Regional Planning and Environment Division North

October 11, 2016

Dear Interested Parties:

Enclosed for your information, review, and comment is the draft Environmental Assessment and Finding of No Significant Impact for the Mississippi Headwaters Reservoirs Master Plan. The Public Notice for the proposed action is also enclosed. These documents are also posted at http://www.mwp.usace.army.mil/Home/PublicNotices.aspx. We are distributing this environmental assessment to concerned agencies, interest groups and individuals for comment. If public review identifies any significant concerns or results in project modifications, a revised National Environmental Policy Act document may be prepared.

If you have any comments on the Environmental Assessment, please provide them by November 11, 2016. All comments will become an official part of the administrative record and will be available for public examination.

Questions concerning the Mississippi Headwaters Master Plan or the Environmental Assessment should be directed to Brian Turner at (651) 290-5771 or at brian.w.turner@usace.army.mil. Please address all correspondence on the Environmental Assessment, including comments, to the District Engineer, St. Paul District, Corps of Engineers, Attention: Brian Turner, Recreation and Natural Resources, 180 Fifth Street East, Suite 700 St. Paul, Minnesota 55101-1678.

Sincerely,

Steve J. Clark
Acting Deputy Chief, Regional Planning and Environment Division North

Enclosures:
Master Plan
Environmental Assessment
Public Notice
Proposed Actions (Project)  *Mississippi River Headwaters Reservoirs Master Plan* - Adopt and implement the revised Master Plan, which includes reclassification of U.S. Army Corps of Engineers-managed lands.

Type of Statement: Environmental Assessment

Lead Agency  U.S. Army Corps of Engineers, St. Paul District

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Abstract: This Environmental Assessment (EA) seeks to evaluate resources in the project area for potential effects that may be caused by the adoption and implementation of the proposed Master Plan. Implementing the revised Master Plan will provide a vital tool for the responsible stewardship of resources at Mississippi River Headwaters Reservoirs to benefit present and future generations.

The following factors were considerations for alternatives evaluated in the environmental analysis: 1) meeting project purposes, 2) minimizing adverse environmental impacts, 3) taking into account stakeholder and public interests, and 4) complying with relevant laws and regulations. This EA determined that there would be no significant impacts and that no mitigating actions or permits would be required by adoption and implementation of the Master Plan.
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1.0 BACKGROUND

The U.S. Army Corps of Engineers, St. Paul District (Corps or District), has prepared this Environmental Assessment (EA) of the effects to the environment for a proposed update to the Upper Mississippi River Headwaters Reservoirs (Headwaters) Master Plan (Master Plan). This assessment was carried out to satisfy requirements of the National Environmental Policy Act (NEPA) of 1969, Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508), and Corps of Engineers Procedures for Implementing NEPA (33 CFR 230).

This EA provides information to the St. Paul District (District) Commander on the potential environmental effects of the proposed action and various alternatives on the natural, cultural, and human environment for determining the need for an Environmental Impact Statement or a Finding of No Significant Impact (FONSI). This assessment references the information provided in main report and associated appendices on objectives, baseline conditions, coordination results, and other data. This assessment includes the following:

a) A discussion of future conditions.
b) Identification of alternatives, including the Proposed Alternative.
c) An assessment of the environmental impacts of alternatives.
d) A discussion of compliance with environmental regulations and executive orders.

The typical focus of NEPA compliance consists of environmental impact assessments for individual projects, rather than for long-range plans. However, application of NEPA to earlier and more strategic decisions not only meets the CEQ implementing regulations (CEQ, 2005) and Corps regulations for implementing NEPA (USACE, 1988), but also allows the Corps to begin considering the environmental consequences of its actions long before any physical activity is planned. Multiple benefits can be derived from such early consideration. Effective and early NEPA integration with the master planning
process can significantly increase the usefulness of the Master Plan to the decision maker, if environmental information can be provided to the correct individuals at the right time and in the right form. If such utility can be realized, organizational outcomes, such as support for the project mission and NEPA compliance can be improved.

Environmental documents prepared concurrently with the Master Plan can influence and modify strategic land use decisions, whereas environmental documents prepared afterwards would have little influence on strategic decisions already made. The Master Plan intends to develop land classifications that will guide the sustainable development of resources within the Headwaters’ Project. It is not feasible to define the exact nature of potential impacts for all potential actions prior to receiving specific project proposals. Therefore, environmental consequences may be less than or may, in fact, exceed what is described in this EA. To ensure future environmental consequences are identified and documented as accurately as possible, additional NEPA coordination will be conducted, as appropriate, for future projects resulting from this proposed Master Plan.
2.0 PURPOSE AND NEED FOR ACTION

The District is directed to periodically revise and update its master plans, including that for the Upper Mississippi River Headwaters (herein referred to as the revised Master Plan). All actions by the Corps and individuals granted leases to the Corps lands must be consistent with master plans. Therefore, it must be kept current in order to provide effective guidance in the Corps decision-making. The primary goal of the revised Master Plan is to incorporate and consider the most recent conditions and information in order to prescribe an overall land use management plan, resource objectives, and associated design and management concepts (Corps 2013). The plan will provide for the responsible stewardship of resources at the Headwaters to benefit present and future generations. The revision will replace the existing 1977 Master Plan and 1990 Master Plan Supplement (1977 Master Plan and 1990 Supplement; Corps 1990) and will apply changes to land classifications in accordance with Corps’ regulations.

2.1 Location

The Headwaters are a set of impounded natural lakes that were formed approximately 10,000 years ago by receding glaciers in North-Central Minnesota. This project consists of six dams that regulate reservoirs on Lake Winnibigoshish, Leech Lake, Pokegama Lake, Sandy Lake, Cross Lake, and Gull Lake. Lake Winnibigoshish and Pokegama dams are located on the main stem of the Mississippi River. Additional details on the location, purpose, and need for the proposed action are provided in Chapter 1 of the main report.

2.2 Authority

The River and Harbor Acts of June 14, 1880 (21 Stat. 180), and August 2, 1882 (22 Stat. 191), authorized the construction of the U.S. Army Corps of Engineers’ (Corps) dams at each of the six Mississippi River Headwaters’ project sites for the purpose of augmenting the flow of the Mississippi River for navigation. Additional details are provided in Chapter 1 of the main report.

2.3 Proposed Action Objectives

To meet the project goals, objectives for the proposed revised Master Plan that are identified as described in Chapter 3 of the main report.

2.4 Related National Environmental Policy Act (NEPA) Documentation

The following NEPA documents are related to the proposed action:

*Environmental Assessment – Supplement to the Master Plan for Public Use Development and Resource Management Mississippi River Headwaters Reservoirs (Corps 1989).* This document addressed impacts of the 1990 Master Plan Supplement, which recommended construction of new recreation facilities and upgrading existing facilities.

