FINAL SUPPLEMENTAL FINAL ENVIRONMENTAL IMPACT STATEMENT

For

Trunk Highway 60 – St. James to Windom

Prepared by:

Minnesota Department of Transportation and Federal Highway Administration – Minnesota Division Office

July 2012
TRUNK HIGHWAY 60
IN COTTONWOOD AND WATONWAN COUNTIES, MINNESOTA

FINAL SUPPLEMENTAL FINAL ENVIRONMENTAL IMPACT STATEMENT (SFEIS)

Submitted Pursuant to 42 U.S.C. 4332 (2) (c), 49 U.S.C. 303, and Minn. Stat Chap. 116D
By the U.S. Department of Transportation – Federal Highway Administration
and the Minnesota Department of Transportation
State Project Number(s): S.P. No. 1703-69, 1703-70, and 8308-44

Cooperating Agencies
U.S. Army Corps of Engineers  U.S. Fish & Wildlife Service

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ABSTRACT

Highway 60 is an important northeast-southwest highway that crosses through southwestern Minnesota. The highway provides vital links for agricultural goods that are shipped between regional trade centers such as Worthington, MN, Mankato, MN, the Twin Cities (via Highway 169), and Sioux City, Iowa. A Final Environmental Impact Statement (FEIS), dated 1983, for Highway 60 from St. James to Worthington, MN assessed a larger 52-mile segment of the corridor. Of this 52-mile stretch, most of the corridor has been constructed as a four-lane divided highway. This Final SFEIS focuses on the gaps in the four-lane divided highway sections between Windom and St. James, a distance of approximately 17 miles.

REVIEWED AND RECOMMENDED:

Date

APPROVED:

Date

Division Administrator, Federal Highway Administration

To request this document in an alternative format, call Bruce Lattu at 651-366-4718 or 1-800-657-3774 (Greater Minnesota); 711 or 1-800627-3529 (Minnesota Relay). You may also send an e-mail to bruce.lattu@state.mn.us
Notice to Reader

The Federal Council on Environmental Quality (CEQ) Regulations for implementing the National Environmental Policy Act (40 CFR 1500-1508) place heavy emphasis on reducing paperwork, avoiding unnecessary work, and producing documents that are useful to decision makers and the public. With these objectives in mind, this Final Supplemental Final Environmental Impact Statement (SFEIS) was prepared as a “Condensed Final EIS”. This approach avoids repetition of material from the Highway 60 Draft SFEIS by incorporating, by reference, the Draft SFEIS. Thus, a condensed Final EIS is typically a shorter document than under the traditional approach; however, it does afford the reader a complete overview of the project and its impacts on the human and natural environment.

The crux of this approach is to briefly reference and summarize information from the Highway 60 Draft SFEIS that has not changed, and to focus the Final SFEIS discussion on changes in the project’s setting, impacts, technical analysis, and mitigation measures that have occurred since the Draft SFEIS document was circulated. In addition, this condensed Final SFEIS identifies the Highway 60 Preferred Alternative, explains the basis for its selection, describes coordination efforts, includes agency and public comments, provides responses to these comments, and presents any findings or determinations required by law or regulation.

An additional hard copy of the Highway 60 Draft SFEIS is not being provided to those parties that received a copy of the Draft SFEIS when it was circulated in November 2011. Copies of the Draft SFEIS and all supporting documents are included in the CD ROM at the back of this SFEIS, and are available on the project web site at www.dot.state.mn.us/d7/projects/hwy60stjames/ or by special request to MnDOT District 7 in Mankato, Minnesota.
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List of Final SFEIS Acronyms

B/C – Benefit-Cost
BMPs – Best Management Practices
CEQ – Council on Environmental Quality
CR – County Road
CSAH – County and State Aid Highway
dBA – A-weighted Decibel
EIS – Environmental Impact Statement
EPA – Environmental Protection Agency
ESA – Environmental Site Assessment
FEIS – Final Environmental Impact Statement
FEMA – Federal Emergency Management Agency
FHWA – Federal Highway Administration
FIRM – Flood Insurance Rate Map
IRC – Interregional Corridor
LGU – Local Government Unit
MEPA – Minnesota Environmental Policy Act
MnDOT – Minnesota Department of Transportation
MNDNR – Minnesota Department of Natural Resources
MPCA – Minnesota Pollution Control Agency
MSAT – Mobile Source Air Toxics
NEPA – National Environmental Policy Act
NHPA – National Historic Preservation Act
NPDES – National Pollutant Discharge Elimination System
NRCS – Natural Resource Conservation Service
NRHP – National Register of Historic Places
OHW – Ordinary High Water
RDC – Regional Development Commission
RGU – Responsible Governmental Unit
ROD – Record of Decision
SFEIS – Supplemental Final Environmental Impact Statement
SHPO – State Historic Preservation Office
WMA- Wildlife Management Area
1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND INFORMATION: PROCESS LEADING TO THE CREATION OF THIS DOCUMENT

Since the Highway 60 Final Environmental Impact Statement (FEIS) was completed and the Record of Decision (ROD) released in 1984, several segments of the original preferred alternative between the cities of Worthington and St. James, Minnesota (a distance of approximately 52 miles) have been constructed. These transportation improvements were constructed over many years and completed through multiple project lettings. The past projects have involved capacity (four-lane sections), safety (divided sections, interchanges, etc.), and/or mobility (community bypasses) improvements. However, to date three highway segments between the cities of St. James and Windom were reconstructed only as two lane roads rather than four-lane divided highways as proposed in the FEIS. These three gaps in the four-lane, shown in Figure 1, are herein referred to as the following:

- **East Gap** - extends from just west of the City of St. James to the eastern edge of the City of Butterfield (approximately 5.3 miles);
- **Middle Gap** - extends from the western edge of the City of Butterfield to just east of the City of Mountain Lake (approximately 4.2 miles);
- **West Gap** - extends from just west of the City of Mountain Lake to the northeast edge of the City of Windom (approximately 7.5 miles).

This Supplemental Final Environmental Impact Statement (SFEIS) focuses on documenting the environmental impacts and proposed mitigation associated with the preferred alternative for completing construction of the four-lane sections in the approximately 17 mile gap sections described above. Where appropriate, this document also includes a discussion of how the gap areas affect the total Highway 60 corridor; however the majority of the discussions focus on the specific effects of each of the three highway gaps.

The Draft SFEIS, original DEIS, FEIS, and ROD/Adequacy Determination remain unchanged and are incorporated by reference herein and made a part of this Final SFEIS\(^1\). Relevant information from the previous documents has been incorporated into this Final SFEIS. Electronic copies of the original EIS documents, ROD, and Draft SFEIS (published in November 2011 are included on a CD-ROM found on the back cover of this document.

1.2 PURPOSE OF THE FINAL SFEIS

The proposed reconstruction of Highway 60 is considered a Federal Class I Action because of the potential for significant impacts on the natural and physical environment. The original Environmental Impact Statement (EIS) was completed in the early 1980's and the Record of Decision (ROD) was released in 1984. This Final SFEIS focuses on documenting the potential environmental impacts and proposed mitigation for completing four-lane divided sections in the gap segments between Windom and St. James.

\(^1\) This Final SFEIS has been prepared using a “Condensed” format (see Note to Reader on page i of this Final SFEIS).
This SFEIS has been prepared as part of the federal National Environmental Policy Act (NEPA) and Minnesota Environmental Policy Act (MEPA) environmental review processes to fulfill requirements of both 42 USC 4321 et seq. and Minnesota Statute 116D. Consistent with state and federal environmental review requirements, a draft version of the SFEIS was circulated for public comment on November 14, 2011. The Draft SFEIS comment period expired on January 4, 2012, and public hearings were held on December 13, 2011 (in Windom, Cottonwood County, MN) and December 15, 2011 (in Butterfield, Watonwan County, MN). The Final SFEIS and ROD will be issued consistent with state and federal environmental review process requirements.

1.3 DESCRIPTION OF THE PROPOSED ACTION

The Minnesota Department of Transportation (MnDOT), in cooperation with the Federal Highway Administration (FHWA), proposes completion of the expansion of Highway 60 in Cottonwood and Watonwan Counties, to a four-lane divided highway.

1.4 PURPOSE AND NEED OF THE HIGHWAY 60 PROJECT

The purpose of the Highway 60 project is to continue implementation of transportation system improvements, by addressing the three remaining two-lane roadway sections along Highway 60 between Windom and St. James.

The needs that led to initiation of the 1983 Highway 60 EIS were included in the Draft SFEIS and included:

- Substandard Design Elements
- Local and Regional Roadway Significance
- System Linkages
- Present and Projected Traffic Demand
- Safety
- Modal Interrelationships
- Economic and Social Considerations

The needs for the three gap segments have not changed substantially from those stated in the original EIS, but have been refined to provide updated information regarding the current needs of the highway corridor, especially focusing on the three gap segments. Each of these needs is described further in the Draft SFEIS Section 2.5 - Purpose and Need for Proposed Action. The refined need components include:

- Corridor Role in the Transportation System – Policies and Priorities
  - Interregional Corridor (IRC) System
  - Significant Freight Corridor
- Enhanced System Continuity
- Safety
- Additional Considerations
  - Social Demand – Public Input Regarding Transportation Priorities
1.5 ALTERNATIVES

The Highway 60 Draft SFEIS, approved November 2011, considered only the three gap segments of Highway 60 between Windom and St. James. The potentially feasible and prudent alternatives for improving the gap segments of Highway 60 include:

- Alternative 1 – No-Build Alternative.
- Alternative 2 – Constructing a four-lane expressway.

The East and Middle Gap segments considered a single build alternative (Alternative 2) that would expand the two-lane highway section to a rural four-lane section by adding an additional set of lanes to the south of the existing travel lanes. The West Gap segment would primarily widen the existing highway to the north. In addition, the West Gap segment included design options in Bingham Lake and near Clear Lake that were considered to avoid and/or minimize social, economic, or environmental impacts. An evaluation and screening process of the design options was included in the Draft SFEIS.

Preferred Alternative

Following the Draft SFEIS comment period, a review of the Draft SFEIS analysis and the public and agency comments was conducted. Based on the comments and supporting analysis, Alternative 2 (construct four-lane expressway) with the Clear Lake “Full” design option and Bingham Lake “Widen North” design option was identified as the Preferred Alternative. The Bingham Lake “Widen North” design option was modified to shift the alignment slightly south near the intersection of Cottonwood County Road 2 in order to reduce impacts on Wetland #25 located north of Highway 60. These design options were identified for reasons including, but not limited to, the following:

- The design options meet the overall project purpose and need;
- The Clear Lake “Full” design option will minimize the potential for snow drifting and icy roadway conditions, which can result in run off the road and injury crashes. This option does not require safety barriers (guardrail), which can act as a snow traps and limit snow storage;
- The Bingham Lake design option balances potential social, economic, and environmental impacts on local infrastructure, commercial properties, and wetlands.

