
Foraging
50,000 CFS

Lake Sturgeon
Spawning
120,000 CFS

Channel Catfish
Year-Round
50,000 CFS



Paddlefish
Spawning
120,000 CFS

Paddlefish
Adult
50,000 CFS

Emerald Shiner
High Spring Flow
120,000 CFS

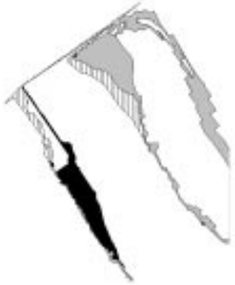
Lock & Dam 22

Sauger/Walleye
Spawning
120,000 CFS

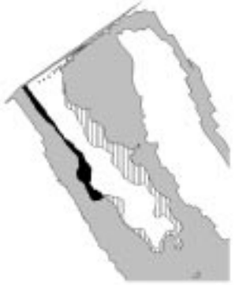
Sauger/Walleye
Wintering
50,000 CFS

Largemouth Bass
Spawning
120,000 CFS

Largemouth Bass
Fry
50,000 CFS



Largemouth Bass
Adult/Juvenile
50,000 CFS



Emerald Shiner
Low Flow
50,000 CFS

Tailwater Fisheries Habitat Analysis

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Gain in Habitat With Project

Loss in Habitat With Project

No Change in Habitat With Project

2000 0 2000 4000 Feet

500 0 500 1000 Metres

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ST. PAUL, MINNESOTA

US Army Corps of Engineers
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St. Louis District
St. Paul District