*Integrated Reservoir Operating Plan Evaluation and Environmental Impact Statement (ROPE; Corps 2009).* The ROPE study implements a water control plan for the Headwaters to balance benefits in consideration of tribal trust, flood risk reduction, environmental, water quality, water supply, recreation, navigation, hydropower, and other public interests. Much of the information for the affected environment of this EA (Section 3) comes from this report.
3.0 ALTERNATIVES

This section of the EA describes the reasonable alternatives for revising the Master Plan. The Corps only considered feasible and reasonable alternatives. In this case, two alternatives are identified: the Proposed Alternative of adopting the proposed revised Master Plan and a No Action Alternative in which the 1977 Master Plan and 1990 Supplement would remain the management guidance document (status quo). Additional details on these alternatives are provided below.

3.1 No Action Alternative

Inclusion of the No Action Alternative is prescribed by the Council of Environmental Quality (CEQ) regulations and serves as the benchmark against which Federal actions are to be evaluated.

Under the No Action Alternative, the District would not approve the adoption or implementation of a revised Headwaters’ Master Plan. Instead, the 1977 Master Plan and 1990 Supplement (Corps 1990) would continue to provide comprehensive management guidance and philosophy for the Headwaters. Resource management activities would continue to be directed towards providing continued enjoyment and maximum sustained use by the public of lands, waters, forests, and associated recreational resources under the jurisdiction of the Corps. However, the 1977 Master Plan and 1990 Supplement would provide the only source of comprehensive management guidance and philosophy.

Under this alternative, the existing Land Classification1 and associated management practices would continue to be in place (Table 1; ER 1120-2-400). The land classes identified in the 1977 Master Plan and 1990 Supplement and associated percent of project lands are, in order of dominance, Recreation – Low Intensity Use (57%), Recreation-Intensive Use (20%), Project Operations (16%), and Natural Areas (7%) (Table 1).

This alternative would not meet the Corps’ current regulations or project purposes as described above. Information provided in these plans is out of date and no longer adequately addresses the needs of the District, other management partners, or users of the Headwaters. Furthermore, the 1977 Master Plan and 1990 Supplement do not include the revised Land Classifications. Future major developments or resource management policies would require approval on a case-by-case basis without the benefit of evaluation in the context of an overall plan.

3.2 Balanced Alternative (Proposed)

Under the Balanced Alternative, the District would replace the 1977 Master Plan and 1990 Supplement with a revision that modifies the land classification with greater emphasis on balancing recreation and natural resources needs. Additional details on the changes to land classes associated with this alternative are provided in Chapters 3 through 5 of the main report.

Under this alternative, an updated land classification system would replace the existing system, recognizing six applicable classes (see Section 4.2 of the main report)(EP 1130 -2-550). For purposes of comparing alternatives, each of these classes is associated (i.e., cross-walked) with its counterpart under the No Action Alternative as shown in Table 1. However, lands designated as “Environmentally Sensitive Area” (ESA) may overlap other land classes. In other words, ESAs are a special class that may or may not share its designation.

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1 The 1990 Master Plan identifies these as “land use allocations”.
This alternative would also involve adjustments to the land class boundaries. For example, 20% of project lands are designated as “Recreation- Intensive Use” under the No Action Alternative. However, 23% of project lands are designated with the associated class (High Density Recreation) under the Proposed Alternative. The land classes proposed as part of the revised master plan are, in order of dominance, Multiple Resource Management (MRM)-Vegetation Management (50%), High Density Recreation (23%), Multiple Resource Management-Low Density Recreation (16%), Project Operations (10%), and Multiple Resource Management-Future Use (< 1%). Lands designated as Environmentally Sensitive Area would also constitute about 34% of the project area (Table 1).

This alternative would provide a management framework emphasizing these resources, and which is up-to-date with current regional and local needs, resource capability and suitability, public interests consistent with authorized project purposes, and regulations. Moreover, it would meet the Corps’ current regulations or goals of regular update to a master planning document. The information provided in this alternative is up to date and addresses the needs of the District, other management partners, or users of the Headwaters. This is the District’s proposed alternative that emphasizes the most recent public desires, legislative authority, regional and project-specific resource requirements, and suitability.

3.3 Other Alternatives Considered

Early in the process, the District considered two additional alternatives as follows:

- **Natural Resource Focus Alternative.** The District would approve a master plan with a natural resource focus. This alternative would provide management with an up-to-date document focused on environmental protection and conservation by classifying most of the Headwaters’ managed lands as environmentally sensitive and vegetation/wildlife management (Table 2). Future management recommendations would de-emphasize recreation activities in the Headwaters.

- **Recreation Focus Alternative.** The District would approve a master plan with emphasis on recreation. This alternative would provide management with an up-to-date document which is focused on recreation by classifying most of the Headwaters’ managed lands as either high density or low density recreation. This would open up more lands for intensive use which would have higher impacts to natural resources. Areas considered environmentally sensitive and some of the current wildlife management areas would be de-emphasized and could be opened for development.

Chapter 3 of the Master Plan lists objectives focused on recreation and environmental stewardship resources. In summary, the objectives of the Master Plan “…are established to provide high levels of stewardship to Corps-managed lands and resources while still providing an appropriate level of public service”. The District has determined that the Natural Resource Focus and Recreation Focus alternatives do not meet the project objectives and overall purpose of providing a balanced management plan that provides both natural resource protection and quality outdoor recreational experiences. For this reason, these alternatives were eliminated from further consideration in this EA.
Table 1. Crosswalk of Applicable Land Classes Between the No Action Alternative and Proposed Alternative.