Section 3.1 of this Final SFEIS contains a more detailed discussion on the Preferred Alternative identification process.

1.6 POTENTIAL ENVIRONMENTAL EFFECTS

A summary of the potential beneficial and adverse effects associated with the Preferred Alternative is presented in Table 1 (on the following page).
### Table 1 – Impact Summary

<table>
<thead>
<tr>
<th>Subject</th>
<th>Social And Community</th>
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Social, economic, and environmental impact avoidance and minimization measures have been explored to the greatest extent possible without compromising the safety of travel throughout the Highway 60 corridor. For additional information regarding the impacts shown in Table 1, the reader is referred to Section 4.0 of this Final SFEIS document and Section 4.0 of the Draft SFEIS.

### 1.7 PROJECT COST AND FUNDING SOURCE

Construction of the Highway 60 improvements will be funded from both federal and state sources. It is anticipated that federal funds will be the primary source of construction funding. Cost estimates for each gap of the Preferred Alternative are presented in Table 2 below. The estimate includes construction (pavement and structures) and anticipated right-of-way acquisition costs.

<table>
<thead>
<tr>
<th>Preferred Alternative</th>
<th>Construction Cost Estimates</th>
<th>Right-of-Way Acquisition Costs</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Gap</td>
<td>$21.6 million</td>
<td>$1.4 million</td>
<td>$23.0 million</td>
</tr>
<tr>
<td>Middle Gap</td>
<td>$15.9 million</td>
<td>$600,000</td>
<td>$16.8 million</td>
</tr>
<tr>
<td>West Gap</td>
<td>$20-30 million</td>
<td>$2-4 million</td>
<td>$22-34 million</td>
</tr>
</tbody>
</table>

Table Notes:
1. Cost estimates are inflated to the year of the midpoint of anticipated construction (i.e. 2014 for the East Gap, 2016 for the Middle Gap, 2018 for the West Gap)
2. Includes four-lane roadway, local/frontage road connections, and other mitigation costs.

The current 2012-2015 State Transportation Investment Plan (STIP) includes approximately $18.8 million in funding for the East Gap improvements (FY 2013 Seq. #1201; FY 2014 Seq. #1247; and FY 2015 Seq. #1288). Additional funding for the Middle and West Gaps will be identified and programmed in future fiscal years of the STIP.

### 1.8 PERMITS, APPROVALS, AND CONCURRENCE

It is anticipated that federal, state, and local permits/approvals/concurrence may be required for the proposed action. The following actions may be required:

- Adequacy Determination – MnDOT
- Record of Decision – FHWA
- Section 404 Permit – United States Army Corps of Engineers (USACE)
- Section 401 Water Quality Certification – Minnesota Pollution Control Agency (MPCA)
- National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit – MPCA
- Minnesota Wetland Conservation Act (WCA) – MnDOT
- Public Waters Work Permit – Minnesota Department of Natural Resources (MNDNR)
- Orders for crossing drainage ditches from requisite ditch authorities
1.9 **PROJECT COORDINATION**

MnDOT is committed to public and agency involvement/outreach at all levels in decision-making related to the Highway 60 Project. MnDOT has engaged community organizations; area property owners; business owners; residents; and local, county, regional, state, and federal agencies in the development of the project. See Final SFEIS Section 7.0 – Coordination for additional information. Public involvement activities have included:

- Agency Coordination Meetings/Workshops
- Public Open House Meetings
- Public Hearings
- Project Mailings
- Project Website Updates

Coordination has also occurred with representatives from local, state, and federal agencies to discuss appropriate analysis methodology and mitigation for different resource areas.

1.10 **PROJECT SCHEDULE**

<table>
<thead>
<tr>
<th>Completion Date</th>
<th>Task/ Activity</th>
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<tbody>
<tr>
<td>June 14, 2011</td>
<td>Public Meeting/Open House</td>
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<td>August 10, 2011</td>
<td>Federal Notice of Intent</td>
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<tr>
<td>November 2011</td>
<td>Distribute Draft SFEIS Document for agency/public comment, start of Draft SFEIS comment period</td>
</tr>
<tr>
<td>December 13 &amp; 15, 2011</td>
<td>Public Hearings on Draft SFEIS</td>
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<tr>
<td>January 2012</td>
<td>Identification of Preferred Alternative</td>
</tr>
<tr>
<td>Spring 2012</td>
<td>Prepare and Distribute Final SFEIS</td>
</tr>
<tr>
<td>July 2012</td>
<td>MnDOT Adequacy Determination, Federal Highway Administration Record of Decision</td>
</tr>
<tr>
<td>2013-2014</td>
<td>East Gap Construction (St. James to Butterfield)</td>
</tr>
<tr>
<td>2015-2016</td>
<td>Middle Gap Construction (Butterfield to Mountain Lake)</td>
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<tr>
<td>2017-2018 (tentative)</td>
<td>West Gap Construction (Mountain Lake to Windom)</td>
</tr>
</tbody>
</table>

1.11 **OTHER MAJOR PROPOSED ACTIONS BY OTHERS**

There are no other major projects being proposed by other agencies within the three gap segments of the Highway 60 project area.

1.12 **AREAS OF UNRESOLVED OR CONTROVERSIAL ISSUES**

There are no unresolved or controversial issues with the Highway 60 Windom to St. James Project.
2.0 PURPOSE AND NEED FOR PROPOSED ACTION

2.1 PROJECT BACKGROUND

Highway 60 is an important northeast-southwest highway that crosses through southwestern Minnesota. This principal arterial highway provides vital links for local traffic, regional traffic, and shipping agricultural goods grown by local producers to regional trade centers such as Worthington, Mankato, the Twin Cities (via Hwy 169), and Sioux City, Iowa (via Hwy 75). Figure 1, located on page 2, illustrates how this important freight corridor connects producers and markets in the intra-state and inter-state transportation system.

The local and regional importance of Highway 60 has been recognized for many years. A Final Environmental Impact Statement (FEIS), dated 1983, was prepared for a 52-mile segment of Highway 60 from St. James to Worthington. Highway 60, including the 52-mile project corridor, falls under the MnDOT classification of a Medium Priority Interregional Corridor (IRC).

The Preferred Alternative concept identified in the original EIS and Record of Decision (ROD) consisted of constructing Highway 60 on new alignment from near St. James to approximately one-half mile southwest of Mountain Lake and to reconstruct on existing alignment from Mountain Lake to Worthington. The initial stages were to provide two-lane reconstruction to modern highway design standards and subsequent stages would provide added capacity with construction to a four-lane expressway. Nearly 35 miles of the Highway 60 corridor between St. James and Worthington has been constructed as a four-lane divided highway including community bypasses at St. James, Butterfield, and Mountain Lake. However, three segments (approximately 17 miles) of the original EIS study limits remain as two-lane highway sections between Windom and St. James.

MnDOT is currently in the process of updating the evaluation of improvements in these two-lane highway gap sections since funding for implementation of roadway improvements was made available in 2008. Given the amount of time that has passed since the 1984 ROD, MnDOT consulted with FHWA to determine the most appropriate course of action to maintain compliance with the National Environmental Policy Act (NEPA). The consultation focused on the specific circumstances of the project, the nature and type of potential impacts, and the need for interagency coordination. Based on this consultation, FHWA determined that a Supplemental Final EIS (SFEIS) must be prepared.

2.2 DESCRIPTION OF PROJECT

The Highway 60 project area is located in southwestern Minnesota. The project corridor for the three remaining two-lane gap segments primarily traverses east to west between the cities of St. James and Windom through Watonwan County and Cottonwood County, Minnesota (see Figure 1 on page 2). Within the project area, four-lane highway bypasses have already been constructed near St. James, Butterfield, and Mountain Lake. However, three highway segments between St. James and Windom were built as two lane roadways instead of four-lane, divided
Highways as proposed in the 1983 Final EIS. These three gaps in the four-lane are herein referred to as the following:

- **East Gap** – extends from just west of the City of St. James to the eastern edge of the City of Butterfield (approximately 5.3 miles);
- **Middle Gap** – extends from the western edge of the City of Butterfield to just east of the City of Mountain Lake (approximately 4.2 miles);
- **West Gap** – extends from just west of the City of Mountain Lake to the northeast edge of the City of Windom (approximately 7.5 miles).

The proposed improvements include expanding these gap segments of Highway 60 to a four-lane divided expressway section. Other improvements will include minor intersection improvements and access management improvements.

### 2.3 RESPONSIBLE GOVERNMENTAL UNITS

MnDOT is the Responsible Governmental Unit for the development of and the environmental documentation for the Highway 60 Project. MnDOT is managing the project with the FHWA as a Joint Lead Agency. The contact persons for the project are:

<table>
<thead>
<tr>
<th>MnDOT District 7</th>
<th>FHWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter Harff, PE</td>
<td>Philip Forst</td>
</tr>
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<td>MnDOT District 7</td>
<td>Environmental Specialist</td>
</tr>
<tr>
<td>2151 Bassett Drive</td>
<td>380 Jackson Street, Suite 500</td>
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<td>Mankato, MN 56001</td>
<td>St. Paul, MN 55101</td>
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<tr>
<td>507.304.6165</td>
<td>651.291.6110</td>
</tr>
<tr>
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</tr>
</tbody>
</table>

### 2.4 PURPOSE OF THE SUPPLEMENTAL FINAL ENVIRONMENTAL IMPACT STATEMENT

This Final SFEIS focuses on documenting the environmental impacts and proposed mitigation for completion of the four-lane in the gaps described in Section 2.1 above.²

The 1982 DEIS, 1983 FEIS and 1984 ROD/Adequacy Determination remain unchanged and are incorporated by reference herein and made a part of this SFEIS. Relevant information from the previous documents has been incorporated into this SFEIS, as necessary. Electronic copies of the original EIS documents, ROD, and Draft SFEIS (published November 2011) are included on the CD-ROM provided with this Final SFEIS. Combined with the Final SFEIS, these environmental review documents are intended to help public officials and agencies make decisions with a complete understanding of the environmental consequences and proposed mitigation commitments associated with the proposed action.

This Final SFEIS has been prepared as part of the federal National Environmental Policy Act (NEPA) and Minnesota Environmental Policy Act

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² This Final SFEIS has been prepared using a “Condensed” format (see Note to Reader on page i of this Final SFEIS).
(MEPA) environmental review processes to fulfill requirements of both 42 USC 4321 et seq. and Minnesota Statute 116D. Consistent with state and federal environmental review requirements, the Draft SFEIS was circulated for public comment and two public hearings were held to receive testimony for the public record. This Final SFEIS is also being issued consistent with state and federal environmental review process requirements.

2.5 PURPOSE AND NEED FOR PROPOSED ACTION

Project Purpose

The purpose of the Highway 60 project is to continue implementation of transportation system improvements in the corridor, by expanding the three remaining sections of two-lane roadway along Highway 60 between St. James and Windom to four lane divided highways.