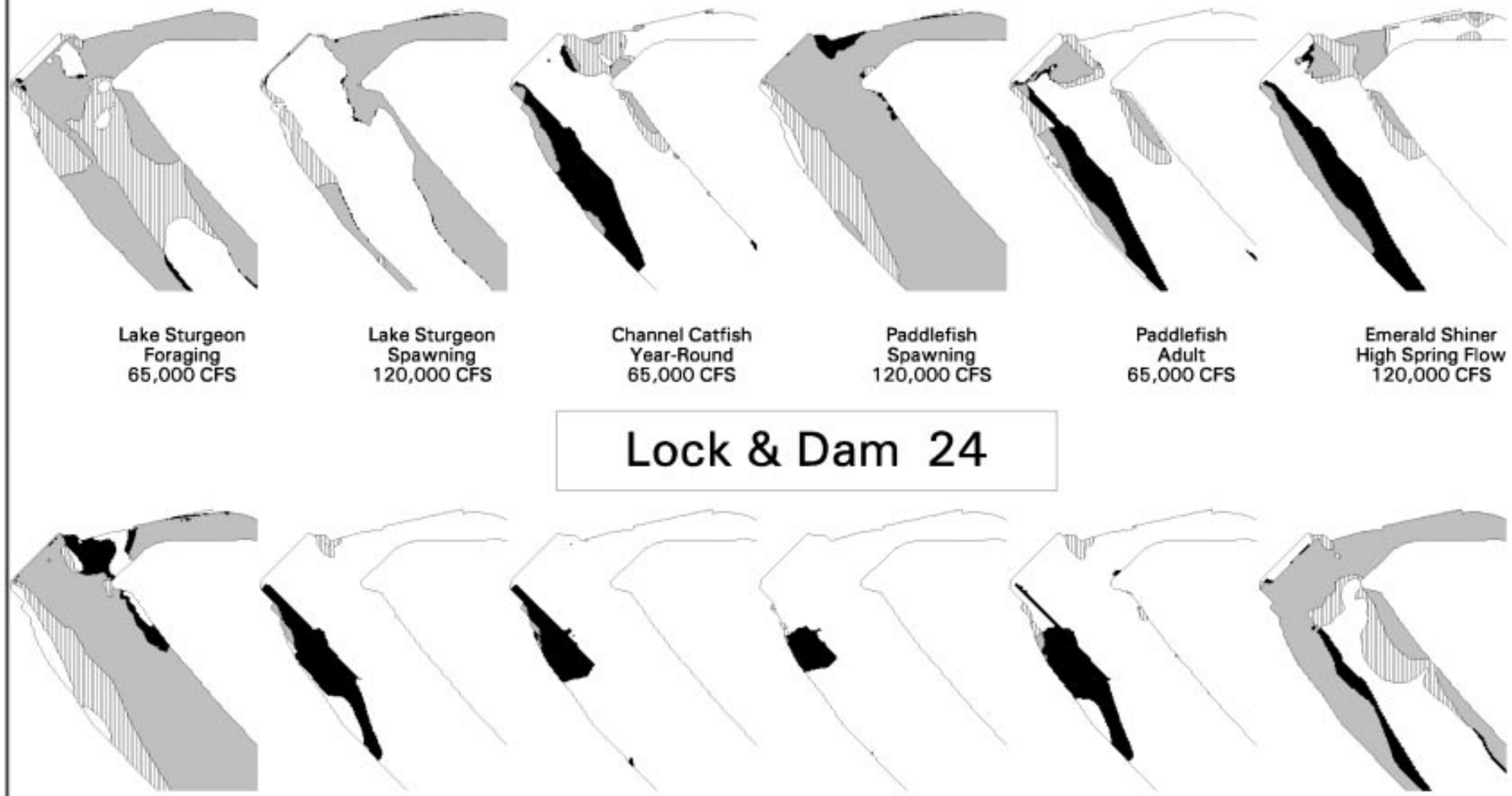
UPPER MISSISSIPPI RIVER &
ILLINOIS WATERWAY
SYSTEM NAVIGATION STUDY

SITE SPECIFIC
HABITAT ASSESSMENT
LOCK AND DAM NO. 22

Scale: AS SHOWN

Date: 30 APRIL 1998

APPENDIX F



Tailwater Fisheries Habitat Analysis

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Gain in Habitat With Project

Loss in Habitat With Project

No Change in Habitat With Project

2000 0 2000 4000 Feet

500 0 500 1000 Metres

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St. Louis District
St. Paul District

UPPER MISSISSIPPI RIVER & ILLINOIS WATERWAY SYSTEM NAVIGATION STUDY

SITE SPECIFIC HABITAT ASSESSMENT LOCK AND DAM NO. 24

Scale: AS SHOWN

Date: 30 APRIL 1998

APPENDIX F

Lake Sturgeon
Foraging
65,000 CFS

Lake Sturgeon
Spawning
120,000 CFS

Channel Catfish
Year-Round
65,000 CFS

Paddlefish
Spawning
120,000 CFS

Paddlefish
Adult
65,000 CFS

Emerald Shiner
High Spring Flow
120,000 CFS

Lock & Dam 25

Sauger/Walleye
Spawning
120,000 CFS

Sauger/Walleye
Wintering
65,000 CFS

Largemouth Bass
Spawning
120,000 CFS

Largemouth Bass
Fry
65,000 CFS

Largemouth Bass
Adult/Juvenile
65,000 CFS

Emerald Shiner
Low Flow
65,000 CFS

Tailwater Fisheries Habitat Analysis

This assessment was completed to address potential fisheries effects with construction of a 1200-foot lock and guidewall at location 4. Potential aquatic habitat in the tailwater was determined using output from calibrated depth and velocity models (TABS). Velocity and bathymetric data were imported into Arc Info and queried to identify and quantify potential habitat and to determine changes in habitat with the project.

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Gain in Habitat With Project

Loss in Habitat With Project

No Change in Habitat With Project

2000 0 2000 4000 Feet

500 0 500 1000 Metres

U.S. ARMY ENGINEER DISTRICTS
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ROCK ISLAND, ILLINOIS
ST. LOUIS, MISSOURI
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St. Louis District
St. Paul District

UPPER MISSISSIPPI RIVER & ILLINOIS WATERWAY SYSTEM NAVIGATION STUDY

SITE SPECIFIC HABITAT ASSESSMENT LOCK AND DAM NO. 25

Scale: AS SHOWN

Date: 30 APRIL 1998

APPENDIX F