<table>
<thead>
<tr>
<th>NO ACTION ALTERNATIVE</th>
<th>PREPOSED ALTERNATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Classification (% of Project Area)</strong></td>
<td><strong>Land Classification (% of Project Area)</strong></td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>Project Operations (16%)</td>
<td>Lands required for the dam and associated structures, powerhouse, operations center, administrative offices, maintenance compounds, and other areas that are used to operate and maintain the Headwaters. When compatible with operational requirements, project operations lands may be used for wildlife habitat management or recreational use. Licenses, permits, easements, or other outgrants are issued only for uses that do not conflict with operational requirements.</td>
</tr>
<tr>
<td>Lands acquired and allocated to provide for safe, efficient operation of the project for those authorized purposes other than recreation and fish and wildlife. In all cases, this will include, but is not limited to, the land on which project operational structures are located. Lands on navigation projects which are required for industrial and public port terminals will be included in this allocation. Agricultural use of these lands will be permitted on an interim basis when not in conflict with use for authorized purposes, recreation use or wildlife habitat.</td>
<td>Project Operations (10%)</td>
</tr>
<tr>
<td>Recreation-Intensive Use (20%)</td>
<td>High Density Recreation (23%)</td>
</tr>
<tr>
<td>Lands acquired for project operations and allocated for use as developed public use areas for intensive recreational activities by the visiting public, including areas for concession and quasi-public development. No agricultural uses are permitted on these lands except on an interim basis for terrain adaptable for maintenance of open space and/or scenic values.</td>
<td>Lands designated for intensive levels of recreational use to accommodate and support the recreational needs and desires of visitors. They include lands on which existing or planned major recreational facilities are located and allow for developed public recreation facilities, concession development, and high-density or high-impact recreational use. In general, any uses of these lands that interfere with public enjoyment of recreation opportunities are prohibited. Low-density recreation and wildlife management activities compatible with intensive recreation use are acceptable, especially on an interim basis. No agricultural uses are permitted on those lands except on an interim basis for maintenance of scenic or open space values.</td>
</tr>
<tr>
<td>Recreation-Low Density Use (57%)</td>
<td>Multiple Resource Managed Lands: Low Density Recreation (16%)</td>
</tr>
<tr>
<td>Lands acquired for project operations and allocated for low density recreation activities by the visiting public as required as open space between intensive recreational developments or between an intensive recreational development and land which, by virtue of use, is incompatible with the recreational development and would detract from the quality of the public use. Such incompatible land may be located either on the project or adjacent to the project. Land required for ecological workshops and forums, hiking trails, primitive camping, or similar low density recreational use available for a significant role in shaping public understanding of the environment will be under this allocation. No agricultural development for dispersed and/or low-impact recreation use. Development of facilities on these lands is limited. Emphasis is on providing opportunities for non-motorized activities, such as walking, fishing, hunting, or nature study. Site-specific, low-impact activities like primitive camping and picnicking are allowed. Facilities may include boat ramps, boat docks, trails, parking areas and vehicle controls, vault toilets, picnic tables, and fire rings. Manmade intrusions, including power lines, non-project roads, and water and sewer pipelines, may be permitted under conditions that minimize adverse effects on the natural environment. Vegetation management, including agricultural activities that do not greatly alter the natural character of the environment, are permitted for a variety of purposes, including erosion control, retention</td>
<td></td>
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</tbody>
</table>
NO ACTION ALTERNATIVE | Description | PREPOSED ALTERNATIVE | Description
--- | --- | --- | ---
**Land Classification (% of Project Area)** | **Land Classification (% of Project Area)** | **Description** | **Description**

<table>
<thead>
<tr>
<th>Land Classification (% of Project Area)</th>
<th>Description</th>
<th>Land Classification (% of Project Area)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO ACTION ALTERNATIVE</strong></td>
<td>uses are permitted on this land except on an interim basis for terrain adaptable for maintenance of open space and/or scenic values.</td>
<td><strong>PREPOSED ALTERNATIVE</strong></td>
<td>and improvement of scenic qualities, and wildlife management. Hunting and fishing are allowed pursuant to tribal or state fish and wildlife management regulations where these activities are not in conflict with the safety of visitors and project personnel.</td>
</tr>
</tbody>
</table>

**Operations – Reserve Forest Land (0%)**

Lands acquired for project operations and allocated for vegetation control to support management objectives not compatible with sustained yield based on established harvest rotation. Timber will be harvested only when required to achieve other management objectives such as wildlife habitat improvement. Forest improvement measures may be paramount on this land such as timber planting or vegetation manipulation for erosion control. Such lands should be continuously available for low density recreational activities.

**Multiple Resource Managed Lands: Vegetation Management (50%)**

Management activities in these areas focus on the protection and development of forest resources and vegetative cover. Compatible uses may also occur on these lands.

<table>
<thead>
<tr>
<th>Land Classification (% of Project Area)</th>
<th>Description</th>
<th>Land Classification (% of Project Area)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N/A a (0%)</strong></td>
<td>Multiple Resource Managed Lands: Future or Inactive Recreation Areas (&lt; 1 %)</td>
<td><strong>Environmental Sensitive Areas (34%)</strong></td>
<td>Areas with site characteristics compatible with potential future recreational development or recreation areas that are closed. Until there is an opportunity to develop or reopen these areas, they will be managed for multiple resources. This special class may overlap with other designated classes. This classification consists of areas where scientific, ecological, cultural, or aesthetic features have been identified. Development of public use on lands within this classification is normally prohibited to ensure that these sensitive areas are not adversely impacted. Agricultural or grazing uses are not permitted on lands with this classification.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Land Classification (% of Project Area)</th>
<th>Description</th>
<th>Land Classification (% of Project Area)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Natural Areas (7%)</strong></td>
<td>Lands acquired for project operations and allocated for preservation of scientific, ecological, historical, archeological or visual values. Lands managed to protect rare and endangered species of flora and/or fauna will be allocated as natural areas. Normally limited or no development is contemplated on land in this allocation. Project operational land may be a dual classification. No agricultural uses are permitted on this land.</td>
<td><strong>Environmentally Sensitive Areas (34%)</strong></td>
<td>This special class may overlap with other designated classes. This classification consists of areas where scientific, ecological, cultural, or aesthetic features have been identified. Development of public use on lands within this classification is normally prohibited to ensure that these sensitive areas are not adversely impacted. Agricultural or grazing uses are not permitted on lands with this classification.</td>
</tr>
</tbody>
</table>

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*a No classes from the 1977 Master Plan and 1990 Supplement are comparable to the MRM: Future or Inactive Recreation Area class.*
Table 2. Summary of Alternatives Considered as Part of the Master Plan.

<table>
<thead>
<tr>
<th>Land Uses Emphasized:</th>
<th>No Action</th>
<th>Natural Resource Focus</th>
<th>Recreation Focus</th>
<th>Balanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Operations</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>High Recreation Use</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Low Recreation Use</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Vegetation Management</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Wildlife Management</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Natural / Ecologically Sensitive Area</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
4.0 AFFECTED ENVIRONMENT

Chapter 2 of the main report describes current conditions for the affected environment within the project area, including resources that may be affected by the revised Master Plan. This section focuses on generally describing the anticipated future conditions and which will be the basis for evaluating alternatives in Section 5. For purposes of this EA, the District considered all environmental factors potentially influenced by the proposed Master Plan and has focused this environmental review on specific resources. Many of the unaffected resources were eliminated from further consideration and included climate, geology, topography, soils, air quality, water supply, farmland, and groundwater.

4.1 Socio-Economic

4.1.1 Aesthetic Values

The aesthetic value of the Headwaters’ area is primarily a function of the lakes themselves, the associated shorelines, and the adjacent uplands. The area offers a wide variety of natural habitats ranging from forested areas to wetlands. These components will continue to be important for preserving the natural beauty of the project area. No major developments or activities are anticipated that would diminish the future aesthetic appeal of this area.

4.1.2 Recreational Opportunities

See Section 2.17 of the main report for a description of existing conditions associated with recreational use in the Headwaters. Population growth in the surrounding areas is anticipated to continue to increase slowly. The study area will retain much of its pristine beauty and good water quality, thus continuing to appeal to hunters, anglers, snowmobilers, skiers, and other outdoor enthusiasts. The Headwaters will continue to provide opportunities for water-related recreation such as boating, sailing, kayaking, paddle boarding, fishing, and swimming. The Headwaters will also continue to provide access to snowmobile trails, snowshoeing, walking, biking, picnicking, marinas, restaurants. Recreational uses in Central Minnesota will likely continue to change from a region of family resorts and vacation cottages to retirement homes, large-scale resorts, and year-round residences.