Project Need

A detailed description of the project purpose and need was presented in the Highway 60 Draft SFEIS – Section 2.5, which has been incorporated by reference into this Final SFEIS. The identified Preferred Alternative is consistent with meeting the purpose and need objectives summarized below:

The needs that resulted in initiation of the 1983 Highway 60 EIS included the following:

- Substandard Design Elements - the highway corridor was characterized as having numerous design deficiencies that create safety and mobility concerns.
- Local and Regional Significance of the Highway
- System Linkages - four-lane roadway continuity
- Present and Projected Traffic Demand
- Safety Concerns
- Modal Interrelationships - including freight
- Economic and Social Considerations

The Draft SFEIS, published in November 2011, identified specific needs for transportation system improvements within the three gap segments between Windom and St. James. These need components are summarized below:

- System Continuity - The transportation improvements shall be compatible with adjacent segments of Highway 60.
  - With the completion of improvements near Worthington, the three gap segments between Windom and St. James will be the only remaining two-lane sections along Highway 60 between Mankato and the MN/IA border.
The transitions back and forth between two-lane and four-lane highway segments can cause distractions and confusion for drivers.

Highway 60 has been designated by MnDOT as an Interregional Corridor (IRC), which acknowledges the importance of Highway 60 in enhancing the economic vitality of the state by providing safe, timely, and efficient movement of goods and people between regional trade centers.

Highway 60 is also considered an important freight corridor because it connects producers and markets in the intra-state, inter-state, and international transportation system. As a result, there has been a heightened demand to maintain mobility along the corridor to accommodate growing freight traffic. Heavy commercial traffic currently makes up approximately 16 to 17 percent of the total daily traffic and seasonal peaks during the spring and fall are even higher.

- **Improve Safety** - For a 10-year study period (2000 – 2009), the three gap segments had 184 reported crashes (49-East Gap; 59-Middle Gap; 76-West Gap).

  - Nearly 40 percent of the crashes were higher severity crashes like head on, ran-off-road, and sideswipe opposite direction crashes. Furthermore, six fatal crashes and 40 personal injury crashes occurred within the 10-year reporting period.

  - Certain types of crashes (i.e. sideswipe, head-on, or run off road crashes) may have resulted from the highway's design features such as a two-lane roadway, transitions between 2-lane to 4-lane, and the frequency of access points.

  - Crash locations were reviewed and it was determined that crashes along the gap segments were not concentrated at any particular location(s), which indicates that spot safety improvements may not be effective.

  - As a result of public outreach meetings, MnDOT became further aware of the public's safety concerns along the three gap segments with numerous personal accounts of “near misses” where on several occasions vehicles were observed traveling in the wrong direction between Windom and St. James where the highway transitions back and forth between two-lane and four-lane sections and can be confusing to non-local drivers that may be anticipating a continuous highway section.

  - Slower operating characteristics of heavy commercial vehicles and/or agricultural machinery on the two-lane highway sections are another safety concern because motorists tend to take more risks in trying to pass these slower moving vehicles.
• Additional Considerations – A number of additional considerations have been identified as important issues in the development and evaluation of improvements to Highway 60 between Windom and St. James.

- Social Demand: MnDOT has benefited from an active and informed set of stakeholders from a variety of sectors, including farming, business, education, and government, as well as the interested public. The Statewide Transportation Policy Plan/District Highway Investment Plan Outreach meetings held in 2008 captured substantial input from the public and local elected officials insisting that additional Highway 60 improvements be completed, including completion of the four-lane corridor concept envisioned in the 1983-4 EIS.

- Access Management: In order to maintain the effective flow of traffic and improve safety conditions along Highway 60, it was determined that access management strategies needed to be considered and implemented where possible. MnDOT’s policy for Access Management on the trunk highway system is set forth in the MnDOT Access Management Manual, January 2008. Recommended spacing guidelines are set forth in the guidelines for public street intersections, signal systems, and private driveways.

- Environmental Concerns: While the three gap segments consist primarily of rural land use with limited development a number of important environmental factors were considered including: potential impacts to Clear Lake due to the proximity of the south shoreline of the lake and the Union Pacific Railroad corridor, and prairie remnants that have been identified in several locations between the Union Pacific Railroad corridor and the Highway 60 alignment. Any proposed improvements should consider these potential impacts and consider potential avoidance, minimization, and mitigation options.

3.0 ALTERNATIVES

The Highway 60 Draft SFEIS, dated November 2011, considered two alternatives: No-Build Alternative (Alternative 1) and the Build Alternative (Alternative 2). The build alternative was subdivided into the three gap segments (East Gap – St. James to Butterfield; Middle Gap – Butterfield to Mountain Lake, and West Gap – Mountain Lake to Windom). The Build Alternative for the East and Middle Gaps included one option that involved constructing two new travel lanes immediately south of the existing highway alignment. The West Gap Build Alternative included the construction of two additional travel lanes immediately north of existing highway with additional consideration of design options near community of Bingham Lake and along the southern shoreline of Clear Lake.

The alternative evaluation and screening process was based on an assessment of how each alternative addresses the purpose and need objectives of the project, as well as an assessment of potential social, economic, and environmental impacts. Following the Draft SFEIS comment period, a review of the public and agency comments was conducted. Based on the comments and supporting analysis in the Draft SFEIS, Alternative 2 – Build Alternative with the Clear Lake
“Full” design option and Bingham Lake “Widen North” design option was identified as the Preferred Alternative. The Bingham Lake “Widen North” design option was modified to shift the alignment slightly south near the intersection of Cottonwood County Road 2 in order to reduce impacts on Wetland #25 located north of Highway 60.

3.1 PREFERRED ALTERNATIVE

What Reasons Lead to the Identification of the Preferred Alternative?

The following list highlights the primary reasons for identifying Alternative 2 with the modified Bingham Lake “Widen North” and the Clear Lake “Full” design options as the Preferred Alternative:

- Provides for safe and efficient travel through the study area by providing a continuous four-lane highway section with improved access and intersection conditions.

- Is consistent with the design of Highway 60 in areas where the corridor has already been converted to a four-lane expressway. The capacity expansion will occur immediately south of the existing highway in the East and Middle Gaps and immediately north of the existing highway in the West Gap.

- The two design options provide a balanced approach in minimizing social, economic, and environmental impacts, while satisfying the overall project purpose and need objectives;

- Inclusion of the modified Bingham Lake “Widen North” Option minimizes potential impacts to operating businesses in the community, reduces impacts on Wetland #25 (north of Highway 60 near County Road 44), and provides an opportunity to clean up a potentially hazardous site (former vehicle salvage business) that if untreated could result in long-term soil and/or groundwater contamination concerns. This modified design option requires the least amount of right-of-way and farmland conversion to accommodate the improvements. Also, it avoids impacts to a sewer lift station located south of Highway 60 near Cottonwood County Road 44 (520th Avenue) and avoids the City’s main sanitary sewer and watermain lines that are located south of Highway 60 and run parallel to the corridor toward Windom.

- The Clear Lake “Full” design option will minimize the potential for snow drifting and icy roadway conditions, which can result in run off the road and injury crashes. This option does not require safety barriers (guardrail), which can act as a snow traps and limit snow storage;

- Alternative 2 with the identified design options has a positive (greater than 1.0) benefit-cost ratio indicating the benefits of the project outweigh the costs.

- Alternative 2 received the greatest amount of public support.
Appendix A contains preliminary layout drawings illustrating the Preferred Alternative.

**Description of Preferred Alternative**

The Preferred Alternative (Alternative 2 from the Draft SFEIS), including the Clear Lake “Full” and Bingham Lake “Widen North” design options involves expanding Highway 60 to a continuous four-lane expressway section within the East, Middle, and West Gap sections (see Figure 1). As previously mentioned, the Bingham Lake “widen North” design option was modified to shift the alignment slightly south to minimize potential impacts on Wetland #25 located north of Highway 60.

The four lane highway will be completed by constructing two lanes adjacent to the existing highway with 90 feet between centerlines. A 70 mph design speed will be used for designing the improvements and a 65 mph posted speed is anticipated to match the posted speeds on existing four-lane sections of Highway 60. Figure 2 on the following page illustrates a typical highway section that will be used in the East, Middle, and West Gaps, whenever possible. Exceptions to the typical section may occur due to environmental constraints that may reduce the centerline spacing or at certain high volume intersections where greater centerline spacing may be required. Intersections are proposed to be at-grade with two way stop control on the intersecting local roadway approaches. Left and right turn lanes will be provided at all public road intersections. Other improvements include minor reconstruction of cross street intersections and access/driveway modifications.

**East Gap**

The east termini of the East Gap is a point where the existing four-lane bypass of St. James tapers to a two-lane section southwest of St. James. The west termini of the East Gap is located at the eastern edge of the four-lane bypass of Butterfield. The length of the East Gap is approximately 5.3 miles.

The Preferred Alternative in the East Gap includes the construction of two additional travel lanes immediately south of the existing alignment. The existing roadway would serve westbound traffic and the new lanes would serve eastbound traffic. An additional overpass bridge of the Union Pacific rail line near Butterfield will also be constructed. Minor access modifications and/or closures are proposed to improve safety. Several storm water management ponds are proposed adjacent to the highway to collect and treat runoff from the highway.

**Middle Gap**

The east termini of the Middle Gap is a point where the existing four-lane bypass of Butterfield tapers to a two-lane section located approximately 900-feet west of Watonwan County Road 102. The west termini of the Middle Gap is located at the east end of the four-lane bypass south of Mountain Lake. The Middle Gap extends approximately 4.2 miles.
The Preferred Alternative in the Middle Gap includes the construction of two additional travel lanes immediately south of the existing alignment. The existing roadway would serve westbound traffic, while the new lanes would serve eastbound traffic. Minor access modifications and/or closures are anticipated in the Middle Gap to further improve safety. Several storm water management ponds are proposed adjacent to the highway to collect and treat runoff from the highway. Access changes and the locations of storm water ponds will be further developed as part of the final design process for the Middle Gap.

West Gap

The east termini of the West Gap begins where the existing four-lane bypass of Mountain Lake tapers to a two-lane section approximately 750-feet west of Cottonwood County Road 47/560th Avenue. The west termini of the West Gap is located at the northeastern edge of Windom near the intersection of John Caldwell Drive. The length of the West Gap is approximately 7.5 miles.

The Preferred Alternative in the West Gap includes the construction of two additional travel lanes immediately north of the existing alignment. The existing roadway would serve eastbound traffic, while the new lanes would serve westbound traffic. The Preferred Alternative through the community of Bingham Lake is a modified “Widen North” design option from the Draft SFEIS. This design option was modified to shift the alignment slightly south near the intersection of Cottonwood County Road 44 in order to reduce impacts on Wetland #25 located north of Highway 60, but yet still avoid commercial business relocations on the south side of the highway corridor.

The Preferred Alternative near Clear Lake includes the “Full” design option from the Draft SFEIS. This design option does result in more fill being placed in Clear Lake, which is further discussed in Section 4.2 – Wetlands of this Final SFEIS. However, this design option will minimize the potential for snow drifting and icy roadway conditions that can result in safety concerns including run off the road and injury crashes. The Clear Lake “Full” design option does not require the use of safety barriers/guardrail that would otherwise be required to meet safety design standards under the “Compressed” option. In rural agricultural areas where there are few objects to block the wind during the winter months, even on a day with clear skies a structure like a linear guardrail can exacerbate snow drifting that can quickly cause unsafe driving conditions. Highway 60 is located along the south shore of Clear Lake in an elevated area and a north wind would drive blowing snow up the slope which would then hit the guardrail and deposit the snow on the roadway.

The modified Bingham Lake “Widen North” and Clear Lake “Full” design options in the West Gap were identified as part of the Preferred Alternative because they balance potential social, economic, and environmental impacts, while satisfying the project purpose and need. Minor access modifications and/or closures are anticipated in the West Gap to further improve safety. Several storm water management ponds are proposed adjacent to the highway to collect and treat runoff from the highway. Access changes and the locations of storm water ponds will be further developed as part of the final design process for the West Gap.
The intersection of Cottonwood County Road 2 with Highway 60 occurs in the West Gap near the northeast edge of Bingham Lake. The proposed design at this intersection will be 125 feet between centerlines on Highway 60 to allow trucks to wait comfortably in the median cross over. During the final design process of the Preferred Alternative for the West Gap, MnDOT will determine the appropriate intersection design and geometry that may include center acceleration lanes or a restricted crossing U-turn intersection (RCUT) design. Furthermore, 510th Avenue will be realigned to County Road 2 in order to consolidate intersections and route trucks headed to the POET bio-fuel facility to the widened intersection.

4.0 SOCIAL, ECONOMIC, AND ENVIRONMENTAL IMPACTS ANALYSIS

The purpose of this section is to present an update on the anticipated impacts of the Preferred Alternative on the social, economic, and natural environments, as they differ from the information presented in the Draft SFEIS. For impacts that have not changed, the information is summarized here, and the reader will be referred to the Draft SFEIS. Appendix B includes project Green Sheets that summarize the proposed mitigation for potential project impacts.

4.1 WHAT ARE THE SOCIAL AND COMMUNITY IMPACTS?

Right-of-Way and Relocation

The amount of right-of-way to be acquired for the Preferred Alternative was calculated by taking the total amount of land within the preliminary right-of-way corridor that falls outside any existing publically-owned (city, county, state) right-of-way. The existing Highway 60 right-of-way in the areas of the three gaps ranges from approximately 150 feet to approximately 185 feet in some rural areas. The majority of the right-of-way corridor is 150 feet. The following design guidelines were used in determining the right-of-way acquisition needs of the Preferred Alternative.

- Right-of-way acquisition was calculated by taking the total amount of land within the preliminary right-of-way corridor less any existing right-of-way.

- A typical 245 foot right-of-way corridor is proposed in the East Gap and a 290 foot right-of-way is proposed for the Middle and West Gap. The wider distance is to allow for future relocation of the existing lanes farther from the railroad right of way if the need is identified in further design efforts.

- A 100-foot right-of-way corridor was assumed for all new/reconstructed county roads, which is typical for new construction on county roads in Cottonwood and Watonwan Counties.

The Preferred Alternative will require approximately 364.7 total acres of new right-of-way to accommodate the proposed improvements. The amount of right-of-way needed by gap is presented in Table 3.
Table 3– Potential Right-of-Way Acquisition

<table>
<thead>
<tr>
<th>Preferred Alternative</th>
<th>Additional Right-of-Way Needed (acres)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Gap</td>
<td>86.4 acres</td>
</tr>
<tr>
<td>Middle Gap</td>
<td>113.8 acres</td>
</tr>
<tr>
<td>West Gap – with Clear Lake “Full” design option and the hybrid Bingham Lake “Expand North of Existing” option</td>
<td>164.5 acres</td>
</tr>
</tbody>
</table>

¹ Right-of-way impacts are based on a preliminary right-of-way corridor and may change slightly once the preferred alternative is identified and additional design details are determined.

This is a preliminary estimate of the right-of-way required for the Preferred Alternative and will be refined as part of the final design and as a result of the right-of-way acquisition process for each gap segment. In addition, temporary construction easements may be required in areas where the construction limits extend beyond the proposed right-of-way.

Relocation

Transportation improvements quite often require the relocation of residential, commercial, and farm properties. The acquisition of property is one of the most obvious impacts associated with highway construction. The identification of potential relocations was completed by overlaying the Preferred Alternative alignment onto aerial photographs. The same right-of-way corridor widths as described above were also used in the assessment of potential relocations. Properties where the required right-of-way impacted the building or required a substantial portion of the lot were considered for relocation. Depending on the outcome of the right-of-way process, additional relocations may be considered if requested by the property owner and approved by MnDOT.

The Preferred Alternative will require no residential/farmstead relocations and one commercial acquisition (former salvage business) located in Bingham Lake (see Figure A3, located in Appendix A).

Access Modifications

The majority of the project area can be characterized as agricultural and a rural residential setting. Concern has been expressed about direct access to farmsteads and farm properties adjacent to the highway. As part of this improvement, access changes at public roadways, to rural building sites, and farmland will occur in a number of areas to improve safety and operations along the highway corridor. In some cases, direct access will be removed from the highway and redirected to a cross street (county or township road), while in other cases an access point may be restricted to right-in/right-out movements or slightly realigned/relocated. In all cases, MnDOT will work with the affected property owners and local units of government during the final design phase to ensure reasonable access is provided during and following construction.
Mitigation

The design phase of the Preferred Alternative will focus efforts to minimize right-of-way impacts to the extent possible. The needs of each property located adjacent to the Preferred Alternative will be assessed on a case-by-case basis and will occur closer to the time of acquisition and construction. See Draft SFEIS Section 4.1 – Right-of-Way and Relocation for further information.

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and 49 CFR Part 24 provide that assistance be granted to persons, businesses, farms, and non-profit organizations that may be displaced by public improvements, such as this highway project.

MnDOT will provide relocation assistance for persons displaced by the project without discrimination. Advisors are available to explain relocation details, policies, and procedures with potentially displaced individuals. The advisors will work with a displacee in locating comparable replacement property and will work directly with property occupants to assist with their specific relocation plans.

Residential displacees are entitled to advisory services and the reimbursement of some of the costs associated with relocation. These may include moving expenses, replacement housing costs, increased rental or mortgage payments, closing costs, and other valid relocation costs. The replacement dwelling to which a displacee relocates must be “decent, safe, and sanitary”, meaning it must meet all the minimum requirements established by federal regulations and conform to all housing and occupancy codes.

While not expected for the Highway 60 Gaps Project, Last Resort Housing provisions can be implemented to ensure that comparable replacement housing is available to any displacee. These provisions may include increased replacement housing payments or other alternate methods based on reasonable costs.

Relocation assistance will also be made available to businesses, farms, and non-profit organizations. In addition to advisory services, payment may be made for certain expenses pertaining to:

- Moving Costs
- Loss of tangible personal property as a result of relocation or discontinuance of a business
- Eligible reestablishment expenses
- Eligible costs incurred in searching for a replacement site
- Fixed payment in lieu of moving and reestablishment costs

Economic Environment

The construction of the Preferred Alternative will impact the economy of the project area by converting agricultural land to highway uses and is anticipated to require the acquisition of one commercial property (former vehicle salvage yard) in Bingham Lake. The improved highway may also attract new development that
would compensate for such economic losses. See Draft EIS Section 4.1 - Economic Environment for further discussion.

Indirect impacts to existing businesses may occur as a result of access changes and construction activities including potential traffic delays and detours.

**Mitigation**

Relocation assistance will be provided for all acquired properties. Potential temporary business access impacts during construction will be mitigated by minimizing detours and through the use of signage directing customers to businesses. No other economic mitigation measures are proposed.

**Traffic Assessment**

As discussed in Section 2.5 of this document, and the Traffic Assessment section of the Draft SFEIS, the Preferred Alternative proposes to convert the three remaining two-lane highway segments of Highway 60 to a continuous four-lane divided rural section. The Preferred Alternative will accommodate future traffic volumes adequately and is expected to reduce the number of higher severity crashes (head on, ran-off-road, and sideswipe opposite direction incidents) that are more typical with a two-lane highway. The completion of a continuous four-lane section along Highway 60 will provide a logical, safe, and predictable system for highway users.

**Benefit-Cost Analysis**

A benefit/cost analysis (B/C analysis) was completed for the proposed project in June 2011. The purpose of a benefit/cost analysis (B/C analysis) is to bring all of the direct effects of a transportation investment into a common measure (dollars), and to allow for the fact that benefits accrue over a long period of time while costs are incurred primarily in the initial years of the project. The primary elements that can be monetized for transportation projects are travel time, vehicle operating costs, crash costs, and remaining capital value. Projects are considered cost effective if the B/C ratio is greater than 1.0. The B/C Analysis provides an indication of the economic desirability, but the results must be weighted by decision-makers along with the assessment of other effects and impacts. A B/C Analysis was completed and discussed in Section 4.1 of the Draft SFEIS. The calculated B/C ratio for the Preferred Alternative is 1.36.

**Social and Community Environment**

Information regarding population, housing, and community resources is available in the Draft SFEIS Section 4.1 - Social and Community Environment. The Preferred Alternative is anticipated to have no direct impact on community resources. Proposed access changes along Highway 60 may have minimal effects on how travelers access community resources. However, safe and convenient access will be provided throughout the project area.

**Mitigation**

No mitigation is required since no anticipated directs effects occur as a result of the Build Alternative.
Land Use

As discussed in Draft SFEIS Section 4.1 – Land Use, the Preferred Alternative will have some impact on land use in the project area. Right-of-way acquisition will impact several rural residential properties and farmsteads. However, only one full acquisition is anticipated as a result of the Preferred Alternative. The proposed improvements will also convert farmland and wetland acreage to transportation uses and there is the potential for the improved four-lane highway section to attract additional development to more urban areas. It is assumed this development would primarily occur within the cities of Bingham Lake, Butterfield, Mountain Lake, St. James, and Windom.

Based on the importance of Highway 60 to the affected communities, the Preferred Alternative is consistent and compatible with existing and future land use plans and maps.

Mitigation

Controlling potential land use changes that occur following implementation of the proposed improvements would be accomplished primarily through local government zoning authority and through highway access management. MnDOT has already coordinated with local units of government regarding the project. Furthermore, MnDOT encourages cities in the project area to use smart growth techniques and innovative best management practices for stormwater, such as those listed on the NEPA Stormwater Green Sheet, prepared by the Environmental Protection Agency.