4.1.3 Transportation

Access to specific locations within the study area is provided by a network of State and local roads. Within the project boundary, a mix of paved and unpaved roads, parking lots, and trails provide access to different sites. Internal access by foot also is provided by trails. Transportation within the project site is also facilitated by numerous boat ramps. Roads and parking lots support Project operations areas, developed recreational sites and some resource sites. The undeveloped portions of the Project have limited transportation infrastructure. Trails run throughout the project site and provide access to certain portions of these lands. The transportation services described above are anticipated to continue.

4.1.4 Public Health and Safety

The District, the State of Minnesota, and other management partners work to ensure a safe and enjoyable experience for all visitors at the Headwaters. Safety at the Headwaters is maintained through a variety of different mechanisms. The District’s Project Safety Plan defines programs and guidelines relative to employee and visitor safety together with procedures to follow in the event of accidents. Safety conditions will continue to be important for the Headwaters.
4.1.5 Community Growth, and Development
See Section 2.16 and 2.17 of the main report for a description of baseline conditions associated with community growth and development. The cities of Brainerd and Grand Rapids are anticipated to continue as major population centers. Population growth in the project area is anticipated to continue to increase slowly.

4.1.6 Existing / Potential Land Use
Refer to Chapter 2 of the main report for a description of baseline conditions associated with existing land use. These conditions are anticipated to continue.

4.1.7 Property Values / Tax Revenue
Property values and tax revenue in the area surrounding the project area are anticipated to remain stable.

4.1.8 Public Facilities and Services
See Section 1.6 of the main report for a description of baseline conditions associated with public facilities and services. These conditions are anticipated to continue.

4.1.9 Employment / Business Activity
See Section 2.16 and 2.17 of the main report for a description of economics and business activities in the area. These activities are projected to continue. Recreation and tourism will continue to be major contributors to employment. Agriculture and mining are also major industries and trades that will continue to be important to the economy in the Headwaters’ area.

4.1.10 Environmental Justice
See Section 2.17.1 of the main report for a description of population demographics. Environmental Justice is institutionally significant because of Executive Order 12898 (E.O. 12898) and the Department of Defense’s Strategy on Environmental Justice of 1995, which direct Federal agencies to identify and address any disproportionately high adverse human health or environmental effects of Federal actions to minority and/or low-income populations.

To identify low-income and minority populations in the Project area, the Environmental Protection Agency’s (EPA) mapping tool was used (http://www.epa.gov/environmentaljustice/mapping.html). In the Project area and surrounding area, the minority population constitutes 5% of the population and those below the below poverty threshold constitute 10 to 20 % (EPA EJ Viewer 2015).

4.2 Natural Resources
A Level One natural resource inventory was conducted for each of the Headwaters’ sites in accordance with EP-1130-2-540. This information provides a basic inventory of natural resources and is discussed in Section 2.8 of the main report.

4.2.1 Terrestrial Habitat
Terrestrial habitat in the Project area is described in Section 2 in the main report. For the most part, the future conditions for terrestrial habitat in the Project area are anticipated to remain similar as they are today.

4.2.2 Wetlands
Wetlands in the Project area are described in Section 2.12 of the main report. Related to wetlands, wild
rice is a resource with special cultural and environmental significance and is described in Section 2.8 of the main report. Future conditions for wetlands and wild rice are anticipated to remain similar to existing conditions.

4.2.3 Aquatic Habitat
Aquatic habitat is discussed in Sections 2.1 through 2.4 of the main report. Future conditions for aquatic habitat are anticipated to remain unchanged.

4.2.4 Habitat Diversity and Interspersion / Biological Productivity
A description of factors related to habitat diversity and biological productivity is provided throughout Section 2 of the main report. The Project area will continue to have lakes, streams, forests and open spaces that support many complex and varied forms of wildlife. Forests, marshes and wetlands bordering and connecting many water bodies will continue to provide ideal habitat conditions for many species of migratory waterfowl and game fish.

Habitat in the Headwaters will continue to be diverse and support an abundance of fish and wildlife. The forests, marshes and wetlands bordering and connecting many water bodies will continue to provide habitat for many species of migratory waterfowl and game fish. Wetlands, lowland forests, upland forests, and open upland will continue as dominant habitat types in the project area. Mammal species such as white-tailed deer, bear, fox, raccoon, weasel, mink, woodchuck, squirrel, chipmunk, beaver, porcupine, and skunk will persist. Reptile and amphibian species will also continue to utilize existing habitat. The Headwaters will also continue to be used by the 240+ species of avifauna in the region, either as residents or transient migrants.

4.2.5 Surface Water Quality
Surface water quality is described in Section 2.5 of the main report. Good conditions for water quality are anticipated to continue. However, the threats to water quality for Headwaters’ lakes will continue as well. These include storm water runoff from logging operations, urban and shoreland development, mining, inadequate wastewater treatment, and failing septic systems. Lakes would also remain vulnerable to cultural-induced eutrophication from point and non-point sources.

4.2.6 Threatened or Endangered Species
Federally-listed threatened or endangered species are described in Section 2.10 of the main report. Three species found in the study area are Canada lynx (*Lynx Canadensis*; threatened), gray wolf (*Canis lupus*; threatened), and northern long-eared bat (*Myotis septentrionalis*; threatened). It is anticipated that each of these species will continue to be federally-listed until populations have recovered.

State listed species (including species of special concern) are also identified in Section 2.10 of the main report and Appendix D. Those expected to occur in the study area include Nelson’s sparrow (*Ammodramus nelsoni*), Wilson’s phalarope (*Phalaropus tricolor*), Blanding’s turtle (*Emydoidea blandingii*), least darter (*Etheostoma microperca*), pugnose shiner (*Notropis anogenus*), and creek heelsplitter (*Lasmigona decorata*). These species are also anticipated to remain on the state-listed species list until populations have recovered.

4.2.7 Invasive Species
Invasive species found in the Headwaters are identified in Section 6.4 of the main report. Exotic and invasive species are a part of the existing ecosystem within the Project area. These invasive species have the ability to rapidly disrupt land and water resources if not aggressively managed. Over time, native
species can be replaced and the ecology altered. Additionally, the interdependence and connectivity between the flora and fauna will be out of balance and the fauna may relocate to find habitat required for preferred food, shelter, or habitat structure. Invasive species not only have tremendous consequences on altering ecosystem compositions, but also economically. There are high costs that stem from labor, materials, and equipment to control invasives. All of these invasive species cause serious threat and are expensive to control on an annual basis.

4.3 Cultural Resources
Cultural resources in the Project area are described in Section 2.15 of the main report. Cultural resources and historic properties will continue to be recognized as significant resources and protected in the Project area.