Parks and Public Recreational Areas

Parks and public recreational areas are listed and discussed in Draft SFEIS Section 4.1 – Parks and Public Recreational Areas. The Preferred Alternative will have no impacts on existing parks in the study area. However, the Preferred Alternative may impact grant-in-aid snowmobile trails. These Department of Natural Resources (MNDNR) grant-in-aid trails are generally used for recreational purposes during winter months.

The construction of a continuous four-lane highway may affect the current designated routes of grant-in-aid snowmobile trails (Cottonwood and Riverside Trail) since these trails parallel and/or cross over the highway in some locations. However, the route of these trails is fluid and dependent upon landowner agreements. Construction of the Preferred Alternative will not prohibit these trails and they will still be allowed to cross and parallel the highway corridor.

Mitigation

Further evaluation of potential impacts to snowmobile trails will be completed during final design and coordination with the MNDNR and other local snowmobile organizations may need to occur to ensure safety conditions for motorist and snowmobile riders is maintained as a result of any changes to the design of the highway and trail alignments/crossing.
Section 4(f) and Section 6(f) Properties

The Section 4(f) legislation, as established under the Department of Transportation Act of 1966 (49 USC 303, 23 USC 138) and as revised in 2005 by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) [which included moving Section 4(f) regulations to 23 CFR 774], provides protection for publicly owned parks, recreation areas, public and privately owned historic sites, wildlife, and/or waterfowl refuges from conversion to a transportation use.

Additional protection is provided for outdoor recreational lands under the Section 6(f) legislation (16 USC 4602-8(f) (30)) where Land and Water Conservation funds were used for the planning, acquisition, or development of the property. These properties may be converted to highway use, but only if replacement land of the same fair market value and equal usefulness is made available.

As discussed in the Draft SFEIS Section 4.1 – Section 4(f) and Section 6(f), no Section 4(f) or Section 6(f) resources will be impacted by the Preferred Alternative.

Mitigation

No mitigation is proposed since no direct impacts to Section 4(f)/6(f) resources is anticipated.

Pedestrian and Bicycle Movements

There are no pedestrian or bicycle facilities currently located along the three two-lane segments of Highway 60. Future regional trail corridors within the Highway 60 study area are shown in the 2010 Trail Corridor Plan, which was prepared by the Southwest Regional Development Commission (RDC) in cooperation with the surrounding local units of government. The Plan identifies a trail corridor south of Highway 60 beginning at Windom and traversing northeast toward Mountain Lake and beyond. A second future trail corridor has been identified running north-south near Bingham Lake. These trail corridors appear to cross Highway 60 near Bingham Lake and Mountain Lake. No funding for these trail corridors has been programmed and the timing of construction has not been scheduled.

The 2001 MnDOT Bicycle Map shows that the majority of Highway 60 between St. James and Windom as having a “Medium Volume” Roadway Suitability Rating with short segments west of St. James and east of Mountain Lake having Low Volume ratings.

The Preferred Alternative will include 10-foot shoulders along Highway 60, which will perpetuate the existing condition and can be used by pedestrians/bicyclists. The Preferred Alternative may improve safety of pedestrians/bicyclists crossing Highway 60 since with the construction of a four-lane divided section, these movements will no longer have to cross both directions of traffic at the same time. The center median can serve as a refuge for pedestrian/bicycle movements where they can cross one direction of traffic at a time. Also, the additional traffic lane in each direction allows vehicles to shy away from cyclists on the shoulder of the highway.
Mitigation

No mitigation for pedestrian and bicycle movements is anticipated. Coordination with the Southwest RDC will continue to occur to determine the status of the planned trail corridors and whether additional pedestrian/bicycle accommodations are needed along Highway 60.

Environmental Justice

The Draft SFEIS included an evaluation of the entire project area for environmental justice issues including the potential effects to identifiable low-income populations. The Draft SFEIS concluded there would be no disproportionately high and adverse effects on minority populations or low-income populations as a result of the proposed alternatives (see Draft SFEIS Section 4.1 – Environmental Justice).

Mitigation

No mitigation measures are proposed since no disproportionately high and adverse effects are anticipated on minority and/or low-income populations.

Transit Services

Both Cottonwood County and Watonwan County have public transit services available within the project area. These services are limited to dial-a-ride service. In 2010, ridership within both counties was slightly lower than previous years. The MnDOT Office of Transit provides funding for dial-a-ride service operations within both Cottonwood and Watonwan Counties.

The Preferred Alternative will potentially have a positive impact on the quality and efficiency of transit service along the Highway 60 corridor as a result of improved operations. Short-term adverse impacts to transit services may result from construction activities including minor detours or construction delays. See Draft SFEIS Section 4.1 – Transit Services for additional detail of transit options available in the area.

Mitigation

As part of the final design phase of each gap, a construction staging plan will be prepared by MnDOT which will be shared with all interested individuals, including transit providers. The staging plan will attempt to minimize disruptions on transit routes and maintain the efficiency of transit service during construction.

Utilities

There are several local and regional utility lines and distribution and/or transmission facilities that can be found within the project area. These utilities primarily consist of local electric and telephone distribution lines, natural gas pipelines, and fiber optic communication lines.

Construction of the additional lanes will cause the relocation of certain utilities currently located in or directly adjacent to the current right-of-way. Temporary disruptions in service are possible as a result of these relocations. Furthermore,
utility relocations have the potential to result in some environmental impact (farmland disturbance, wetland fill, vegetation clearing, etc.) through work needing to take place outside the highway right-of-way. While MnDOT and FHWA recognize the possibility of such impacts, at this time it is not possible to estimate the nature and magnitude of such future impacts. However, under the State of Minnesota environmental review program (Minnesota Rules 4410.4300) environmental analysis is required for certain utilities. These regulations are currently administered by the Minnesota Department of Commerce and Minnesota Public Utilities Commission. In addition, Minnesota Statutes 85.415 requires utility companies to obtain permits from the MNDNR to cross state owned lands and waters. Such permits include provision for further environmental analysis and the minimization/mitigation of adverse impacts on the environment. It is not known where any rerouted lines may subsequently be relocated.

Within the East Gap there are overhead electric power lines that cross Highway 60 in approximately five locations. In addition, an electric power line parallels the north right-of-way line of Highway 60 from approximately 670th Avenue to 685th Avenue. This line is located on the opposite side of the existing highway from where the new roadway is proposed to be constructed. A natural gas line is also located along the north side of Highway 60 for a short segment within the East Gap.

In the West Gap, a City of Bingham Lake sewer lift station is located in the southwest corner of the Highway 60/Cottonwood County Road 44 intersection. Sanitary sewer and water mainlines are also located immediately south of Highway 60 starting at the western edge of the community (near 510th Avenue) and are located within the highway right-of-way all the way to the City of Windom. Impacts to these City-owned utilities will be avoided with the Preferred Alternative that proposes to widen the highway to the north. Other city utility lines that pass perpendicular under the highway will be identified during the final design process and efforts will be made to minimize potential impacts and disruptions in service.

Overall, no substantial utility relocations and/or impacts are anticipated as a result of the Preferred Alternative.

**Mitigation**

Coordination with utility providers will occur during the final design phase of the project to ensure all utilities within the area are identified, so avoidance and minimization measures can be implemented. Minimization efforts may include minor alignment shifts of the Preferred Alternative or alterations to the typical roadway cross-section. Furthermore, as discussed above, environment analysis under Minnesota Rules 4410.4300 is required for certain utilities and Minnesota Statutes 85.415 requires utility companies to obtain permits in order to cross state owned lands and waters. Such permits may include provisions for further environmental analysis and the minimization of adverse impacts on the environment.
Contaminated Properties

The presence of potentially contaminated properties (defined as properties where soil and/or groundwater is impacted with pollutants, contaminants, or hazardous materials) is a concern in the development of highway projects because of potential liabilities associated with ownership of such properties, potential cleanup costs, and safety concerns associated with construction personnel encountering unsuspected wastes or contaminated soil or groundwater. The primary step in recognizing and evaluating potentially contaminated properties is completing a Phase I Environmental Site Assessment (ESA).

A Phase I ESA was completed in the spring 2011. The Phase I ESA analysis included a site visit, and a review of reasonably ascertainable federal and/or state records. A complete summary of the sites identified in the Phase I ESA was documented in the Draft SFEIS (see Section 4.1 - Contaminated Properties). The Phase I ESA Report is on file at the MnDOT District Office in Mankato.

According to the Phase I ESA, 23 medium and two high risk sites were identified within close proximity of the Preferred Alternative. Within the East and Middle Gaps, 7 medium risks sites and four medium risks sites have been identified, respectively. The West Gap contains 9 medium risk and 2 high risk sites. Many of these sites are located within 500 feet of the Preferred Alternative.

Since the preparation of the Draft SFEIS, the findings of a more detailed Phase II assessment at one of the high risks sites in the West Gap (former salvage yard in Bingham Lake) have been completed. The detailed site investigations, consisting of soil and groundwater testing, provided MnDOT with a better understanding of the contamination (type, quantity, and location) at the site. Based on the findings of the Phase II assessment, the contamination appears to be contained on-site and the type and level of contaminates is not anticipated to result is extraordinary liabilities associated with ownership or substantial cleanup costs. As a result, the Preferred Alternative includes widening the highway to the north of the existing alignment in the project area adjacent to the former salvage yard business in Bingham Lake.

Mitigation

As part of the final design phase and prior to right-of-way acquisition, properties identified as having the greatest potential to directly impact the Preferred Alternative will be further evaluated to determine if extensive liability exists in acquiring property for the highway improvements. Potentially contaminated properties that would be acquired will be drilled and sampled, if necessary, to determine the extent and magnitude of contaminated soil or groundwater. The results of these investigations will be used to avoid and/or minimize potential impacts through design modifications, right-of-way refinements. Construction work will be conducted in compliance with all state and federal laws and regulations.

A plan will be developed by MnDOT for properly handling and treating contaminated soil and/or groundwater. MnDOT will work with the Petroleum
Brownfields Program and/or the Voluntary Investigation and Cleanup Programs at the MPCA, as appropriate.

**Cultural Resources**

In compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (36 CFR 800) and Section 4(f) of the Department of Transportation Act of 1966 (49 USC 303, 23 USC 138), a Phase I/II cultural resources investigation of the three gap segments of the Highway 60 corridor was conducted. The Draft SFEIS Section 4.1 – Cultural Resources provided a summary of the reports available for review at the MnDOT District 7 Offices in Mankato, Minnesota.

Based on the findings of the Phase I investigations, a determination was made by MnDOT’s Cultural Resources Unit staff that there are no historic properties adversely affected by the project as it is currently proposed. This determination was included in a letter to the Minnesota SHPO, which concurred with the findings. The MnDOT determination letter and SHPO concurrence letter were included in Appendix B of the Draft SFEIS.

**Mitigation**

Based on the findings of the investigations, no NRHP-eligible historical, architectural, or archaeological sites will be impacted by the Preferred Alternatives. Therefore, no mitigation is necessary.

4.2 **WHAT ARE THE NATURAL ENVIRONMENT IMPACTS?**

**Noise**

A detailed analysis of noise impacts was completed for the three gap segments of Highway 60 and documented in Section 4.2 – Noise of the Draft SFEIS. The objective of the analysis was to quantify the potential impacts of the project improvements using a noise model that considers alignments, locations of receptors, traffic conditions, and topography of the area. The results of the modeling analysis was used to determine the feasibility and cost effectiveness of using noise walls to provide mitigation for any identified impacts on receptors.

The hybrid Bingham Lake design option identified as part of the Preferred Alternative has no change in the impacts or mitigation analysis conducted in the Draft SFEIS. Furthermore, since the Preferred Alternative follows an alignment already studied in the Draft SFEIS, which is herein incorporated by reference, a new detailed analysis of noise impacts was not completed for this Final SFEIS. The remainder of this Noise section summarizes the findings from the previous analysis as it relates specifically to the Preferred Alternative.

**Application of State and Federal Regulations**

For the Highway 60 Gaps Project, future noise levels were determined to exceed both the Federal Noise Abatement Criteria and the State Noise Standards at several noise receptor sites (see Tables 17 through 19 on pages 54-57 of the Draft SFEIS). Therefore, noise abatement measures were included in the analysis. Noise mitigation measures were considered, but none are deemed reasonable and feasible (see Tables 20 though 25 on pages 60-65 of the Draft
Therefore, a Noise Standards Exemption Request will be submitted to the Commissioners of the MPCA. The exemption request document is a means of demonstrating that all reasonably available noise mitigation measures were employed as part of the project.

Noise Conclusion
Traffic noise impacts currently exist and are predicted to increase along the three Highway 60 two-lane segments with or without the proposed improvements. Mitigation in the form of noise barriers was analyzed. No barriers that achieved a 5 dBA reduction were found to be cost-effective; therefore no barriers are proposed with the proposed improvements.

Air Quality
Draft EIS Section 4.2 - Air Quality describes the air quality analysis completed for the proposed Highway 60 improvements, including an analysis of the likely Mobile Source Air Toxics (MSAT) emission impacts of this project. The project is not located in an area where conformity requirements apply, and the scope of the project does not indicate that air quality impacts will be expected. Therefore, it has been determined that no further air quality analysis is necessary.

Mitigation
No mitigation measures are proposed.

Water Quality and Surface Water Drainage
Currently roadway runoff either infiltrates into the grass ditches or eventually flows to area water resources such as wetlands, lakes, and streams/ditches. For a description of the water resources found in the project area, see Draft SFEIS Section 4.2 - Water Quality and Surface Water Drainage. The most common contaminants in highway runoff include sediments, nutrients, heavy metals, oil, grease, and deicing chemicals. However, impacts from erosion and sedimentation will be addressed both during and after construction according to the conditions of a National Pollutant Discharge Elimination System (NPDES) - Construction Stormwater permit.

Based on the preliminary design, the Preferred Alternative will increase the existing impervious surface area by approximately 75 acres, which will result in additional storm water runoff and greater discharge rates. This calculation is important in determining the water quality strategies that have been proposed to ensure compliance with permit requirements. The proposed design of the Preferred Alternative includes grassed swales/ditches and storm water ponds to treat runoff from the highway.

Grassed swales or vegetated ditches are densely vegetated drainage ways with slightly sloped bottoms. The role of the vegetation is to reduce flow velocity and provide sediment settling and infiltration. Typically, tall rigid grasses with extensive root systems are desirable. The grassed swales are proposed to be implemented along the roadside ditches and will provide a substantial amount of
treatment by removing total suspended solids, phosphorus and other pollutants from the runoff.

Storm water detention ponds have also been planned at numerous locations along the corridor (see Preferred Alternative mapping located in Appendix A). These wet detention ponds will be used as end of the line runoff control and storm water treatment. Wet detention ponds have been strategically placed in order to capture substantial amounts of roadway runoff from new impervious surface and from existing Highway 60 for treatment. Some of the storm water ponds’ drainage areas include adjacent properties along the project corridor. The impervious surface and drainage areas from these properties are being captured and treated by the ponds. Note the pond sites shown on the Preferred Alternative mapping is based on the preliminary design and specific locations, sizes, and shapes may be altered if deemed necessary during the final design phase of the project.

Other best management practices (BMPs), such as sodding, seeding, erosion control blanket, biorolls, bioengineering, rock ditch checks, etc. will be used on all disturbed areas of the project to reduce sediment and pollutant loading to surface waters. Additional BMPs may be suggested by the MPCA and will be determined as part of the permitting process. Furthermore, several new/replacement culverts and ditches associated with the Preferred Alternative will need to be constructed in order to maintain drainage patterns. If increased capacity is needed for a culvert(s), this could be achieved by larger or multiple culverts, increased grade on culverts, and/or more hydraulically efficient inlets. Any culvert improvements will consider stream slope, erosion potential, upstream and downstream conditions, and watercourse capacity.

MnDOT will maintain the flow of all drainage ditches impacted by the project. During the final design phase, MnDOT hydraulics staff will coordinate with the appropriate ditch authority to the proposed changes to each of these drainage ditch locations and a detailed assessment of drainage patterns, ditch sections, and culvert impacts will be conducted in accordance with Section 404 permitting requirements.

Water quality impacts from the Highway 60 improvements are expected to be minimal in part due to the permitting and mitigation requirements that will be included as part of the Section 404 Permit, Section 401 Water Quality Certification, and NPDES Permit (MN R 100001).

Mitigation

As part of the final design phase for the Preferred Alternative, a Storm Water Pollution Prevention Plan (SWPPP), which is required as part of the NPDES Permit, will be prepared that will outline the practices to be used for this project to prevent impacts to the quality of the receiving waters. The SWPPP would be incorporated and made part of the construction documents.

The Preferred Alternative will require permits, including ones from the MPCA and MNDNR which will ensure potential impacts from erosion and sedimentation will not adversely impact water quality. A more detailed discussion of water quality
related permit requirements and BMPs was provided in Section 4.2 – Water Quality and Surface Water Drainage of the Draft SFEIS.

**Floodplains and Water Body Modifications**

The most recent Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the study area were used in the assessment of potential impacts that was documented in Section 4.2 – Floodplains and Water body Modifications of the Draft SFEIS. According to the assessment it was determined that there are no designated floodplain areas within the Highway 60 study area. Therefore, no impacts to a designated floodplain are anticipated. Improvements within the West Gap segment will require water body modifications, including alterations to the natural boundary of Warren Pond and Clear Lake, requiring fill to be placed below the ordinary high water (OHW) level of these water bodies. Furthermore, the highway improvements in the City of Bingham Lake will likely require the placement of fill material within an open water wetland (Wetland #25) located near the intersection of Highway 60 and County Road 2. However, a modified design option for this area has been identified as part of the Preferred Alternative that more equally spreads the widening of the highway to both the north and side sides of the existing alignment. This design modification was included to balance impacts on the built (commercial property) and Wetland #25. As a result, the potential impacts on Wetland #25 have been minimized. The conceptual layout figures contained in Appendix A depict the location and estimated amount of potential impact on these water resources.

The Preferred Alternative involves widening the roadway to the north in the area of Warren Pond. Because the level of design detail is limited in this area, the potential impacts were calculated based on the proposed right-of-way limits. The proposed right-of-way extends into the southern portion of Warren Pond and approximately 0.34 acres of potential impact is shown (Wetland #30). However, the detailed design phase will define the construction limits, which is expected to reduce and/or avoid potential impacts to Warren Pond.

The Preferred Alternative involves impacts to approximately 1.17 acres of Clear Lake by widening the highway to the north of the existing alignment. As discussed below in the Wetland Section of this Final SFEIS, a Clear Lake “Compressed Centerline Spacing” design option was considered, but eliminated from consideration due to safety concerns associated with this type of design and the need for safety barriers (guardrail structures). Further coordination with the MNDNR and design refinements will be pursued during the final design phase to minimize and/or avoid direct impact to the lake.

This area of southwestern Minnesota has an extensive agricultural drainage ditch system. Agricultural drainage ditches are designed, constructed, and maintained with steep side slopes to minimize their footprint on the agricultural landscape, as well as to facilitate the efficient removal of surface water from farm fields. Agricultural drainage ditches are not designed to develop wetland characteristics and, if constructed in upland for the purpose of draining upland, are not considered wetlands. Depending on their individual characteristics, drainage
ditches can fall under the definition of “Waters of the U.S.” and ditches meeting the definition will be included in the Section 404 permitting for the project. The existing agricultural drainage ditches in the project area have steep slopes and cross under the highway via culverts or traverse parallel to the highway corridor. In areas where a drainage ditch crosses under the highway, the culvert crossing will be lengthened to accommodate the wider highway corridor.

The Preferred Alternative will impact two existing agricultural drainage ditches (see Table 4). Approximately 150 feet of Cottonwood County Judicial Ditch No.2, which crosses under Highway 60 just east of Bingham Lake in the West Gap segment will be impacted with the extension of the existing culvert to allow for the widening of the highway (see Figure A4). In addition, approximately 500 lineal feet of a privately owned agricultural drainage ditch, which parallels the south side of Highway 60 east of Watonwan County Road 2 (see Figures A9 and A10), will be realigned to allow for the widening of the highway to the south. During the detailed design phase, these ditch impacts will be coordinated with the appropriate ditch authority.

Table 4 – Agricultural Drainage Ditch Impacts

<table>
<thead>
<tr>
<th>Agricultural Ditch</th>
<th>Location Sec./ Twp./ Range</th>
<th>Jurisdiction</th>
<th>Description of Impact</th>
<th>Length of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cottonwood Cty. Ditch No. 2</td>
<td>Sec. 10 &amp; 11, T105N, R35W</td>
<td>County</td>
<td>Widening of highway to the north will require extension of existing culvert.</td>
<td>150</td>
</tr>
<tr>
<td>Private Ditch</td>
<td>Sec. 33, T106N, R33W</td>
<td>Private</td>
<td>Widening of highway to the south will require realignment of ditch to the south.</td>
<td>500</td>
</tr>
</tbody>
</table>

Mitigation

Continued coordination with the MNDNR, US Army Corps of Engineers, and MPCA on the design solutions near Warren Pond, Clear Lake, and the storm water ponds in Bingham Lake will occur as part of the final design phase in order to balance impacts on the built and natural environments in these areas. A MNDNR Public Waters Work Permit will be required.

Wetlands

Wetland regulations in effect for the project area are as follows.