4.4 Climate Change
Climate change is discussed in Section 2.6.2 of the main report. Climate change has become an area of concern due to the potential for effects on numerous aspects of the environment, especially those related to water resources.

Although there is still uncertainty on regional variations in climate change impact, it is likely that the following direct effects to natural and socioeconomic resources in the Headwaters’ area will occur:

- Temperatures and precipitation changes will vary regionally but will lead to changes in the water cycle that will impact both aquatic and terrestrial species.
- Extreme events such as floods, heat waves, droughts and severe storms are expected to increase resulting in increased wildfires, pests, diseases and invasive species that will alter habitat for many species.
- With increasing temperatures, flora and fauna will migrate northward and/or to higher elevations to escape warming conditions. For some species, the inability or lack of opportunity to migrate to a more suitable climate may lead to extinction or extirpation.
- Temperature increases will alter seasons and result in earlier spring and later fall. This will result in migration pattern shifts of birds and migratory insects, which may cause misalignment of food availability.
- Reduced snowpack and increased temperatures in streams, rivers and lakes will contribute to decreased populations of freshwater fish, such as trout, and altered flooding regimes that will affect spawning and rearing habitat for many aquatic species.
- Increased air temperatures and frequencies of drought, especially in the summer months, will result in increased water temperatures. This may lead to water quality concerns, such as low dissolved oxygen levels and nuisance algal blooms.
- Increases in air temperature along with extended heat waves in the summer months and the increased frequency of extreme storm events may decrease the number of visitors to Headwaters’ recreational facilities.
- Periods of extreme high heat pose human health concerns and higher water temperatures can result in algal blooms and other water quality issues which may cause health risks for those involved in aquatic activities.
- Increased extreme storm events will adversely affect recreational activities.

As a consequence, it is anticipated there will be different levels of response. For example, some wildlife and fish species may benefit from a changing climate and could expand their range or increase in
abundance. In addition, the movement of species will create new communities of species for which there will be no previous examples and will require new management regimes. Wildlife management plans will need to reflect these changes and will likely need to be updated on a more frequent basis. Climate change is a large and growing threat to wildlife and natural systems, but it will also exacerbate many existing threats. Efforts to address climate change should not diminish the immediate need to combat threats that are independent of climate change, such as habitat loss, invasive species spread, pollution and wildlife diseases. Resource management goals should be to sustain ecosystems and viable wildlife populations regardless of the threat (Association of Fish and Wildlife Agencies 2009).

If these predicted increases occur in the Headwaters’ area as a result of climate change, there will be need for more intense management of natural resources as well as recreational services. Therefore, consideration of future climate change and its effects would not contradict the need for the proposed action.
5.0 ENVIRONMENTAL CONSEQUENCES

This section of the EA describes the environmental consequences associated with the alternatives presented in Section 2.0. NEPA requires consideration of context, intensity, and duration of adverse and beneficial impacts (direct, indirect, and cumulative) and measures to mitigate for impacts. These elements are considered in the following impact analysis.

In general, the No Action Alternative would not consider the current status of facilities and most up-to-date information regarding, among others, management principles and objectives, public use patterns, and Corps’ policy. Under the 1977 Master Plan and the 1990 Supplement, some of the anticipated benefits for the parameters listed in Table 3 are likely to be lessened or nullified by unintended adverse effects. For example, recreation promoting boat use without consideration of invasive species may result in lakes that become infected with zebra mussels (Dreissena polymorpha). Or campgrounds may be modernized without consideration of the importance of internet access to users. Thus many of these parameters are depicted as having no impact or minor benefits.

Use of the revised Master Plan would help define the approval process for future actions affecting project lands, depending on whether the actions are 1) specifically included in the Master Plan, 2) not included in the Master Plan, but consistent with the Plan, or 3) not included and not consistent with the recommendations, objectives and policies stated in Corps regulations (USACE, 2009). For specific actions that are identified in the Master Plan, the approval process would still require adequate NEPA consideration prior to initiating construction.

The updated Master Plan will consist of land classifications, resource objectives, and other specifically-stated policies considered for analyzing environmental effects. However, this EA does not assess the impacts of specific recommended future management actions and opportunities. These recommendations will be part of the OMP and identified as tasks which will be reviewed and completed at a later date. Because of the wide variety of possible future management recommendations or tasks that could be proposed, an additional evaluation to determine consistency with the stated site objectives and further NEPA consideration would be required as these tasks are undertaken.

The implementation of the Master Plan would not result in any irreversible environmental conditions. The Master Plan is a land-use planning document intended to benefit productivity of Headwaters’ lands in the long term. While any future maintenance and construction activities may temporarily disrupt wildlife and human use in project areas, negative long-term impacts are expected to be minimal or non-existent on all ecosystems associated with this Master Plan.

Environmental impacts of the No Action and Proposed Alternative (adopt and implement Master Plan) are displayed in Table 3. Only resources that have either a beneficial or possible adverse impact will be discussed further in the remainder of this section.
Table 3. Environmental Assessment Matrix.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>No Action a</th>
<th>Recommended Alternative b</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PARAMETER</strong></td>
<td>Beneficial</td>
<td>No Impact</td>
</tr>
<tr>
<td><strong>A. SOCIAL EFFECTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Noise Levels</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2. Aesthetic Values</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. Recreational Opportunities</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4. Transportation</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5. Public Health and Safety</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6. Community Cohesion (Sense of Unity)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7. Community Growth &amp; Development</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8. Business and Home Relocations</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9. Existing/Potential Land Use</td>
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<td></td>
</tr>
<tr>
<td>10. Controversy</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>B. ECONOMIC EFFECTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Property Values</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2. Tax Revenue</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. Public Facilities and Services</td>
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<tr>
<td>4. Regional Growth</td>
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<tr>
<td>5. Employment</td>
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<td>6. Business Activity</td>
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<tr>
<td>7. Farmland/Food Supply</td>
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<td></td>
</tr>
<tr>
<td>8. Commercial Navigation</td>
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<td></td>
</tr>
<tr>
<td>9. Flooding Effects</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10. Energy Needs and Resources</td>
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<td></td>
</tr>
<tr>
<td><strong>C. NATURAL RESOURCE EFFECTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Air Quality</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2. Terrestrial Habitat</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. Wetlands</td>
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<td></td>
</tr>
<tr>
<td>4. Aquatic Habitat</td>
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<td></td>
</tr>
<tr>
<td>5. Habitat Diversity and Interspersion</td>
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</tr>
<tr>
<td>6. Biological Productivity</td>
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<td></td>
</tr>
<tr>
<td>7. Surface Water Quality</td>
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<tr>
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<td>9. Groundwater</td>
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<td>10. Soils</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>11. Threatened or Endangered Species</td>
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</tr>
<tr>
<td><strong>D. CULTURAL RESOURCE EFFECTS</strong></td>
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<td></td>
</tr>
<tr>
<td>1. Historic Architectural Values</td>
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<td></td>
</tr>
<tr>
<td>2. Pre- &amp; Historic Archeological Values</td>
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<td></td>
</tr>
</tbody>
</table>

'X' = minor effects.
a Effects as compared to existing conditions.
b Effects as compared to the No Action Alternative.

5.1 Socio-Economic Effects

5.1.1 Aesthetic Values

The No Action Alternative would result in minor adverse effects to the aesthetic values compared to existing conditions. Areas designated under the Natural Area class would continue to be protected for aesthetic value. However, lands used for recreation would not consider the changing and growing needs of users, which likely will lead to degraded aesthetic appeal. Lands designated as Natural Area or Recreation Low Density support aesthetic value, and comprise about 63% of the total project lands under this alternative.
The Proposed Alternative would result in adverse and beneficial minor effects when compared to the No Action Alternative. Updated amenities that reflect current user needs will likely lead to increased recreational use in the Project area that may reduce aesthetic qualities, especially within the High Density Recreation areas. For example, amenities such as campgrounds, picnic areas, beaches, and boat launches that are equipped to service larger recreational vehicles may diminish aesthetic appeal to those who prefer amenities that blend into the natural environment. However, land classes with high aesthetic value (i.e., Environmentally Sensitive Area, MRM-Low Density Recreation, and MRM-Vegetation Management) would likely benefit from improved management and increased protection measures. Under the Proposed Alternative, this would comprise about 60% of total project lands.

5.1.2 Recreational Opportunities
Existing land classes designated for recreation (i.e., Recreation Intensive and Recreation Low Density) would remain in place and would continue to comprise about 75% of project lands. Although maintenance of current recreational facilities would continue under the No Action Alternative, it would not accurately reflect the current status of facilities or the higher use trends. Thus, the No Action Alternative would result in minor adverse effects in the future compared to existing conditions.

Implementation of the Proposed Alternative would result in mixed minor effects. New land classes set aside for recreation (i.e., High Density Recreation, MRM-Low Density Recreation, and MRM-Future) would comprise only about 40% of project lands, much less than the No Action Alternative. Also, recreation opportunities where these overlap with the Environmentally Sensitive Area class would be limited. However, management of recreational facilities would be based on updated and projected use. Enhancing the camping experience with modern, upgraded facilities would also complement the existing campsites presently available. This is reflected in the recreation resource objectives that aim to enhance day use and campground facilities, improve opportunities for passive recreation, and expand of interpretive services. Improvements to accessibility would result in wider use by people of all ages and abilities. Passive recreational opportunities focused on natural resources (e.g., hiking, bird-watching) would also benefit through improved management of these resources. Finally, studies that identify the carrying capacity on recreational facilities would lead to monitoring and periodic reviews that improve services.

5.1.3 Transportation
Enhancing transportation services would continue under the No Action Alternative; however, this may not reflect current needs. As recreation demands change with time, the quality of transportation services would diminish.

Under the Proposed Alternative, transportation would likely have minor benefits, primarily associated with recreational facilities. Benefits would be gained locally with the extension or development of various trails (pedestrian, horse, water) that consider the latest user needs and allow visitors to travel between recreation sites in the study area.

5.1.4 Public Health and Safety
Future public health and safety would continue to be a priority in the Project area under the No Action Alternative. It is anticipated there would be no measureable effects compared to the existing conditions.

Implementation of the Proposed Alternative will have minor benefits enhancing public health and safety. A stated objective of the revised Master Plan is to foster public and employee safety through
education and training, research, and proactive visitor assistance activities. In addition, a carrying capacity analysis for all activities will help improve safety. Use of updated information in the Master Plan will advance public safety and health.

5.1.5 Community Growth and Development
Under the No Action Alternative, it is anticipated that future community growth and development would not experience measurable effects compared to the existing conditions.

The Proposed Alternative would provide quality recreation opportunities for the surrounding community and for the region at large. By considering the most recent conditions, implementation of the proposed Master Plan would result in minor beneficial effects.

5.1.6 Existing / Potential Land Use
Under the No Action Alternative, it is anticipated that existing and potential land use would not experience measurable effects compared to the existing conditions.

Under the Proposed Alternative, the revised land classes, along with updated information on use, would drive better decisions on land use. Minor benefits are anticipated.

5.1.7 Property Values / Tax Revenue
Future property values and tax revenue are not anticipated to be affected under the No Action Alternative when compared to the existing conditions.

Implementation of the proposed Master Plan is anticipated to have minor benefits on future property values or tax revenues when compared to the No Action Alternative. Up-to-date recommendations for recreation would likely increase recreational visitors to the area and result in more dollars spent in local economies, resulting in an increase in tax revenues for the surrounding communities. The Headwaters plays a large role in the current tourism spending in the Aitkin, Cross, Crow Wing, and Itasca counties and will continue to do so. Additionally, the environmental resources and recreation opportunities will likely enhance the value of adjacent properties.

5.1.8 Public Facilities and Services
Future public facilities and services are not anticipated to be affected under the No Action Alternative when compared to the existing conditions.

Overall, the implementation of the Proposed Alternative is anticipated to have minor positive effects to public facilities and services by enhancing outdoor recreational opportunities.

5.1.9 Employment / Business Activity
Future employment and business activities are not anticipated to be affected under the No Action Alternative when compared to the existing conditions.

The Proposed Alternative will have minor positive effects on employment. There would be some minor benefits for employment or business activity through increased recreational opportunities, which is based on current user needs.

5.1.10 Environmental Justice
No adverse economic or social effects would be anticipated under the Proposed Alternative or the No
Action Alternative. Neither alternative would disproportionately impact one group over another.

5.2 Natural Resource Effects

5.2.1 Terrestrial Habitat
Existing land classes closely associated with terrestrial habitat under the No Action Alternative would be Natural Area and Recreation Low Density, which would continue to comprise about 62% of project lands. Although management of terrestrial habitat would continue under the No Action Alternative, the 1977 Master Plan and 1990 Supplement no longer accurately reflects the current status of these resources in the study area. In the future, minor adverse effects to terrestrial habitat are anticipated compared to the existing conditions as a result of the disconnect between management and use. The increased usage would adversely affect terrestrial resources.

New land classes closely associated with terrestrial habitat under the Proposed Alternative would be MRM-Low Density Recreation and MRM-Vegetation Management, which would comprise about 66% of project lands. Furthermore, 34% of these classes would overlap with the Environmentally Sensitive Area class. These resources would be better accommodated by analyzing current conditions, resource suitability, and wildlife trends. The Proposed Alternative would thus result in minor beneficial effects.

5.2.2 Wetlands
Under the No Action Alternative, wetlands and associated wild rice may experience minor adverse effects associated with future increased use of surrounding areas when compared to existing conditions. Wetlands would be associated with the Natural Area class, which would continue to comprise about 7% of the project area.

The Proposed Alternative would recognize changes to wetlands and include these as part of the Environmentally Sensitive Area land class, which would provide additional management protections, including those for wild rice. This land class would comprise 34% of the project area.