- Section 404 of the federal Clean Water Act as administered by the U.S. Army Corps of Engineers (USACE)
- Section 401 of the Clean Water Act water quality certification as administered by the Minnesota Pollution Control Agency (MPCA)
- The Minnesota Wetland Conservation Act (WCA) administered by the Board of Water and Soil Resources through a designated Local Government Unit (LGU). In accordance with WCA requirements, MnDOT will act as its own LGU for activities within MnDOT right-of-way.
- Public Waters Work Permit for wetlands that are designated as Minnesota Department of Natural Resources (MNDNR) Public Waters.
- Executive Order 11990 – Protection of Wetlands.

Wetlands within the project area were delineated in the spring 2011 by a certified wetland delineator using the methodology of the Corps of Engineers Wetlands Delineation Manual, 1987, and the Midwest Regional Supplement. A Level 2 Routine Onsite Determination Method (RODM) was used for the delineation. The results of the analysis were summarized in the Draft SFEIS Section 4.2 – Wetlands. In addition the Highway 60 Wetland Delineation Report, was included with the Draft SFEIS on an accompanying CD-ROM as supplemental information.

Areas that are underlain by hydric soil, maintain wetland hydrology and support hydric vegetation were mapped as wetlands. Roadside ditches in areas of historic hydric soil were considered as wetland remnants and mapped as wetlands. Ditches cut through upland (i.e., historically non-wetland) and receiving drainage from upland were mapped as ditches. Areas that were not historically wetlands prior to road construction were not delineated as wetland. There are many such ditches within the project area, particularly along the existing Highway 60, the Union Pacific railroad line and the various connecting and intersecting roadways. These roadside ditches may contain hydric vegetation, however, they were designed and constructed to convey water rather than retain it. Depending on their individual characteristics, drainage ditches can fall under the definition of “Waters of the U.S.” and ditches meeting the definition will be included in Section 404 permitting.

Wetland Jurisdiction

Based on current rules it is anticipated that the following agencies would have jurisdiction over project area wetlands:

- The United States Army Corps of Engineers (USACE) regulates all waters of the U.S. including wetlands. Regulated wetlands must meet the criteria of the 1987 Manual and the subsequent regional supplements. Although the USACE does not regulate isolated wetlands, the joint federal/state permit application will be prepared under the assumption that all areas mapped as wetlands are jurisdictional. Depending on their characteristics of flow and connectivity drainage ditches may meet the definition of waters of the U.S.

- The Minnesota Pollution Control Agency (MPCA) also regulates wetlands through two primary mechanisms. The first is through review of the project with regards to compliance with Section 401 of the Clean water Act. This project is anticipated to require a letter of permission from the USACE. The MPCA also regulates wetlands through Minnesota Rules 7050.0186, which attempts to prevent degradation of wetlands and waters, requires sequencing to avoid and minimize impacts, and provides compensatory mitigation if impacts cannot be avoided.
• The Minnesota Wetland Conservation Act (WCA) also regulates wetlands, and is administered by MnDOT when impacts occur within its existing and/or proposed right-of-way. The WCA regulates all wetlands, regardless of isolation. The WCA does not have jurisdiction over areas constructed in non-wetland and created for a purpose other than being a wetland, even though such areas may exhibit wetland characteristics (e.g. roadside ditches and stormwater ponds). This process recognizes created areas as incidental, which could include many of the roadside drainage ditches.

• The Minnesota Department of Natural Resources (MNDNR) regulates Public Waters, and is a participant if projects occur within 1,000 feet of a Public Water. The proposed project includes improvements in the area of Clear Lake and Warren Pond, which are both Public Waters and will require a Public Water Work Permit if construction occurs below the ordinary high water level of these wetlands/water bodies. The WCA does not administer jurisdiction over Public waters, although the MNDNR can waive jurisdiction to WCA.

Section 404 of the Clean Water Act requires approval by the U.S. Army Corps of Engineers for discharge of dredged or fill material into waters of the United States. A Section 404 Permit will be applied for and obtained prior to construction. This analysis is to show that the screening and selection process used in the development of this NEPA document have identified the least environmentally damaging practicable alternative consistent with the Section 404(b)(1) guidelines.

Least Environmentally Damaging Practicable Alternative (LEDPA)

The Section 404(b)(1) guidelines state “no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” Furthermore, an alternative is considered practicable if “it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.”

The purpose and need statement of the Highway 60 Project is to provide an improved transportation link between Windom and St. James that improves travel safety and enhances system continuity. A continuous four-lane highway will provide a logical, safe, and predictable system for highway users. Furthermore, the crash history of the two-lane sections indicate that nearly 40 percent were of the higher severity crashes like head-on and sideswipe opposite direction incidents. These types of crashes can be substantially reduced with a four-lane divided highway section. A complete description of the purpose and need statement was detailed in Section 2.5 – Purpose and Need for the Proposed Action, of the Draft SFEIS.

The Draft SFEIS evaluated alternatives in a multi-step process which served to eliminate alternatives that would not be considered practicable under Section
404(b)(1) guideline, and selected the LEDPA. The evaluation steps are described below.

**Scoping and Original Environmental Impact Statement (EIS)**

Starting in the early 1980's, study began of possible improvements to Highway 60 between St. James and Worthington, MN, including the segment between Windom and St. James. The original Final EIS was completed in 1983 that identified a Preferred Alternative for ultimately improving Highway 60 to a four-lane facility. During this environmental review process, several alternatives were considered including community bypass routes and alternatives that remained on the existing alignment. As previously discussed, many of the improvements identified as part of the 1983 Final EIS Preferred Alternative have been constructed. However, three gap segments between Windom and St. James remain as two-lane highway sections.

**Draft Supplemental Final Environmental Impact Statement (DSFEIS)**

In early 2011, MnDOT initiated the reevaluation of highway capacity and safety improvements in the three gap sections of Highway 60. Due to several factors including the existing four-lane bypasses of St. James, Butterfield, and Mountain Lake, as well as the presence of the Union Pacific Railroad corridor, the East Gap (St. James to Butterfield) and Middle Gap (Butterfield to Mountain Lake) considered only one build alternative in the Draft SFEIS, which proposed to widen Highway 60 immediately south of the existing alignment. The West Gap (Mountain Lake to Windom) also included only one location alternative, but considered several design options near the City of Bingham Lake and Clear Lake. These design options were considered in the Draft SFEIS in an attempt to minimize potential social, economic, and environmental impacts. Section 3.0 – Alternatives, of the Draft SFEIS provides a complete description of the design options considered and Section 4.0 – Social, Economic, and Environmental Impacts, of the Draft SFEIS provides a comparative assessment of potential impacts of each design option studied in the Draft SFEIS.

The Draft SFEIS analyzed the East Gap using the preliminary construction limits of the build alternative. The Middle Gap and West Gap was analyzed using the proposed right-of-way limits because there gap segments have not undergone more detailed preliminary design. A summary of the wetland impacts presented in the Draft SFEIS for the build alternative and design options is presented in Table 5.

**Table 5– Potential Wetland Impacts by Draft SFEIS Alternatives and Design Options**

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Wetland Impacts (acres)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Gap Build Alternative</td>
<td>0.76 acres</td>
</tr>
<tr>
<td>Middle Gap Build Alternative</td>
<td>1.81 acres</td>
</tr>
<tr>
<td>West Gap Build Alternative – Common Areas</td>
<td>3.25 acres</td>
</tr>
<tr>
<td>Clear Lake – “Full” 90’ centerline spacing</td>
<td>1.17 acres</td>
</tr>
</tbody>
</table>
Alternative Wetland Impacts (acres)¹

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Wetland Impacts (acres)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Lake – “Compressed” centerline spacing</td>
<td>0.4 acres</td>
</tr>
<tr>
<td>Bingham Lake – Widen Highway South of Existing</td>
<td>0.15 acres</td>
</tr>
<tr>
<td>Bingham Lake – Widen Highway North of Existing</td>
<td>0.72 acres</td>
</tr>
<tr>
<td>Bingham Lake – North Bypass Alignment</td>
<td>0.88 acres</td>
</tr>
</tbody>
</table>

¹ Wetland impacts identified in the Draft SFEIS were based on preliminary construction limits for the East Gap and proposed right-of-way limits for the Middle and West Gaps.

Following the Draft SFEIS comment period, the build alternative and design options were further analyzed in terms of their ability to satisfy the overall project purpose; their environmental impacts; and their cost, including both construction cost and operation/maintenance cost. Based on this information, conclusions were reached that resulted in alternatives and design options being designated as “preferred” or “non-preferred.” The non-preferred alternatives and design options fell into two groups. These were (1) alternatives/design options which were non-preferred for social and environmental reasons and (2) alternatives/design options which were non-preferred for their poor performance in meeting the purpose of the project. Those identified as “non-preferred” were also considered to be not practicable under Section 404(b)(1) guidelines. The following is a summary of the rationale for designating alternatives /design options as non-preferred.

**Design Options Designated as “Non-Preferred” for Social and Environmental Reasons**

Prior to publication of the Highway 60 Final SFEIS, additional consultations occurred among MnDOT, FHWA, and state and federal regulatory agencies. These consultations provided important feedback regarding environmental resources (prairie remnants, lakes and wetlands, etc.) in the West Gap. These discussions, along with an evaluation of the design options performance in satisfying the project purpose; the anticipated environmental impacts; and the options cost, including both construction and operation/maintenance costs the following design options were designated as non-preferred and considered not to be practicable.

- **Bingham Lake Widen Expand Highway South of Existing Alignment.** This design option had high and unavoidable impacts to three existing commercial businesses located south of Highway 60 and natural environmentally sensitive areas, including impacts to Wetland #23 (0.15 acres) and impacts to approximately 1,620 lineal feet of prairie remnants. Impacts also include the need to relocate a City of Bingham Lake sewer lift station and main sewer/water lines, which are located immediately south of the existing highway alignment.

- **Bingham Lake North Bypass Alignment.** This design option had high and unavoidable impacts to natural environmentally sensitive areas, including Wetland #24 (0.16 acres), Wetland #25 (0.72 acres), and approximately 62.60 acres of prime and/or statewide important farmland. This design
option would also traverse along the south boundary of the Carpenter Wildlife Management Area (WMA).

Alternatives and Design Options Designated as “Non-Preferred” for Poor Performance in Meeting the Purpose of the Project

Based upon their relative performance on project purpose and need objectives, the following alternatives and design options were identified as non-preferred and are considered not practicable.

- Alternative 1 – No Build. MnDOT concluded that the performance of the No Build Alternative is so low as to characterize this alternative as failing to satisfy essential elements of the Purpose and Need for the highway 60 Project. In particular, Alternative 1 – No Build provides very little benefit on project purpose and need objectives related to safety, capacity, and system continuity.