5.2.3 Aquatic Habitat
Under the No Action Alternative, aquatic habitat may experience minor adverse effects associated with future increased use of surrounding terrestrial areas when compared to existing conditions.

Although the Master Plan is focused on managing lands, the Proposed Alternative would have minor localized benefits effects to aquatic habitat. This is due to increased acreages of adjacent lands (i.e., shorelands) included as part the Environmentally Sensitive Area class.

5.2.4 Habitat Diversity and Interspersion / Biological Productivity
As identified above, habitat (primarily terrestrial) would likely experience minor adverse effects under the No Action Alternative compared to existing conditions, which would translate to congruent effects on biological productivity and habitat diversity and interspersion.

Under the Proposed Alternative, the management and addition of lands designated as Environmentally Sensitive Area would enhance habitat diversity and interspersion and biological productivity. As discussed earlier, the percent of lands designated as Environmentally Sensitive Area would increase substantially compared to the No Action Alternative.
5.2.5 Surface Water Quality
Under the No Action Alternative, there are no anticipated effects on surface water quality when compared to existing conditions.

Compared to the No Action Alternative, the Proposed Alternative would likely experience slightly improved water quality in localized areas of the Headwaters adjacent to Corps lands. This is attributed to improved land management and recreational facilities. Lands designated as Environmentally Sensitive Area, especially close to surface waters, would reduce the potential adverse effects associated with stormwater runoff.

5.2.6 Threatened or Endangered Species
Both the No Action and the Proposed Alternatives are anticipated to have “no effect” on any listed or proposed endangered species listed in this EA. The basis for this statement is because no specific management actions are identified and specific effects to listed species cannot be identified. Prior to implementing such actions, effects to listed species would be analyzed on a case-by-case basis. These actions would be reviewed and will determine the type of NEPA documentation needed at that time. The District will take actions, in compliance with Federal and State regulations, to avoid and minimize adverse effects to any threatened and endangered species or any critical habitat that may have been established in or near areas potentially affected by the proposed undertakings.

Compared to existing conditions, the No Action Alternative may result in minor adverse effects to state-listed species as a result of outdated management actions.

Compared to the No Action Alternative, the Proposed Alternative is anticipated to result in beneficial effects to state-listed species due to updated management actions and having more lands set aside under the Environmentally Sensitive Area class.

5.2.7 Invasive Species
The existing Master Plan has little information pertaining to invasive species; thus, is out of date and non-compliant with current laws and regulations. Future adverse effects from invasive species are anticipated when compared to baseline conditions.

The Proposed Alternative addresses invasive species. The District will implement best management practices with regards to invasive species management within the project area. Following District policy and using adaptive and best management practices in prevention, education, early detection, rapid response, and containment in trying to control invasive will aid in cost effective and environmentally sound invasive species management.

5.3 Cultural Resource Effects
Under the No Action Alternative, cultural and historic properties may experience minor adverse effects associated with future increased recreational demands when compared to existing conditions. Known cultural and historic properties would be associated with the Natural Area class, which would continue to comprise about 7% of the project area.

The Proposed Alternative would recognize cultural and historic areas as part of the new Environmentally Sensitive Area land class, which would provide additional management protections. This land class would comprise 34% of the project area.
5.4 Climate Change and Greenhouse Gas Emissions

As discussed in Sections 4.2, implementation of the Proposed Alternative is anticipated to have environmental benefits (especially for terrestrial habitat), but which are difficult to quantify. Such an assessment would be more meaningful at the scale of individual projects instead of a conceptual plan encompassing such a large geographic area. However, ongoing research by the Corps Institute for Water Resources on carbon sequestration potential of Corps-owned land and water demonstrates a potential to capture and store greenhouse gases in vegetation and in reservoir sinks. This indicates that the Proposed Alternative will not have a negative effect on climate.

The District recognizes the CEQ’s revised draft NEPA guidance for consideration of the effects of climate change and greenhouse gas emissions (http://go.usa.gov/3KEyR) and its responsibility to identify the potential emissions from project-specific alternatives as part of the decision-making process.

5.5 Cumulative Impacts

The CEQ regulations that implement NEPA require assessment of cumulative impacts in the decision-making process for Federal projects. Cumulative impacts are defined as impacts which result when the impact of the Proposed Alternative is added to the impacts of other past, present and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7). The cumulative impacts associated with the Proposed Alternative and the No Action Alternative are described below.

Past, present, and reasonably foreseeable future actions have and continue to contribute to the cumulative impacts of activities in and around the study area. Past actions include the construction and operation of reservoirs, the recreation sites surrounding reservoirs, as well as residential, commercial, and industrial facilities throughout the region. All of these developments have had varying levels of adverse impacts on the physical and natural resources in the region. Many of these developments, however, have had beneficial impacts on the region’s socioeconomic resources. In addition, many of the historic impacts have been offset throughout the years by the resource stewardship efforts of the District, Minnesota DNR, and other management partners.

The most significant past action was the construction and development of the Headwaters. This change created new natural and physical conditions under management by the District, Minnesota DNR, and other management partners. The construction of the project also had an impact on cultural resources by flooding terrestrial areas. Impacts to cultural resources were coordinated with the Minnesota State Historic Preservation Office (SHPO). This coordination included appropriate research and documentation of cultural resources. Since that time, the District, Minnesota DNR, and other management partners have worked to preserve, protect, and document cultural resources within the project boundary. The District and the other management partners have also brought a wide variety of high-quality recreational opportunities to the reservoir.

Existing and future actions also contribute to the cumulative impacts in the study area. Existing and future actions include the operation of project facilities, upgrades and maintenance of recreation sites, as well as residential, commercial, and industrial development throughout the region. Continued project operations would result in the sustained maintenance and development of recreational facilities. These facilities would enhance the recreational offerings made by the District and other management partners. Such improvements would result in varying levels of impacts to the surrounding resources. Similarly, surrounding residential, commercial, and industrial development could result in varying levels
of adverse impacts to many resources. Within the project boundary, adverse impacts would be offset through resource stewardship efforts. The programmatic approach to project management, included in this EA and attached Master Plan, would allow for future development plans and mitigation responses to be adapted to address any adverse actions. This would allow the District and other management partners to continue to reduce the contribution of its activities to regional cumulative impacts through proactive actions and adaptive resource management strategies.

The Proposed Alternative would contribute minor increments to the overall impacts that past, present, and future projects have on the region, mainly through the implementation of updated Land Classifications and Resource Objectives outlined in the proposed Master Plan.

5.6 Compliance With Environmental Regulations and Guidelines

The compliance of the Proposed Action with environmental quality statutes is shown in Table 4.

Table 4. Compliance with Environmental Protection Statutes and Other Environmental Requirements.

<table>
<thead>
<tr>
<th>Federal Policies</th>
<th>Compliance¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeological and Historic Preservation Act, 16 U.S.C. 469, et seq.</td>
<td>Full compliance</td>
</tr>
<tr>
<td>Clean Air Act, as amended, 42 U.S.C. 1857h-7, et seq.</td>
<td>Full compliance</td>
</tr>
<tr>
<td>Endangered Species Act, 16 U.S.C. 1531, et seq.</td>
<td>Full compliance</td>
</tr>
<tr>
<td>Federal Water Project Recreation Act, 16 U.S.C. 460-1(12), et seq.</td>
<td>Full compliance</td>
</tr>
<tr>
<td>Fish and Wildlife Coordination Act, 16 U.S.C. 601, et seq.</td>
<td>Full compliance</td>
</tr>
<tr>
<td>National Environmental Policy Act, 42 U.S.C. 4321, et seq.</td>
<td>Full compliance</td>
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<tr>
<td>National Historic Preservation Act, 16 U.S.C. 470a, et seq.</td>
<td>Full compliance</td>
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<tr>
<td>River and Harbors Act, 33 U.S.C. 403, et seq.</td>
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<tr>
<td>Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Wild and Scenic Rivers Act, 16 U.S.C. 1271, et seq.</td>
<td>Full compliance</td>
</tr>
<tr>
<td>Flood Plain Management (EO11988)</td>
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<tr>
<td>Protection of Wetlands (EO11990)</td>
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<tr>
<td>Farmland Protection Act</td>
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<td>Corps of Engineers Planning Guidance Handbook (ER 1105-2-100)</td>
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<tr>
<td>EO13112 Invasive Species</td>
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</tbody>
</table>

¹ This document addresses only a change in the program and would not suffice to comply with NEPA for the individual projects proposed. Each project plan would need to have a separate NEPA document upon its proposal for implementation. Site-specific impacts would be addressed in those documents and would be in greater detail than is presented in this Master Plan EA. In addition, compliance with all applicable environmental statutes would be necessary, as well as the necessary coordination (i.e. 404(b)(1), FWCA, ESA, SHPO) for each project.
6.0 COORDINATION

Chapter 7 of the main report provides information on the District’s efforts to coordinate with stakeholders, including the U.S. Fish and Wildlife Service, Environmental Protection Agency, Minnesota Department of Natural Resources, and the Minnesota Pollution Control Agency and various Native American tribes. The general public was also engaged as part of an open house and website exchange. Scoping comments received were considered in the decision-making process. Appendix B of the main report provides the comments and responses to those comments. This section summarizes the major issues raised during the scoping process.

The following list1 are issues or concerns identified during the scoping process:

- Consideration of climate change and minimization of greenhouse gas emissions
- Engage tribal governments on the master plan
- Minimize threats from invasive species
- Impacts to sensitive species and habitats
- Consideration of water quality impacts
- Monitoring and adaptive management
- Maximizing net environmental and social benefits
- Consideration of cumulative impacts

1 The list is not in order of importance. The list is also not exhaustive, but focuses on the issues that were mentioned the most during scoping and/or were specifically addressed in the Master Plan and this EA.

Below are some of the proposed solutions to the issues and concerns expressed by the public. The District will endeavor to balance the needs of all user groups to the greatest extent possible within the constraints of the primary missions of navigation, flood risk management, recreation, hydropower, water supply, and fish and wildlife management. The proposed solutions to issues and concerns are generally covered in the Master Plan; however, specific solutions are outside its scope.

- The District will use changes in land classifications (see Chapter 4 of the main report) to guide management decisions in order to strengthen resource protection amid strong recreation demands. Many of the land classification designations aim to protect and improve land resources. Sensitive area classifications, multiple habitat management, and continued coordination with Federal, State, and local agencies and municipalities will have positive effects on the Headwaters’ natural resources.
- Improving water quality and containing invasive species are part of the environmental stewardship resource objectives of the revised Master Plan. These are both identified under environmental stewardship resource objectives of the Proposed Alternative. Incorporating sustainability in all activities to the greatest extent possible is one of the broad management goals of the Master Plan. However, the Master Plan is a conceptual document that does not propose any specific actions to either protect water quality or control invasive species.
- The Headwaters has increased in popularity with the outdoor recreation community over the last several decades and become a popular recreation destination for the public. The increase in population and use indicate a need to continue to improve and modify District-managed recreation areas. As part of this interest, the District recognizes the value of coordination with stakeholders, and has identified this as part of general resource objectives of the Proposed Alternative.
7.0 LIST OF PREPARERS

<table>
<thead>
<tr>
<th>District Personnel</th>
<th>Area of Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brian Turner</td>
<td>Natural Resource Specialist</td>
</tr>
<tr>
<td>Katie Opsahl</td>
<td>Planner</td>
</tr>
<tr>
<td>Angela Deen</td>
<td>Planner</td>
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<tr>
<td>David Potter</td>
<td>Biologist, NEPA</td>
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<tr>
<td>Brad Perkl</td>
<td>Archaeologist</td>
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8.0 REFERENCES


U.S. Environmental Protection Agency, Region 7. 2012. Decision Document, Iowa’s Clean Water Act Section 303(d)


MISSISSIPPI RIVER HEADWATERS
RESERVOIRS MASTER PLAN

AITKIN, CASS, CROW WING, AND ITASCA COUNTIES, MINNESOTA

ENVIRONMENTAL ASSESSMENT

FINDING OF NO SIGNIFICANT IMPACT

D R A F T
FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act of 1969, the Corps of Engineers, St. Paul District, has assessed the environmental impacts of the following project:

MISSISSIPPI RIVER HEADWATERS RESERVOIRS MASTER PLAN

The Master Plan lays out future recommendations for management of both recreation and natural resources within the Mississippi River Headwaters Reservoirs (Headwaters) project area. The Master Plan is a vital tool for the responsible stewardship of resources at Mississippi River Headwaters to benefit present and future generations. The Master Plan provides guidance and includes direction for appropriate management, use, development, enhancement, protection, and conservation of the natural, cultural, and man-made resources at the Mississippi River Headwaters. The Master Plan seeks to replace the 1977 Master Plan and 1990 Master Plan Supplement and provide a balanced, up-to-date management plan that follows current Federal laws and regulations while sustaining Mississippi River Headwaters Reservoirs’ natural resources and providing outdoor recreational experiences.

I have reviewed the information provided in the accompanying Environmental Assessment, along with data obtained from cooperating Federal, state, and local agencies, and from the interested public. Based on this review, I find adopting and implementing the Mississippi River Headwaters’ Master Plan, will not significantly affect the quality of the human environment. Minor benefits are anticipated with the environmental, social, economic, and recreational parameters. Temporary minor adverse effects are anticipated with aesthetic values and recreational opportunities.

For the reasons above, the proposed action does not constitute a major federal action significantly affecting the quality of the human environment. Therefore an environmental impact statement will not be prepared. The District will reevaluate this determination on a case-by-case basis for implementation of individual projects.

Date

Samuel L. Calkins
Colonel, Corps of Engineers
District Commander