- Clear Lake “Compressed” Centerline Spacing. This design option partially satisfies the purpose and need of the project by enhancing system continuity and improving safety by reducing the chances of head-on crashes through the creation of a continuous four-lane divided highway section. However, this design option does not fully satisfy the overall safety concerns for the corridor. The Clear Lake “Compressed” centerline spacing option requires the use of safety barriers/guardrail. These safety measures would be added between the directional lanes of traffic and on the north side of the westbound lanes. While these structures are effective in prohibiting vehicles from veering off into oncoming traffic they can also exacerbate snow drifting in rural agricultural areas that are more prone to this hazardous condition because of the relatively few objects to block the wind during the winter months. A roadway will typically blow clear during cold windy conditions if there are no obstructions adjacent to the roadway. However, even on a day with clear skies, a structure like a linear guardrail can quickly cause unsafe driving conditions when blowing snow comes in contact with the guardrail and is then deposited on the roadway. Drivers tend to travel at the posted speed limit when, for long stretched of time, there is no snow on the roadway. Then when driving into an area with barriers, drifts are present and surprise the drivers. The snow packed/icy roadway surface results in safety concerns including run off the road and injury crashes. The placement of guardrail also limits the effective and efficient removal of snow (snow storage), which only intensifies the stopping of snow on the roadway.

Designation of “Preferred” Alternative

In the review and assessment of alternatives, MnDOT and FHWA considered the Section 404(b)(1) guidelines in selecting a preferred alternative. In particular, consideration was given to issues of both “practicability” and wetlands impact. Alternative 2 – Build Alternative, with the Clear Lake “Full” and the modified Bingham Lake “Widen North” design options, was designated as “Preferred Alternative” even though it does not have the least amount of wetland impacts.
In fact, the Bingham Lake “Widen South” and Clear Lake “Compressed” design options would have resulted in fewer impacts (approximately 0.99 acres less).

As previously discussed, the Bingham Lake “Widen North” design option from the Draft SFEIS was modified. This design modification includes a slight alignment shift to the south near Cottonwood County Road 2 in order to reduce impacts to Wetland #25, while not requiring the relocation of commercial businesses and not impacting Wetland #23 which are located along the south side of the highway corridor.

It has been determined that the Preferred Alternative fully satisfies the project purpose and need, while having an acceptable level of environmental impacts. The Preferred Alternative is described in greater detail in Section 3.1 of this Final SFEIS.

MnDOT has reviewed the Preferred Alternative corridor to identify any areas where significant reductions in wetlands acreage impacts could be achieved through minor design adjustments. No other opportunities to reduce wetlands impacts have been identified at this time. However, during detailed engineering for the Middle Gap and Wes Gap, it is anticipated that further reductions will occur since the impacts disclosed in the SFEIS documents were based on right-of-way limits and not actual construction limits.

Preferred Alternative Analysis

A total of 33 wetlands were identified and mapped within the project area (see Figures A1 through A14, located in Appendix A). Since publication of the Draft SFEIS, two additional wetland basins (Wetlands #32 and #33) have been delineated. No impact to these additional wetland basins is anticipated.

All of the wetlands delineated exhibited some signs of disturbance, mostly through drainage or dominance of invasive vegetation, such as reed canary grass. Table 6 is a summary of the wetlands delineated, and the area of impact based on the proposed construction limits for the Preferred Alternative in the East Gap and the proposed right-of-way limits for the Preferred Alternative in Middle and West Gaps.

It is anticipated that the Preferred Alternative would necessitate the filling of an estimated 7.36 acres of wetland (see Table 6).

<table>
<thead>
<tr>
<th>Basin ID</th>
<th>Cowardin Classification</th>
<th>Circular 39 Classification</th>
<th>Wetland Community</th>
<th>Basin Size (acres)</th>
<th>Area of Impact (acres)</th>
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<tr>
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Table 6– Preferred Alternative Summary of Wetland Characteristics
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<thead>
<tr>
<th>Basin ID</th>
<th>Cowardin Classification</th>
<th>Circular 39 Classification</th>
<th>Wetland Community</th>
<th>Basin Size (acres)</th>
<th>Area of Impact (acres)</th>
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<td></td>
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<td></td>
<td><strong>East Gap Subtotal</strong></td>
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<td><strong>Middle Gap Subtotal</strong></td>
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<td>25</td>
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<td>26</td>
<td>L1UBH</td>
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<td>Open Water - Clear Lake, (DNR PWI #17-8P)</td>
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<td>Area of Impact (acres)</td>
</tr>
<tr>
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<td>-----------------------------</td>
<td>------------------</td>
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West Gap Subtotal 4.79 acres

Project-wide Total (East, Middle, and West Gaps) 7.36 acres

---

1 Classification of Wetlands and Deepwater Habitats of the United States. (Cowardin et al., December 1979).


3 Impacts to Wetland #25 under the Bingham Lake “Widen North” design option and the Preferred Alternative have been reduced since the preparation of the Draft SFEIS.

Sequencing

Wetland impact sequencing includes three steps: impact avoidance, impact minimization, and impact compensation/mitigation.

Avoidance

The preliminary design of the Preferred Alternative, including the identified design options near Bingham Lake and Clear Lake, were developed to avoid as many wetlands as possible while still meeting highway design and safety standards. Reasons for the Preferred Alternative not avoiding impacts to a specific wetland included one or more of the following:

- Need to provide safe roadway geometrics;
- Shifting the alignment would isolate the wetland in the median; and
- Shifting the alignment would create impacts to other wetlands and/or to other social, environmental, or natural resources

Minimization

Another step in the sequencing process and requirement of the Section 404(b)(1) guidelines is to implement minimization measures prior to the issuance of a permit. Measures that have been implemented in the Highway 60 Preferred Alternative include the use of the existing roadway alignments wherever possible and the minor alignment shift in the Bingham Lake “Widen North” design option. The minor alignment shift resulted in less impact to Wetland #25 as compared to the Draft SFEIS Bingham Lake “Widen North” design option, while at the same time not requiring the relocation of existing commercial businesses. Further refinement during the design process is also anticipated to further reduce impacts as well as the preparation of final construction limits that will provide a
more refined level of wetland impacts. Additional design measures that may be incorporated to minimize wetland impacts include:

- **Increase in ditch slopes in wetland areas.** Increasing the slope of the ditch adjacent to the outside lanes would reduce the footprint of the roadway. The typical rural cross section calls for 1:6 (vertical: horizontal) slopes. Thus, a 1:5 slopes with additional unpaved shoulder widths are strategies to minimize wetland impacts. In many instances, steeper slopes are not acceptable because of the hazard presented to drivers running off the road or hitting guard rail. Also, the slope near culverts will be gentle so as to cover the culvert.

- **Reduction in the elevation of the road profile in wetland areas.** Lowering the road profile can reduce the footprint of the roadway. This strategy has limited application because the roadway should be at least 5 feet above the water level to prevent water damage to the roadbed, and in some areas, the roadway should be at least 4 feet above the adjacent ground to allow snow to blow off the road to decrease the hazard posed by drifting snow. Also, there must be sufficient cover over culverts.

- **Construction of bridges.** Bridging over wetlands is applicable only where there are exceptional wetlands because of the cost of bridging and the reduction in safety. Only the area near Clear Lake was considered for bridging to avoid and/or minimize impacts. MnDOT determined that the unknown geotechnical conditions, high construction costs, and maintenance costs of a bridge structure was not an appropriate minimization strategy for this area.

- **The use of stormwater ponding areas to pretreat roadway runoff prior to discharging surface water to wetlands and other water resources that may lie outside the highway right-of-way.**

In order to minimize water quality impacts to wetlands, water quality treatment best management practices (BMPs) have been designed and incorporated into the preliminary layout (see Water Quality and Surface Water Drainage section in this SFEIS).

**Compensation/Mitigation**

A Combined Wetland Permit Application and Replacement Plan will be prepared and submitted for the Preferred Alternative prior to construction of each gap segment. Replacement of lost wetlands functions and values will be in accordance with WCA criteria, MNDNR Public Waters requirements (where applicable), and federal Clean Water Act Section 404 regulations.

Replacement acreage for the East Gap improvements will require the use of wetland banking. MnDOT’s existing wetland bank system will provide eligible credits for wetland replacements. There are existing accounts and credits located in Watonwan County that are held by MnDOT. This site is located within the Bank Service Area and will be used for the replacement acreage for the East Gap. The replacement plan for the Middle and West Gaps are not known at this time. Due to the number of years until these gap segments are constructed,
additional bank sites could be developed to accommodate the replacement needs of the Middle and West Gaps. Therefore, no specific information on wetland banking sites for the Middle and West Gaps is provided at this time, but will be pursued during the final design phase for each highway segment. Furthermore, if viable replacement sites are identified within the Middle or West Gaps, they will also be pursued as potential mitigation sites, subject to regulatory approval.

**No Significant Degradation**

Another requirement of the Section 404(b)(1) guidelines prohibits any discharge which will cause or contribute to the significant degradation of the waters of the United States. The Preferred Alternative impacts will not cause or contribute to the significant degradation of waters of the United States and no significant impact to human health or welfare will occur from the proposed impacts to waters of the United States. No significant impact to aquatic ecosystem diversity, productivity and stability, or aquatic ecosystem-dependent wildlife populations will occur from the proposed impacts. In addition, there will be no significant impact to recreational, aesthetic, and economic values of waters of the United States based on the proposed impacts. Additional coordination with environmental review agencies (MNDNR, MPCA, and USACE) during the design and permitting phases of the project will ensure that no significant degradation will occur from the construction of the Preferred Alternative.

**Preliminary LEDPA Determination**

This analysis was based on the evaluation completed for the Draft SFEIS, which considered one practicable build alternative (Alternative 2 - Build) and several design options for the City of Bingham Lake and near Clear Lake. Subsequently, the Bingham Lake “Widen South”, Bingham Lake “North Bypass” and Clear Lake “Compressed Centerline Spacing” design options were identified as non-preferred (not practicable) by MnDOT and FHWA after a reevaluation that occurred in preparation of this Final SFEIS. Therefore, this Final SFEIS has identified Alternative 2 with the modified “Widen North” design option and Clear Lake “Full Centerline Spacing” as the least environmentally damaging practicable alternative. Additionally, the Preferred Alternative will cause no violation of other laws and will not cause or contribute to significant degradation of waters of the United States. Lastly, preliminary design plans have been developed to minimize and mitigate unavoidable impacts caused by the Preferred Alternative. These factors show that the identified Preferred Alternative is the LEDPA and meets all Section 404(b)(1) guidelines for the selection of an alternative.

**No Practicable Alternative Finding**

Based on the findings of the Wetland Delineation Report, the analysis conducted as part of the Draft SFEIS, and summary above, it has been determined that there are no practicable alternatives to the proposed action, and the proposed action includes all practicable measures to minimize harm to wetlands.

**Geology/Groundwater**

Impacts to aquifers from construction of the Preferred Alternative will be negligible due to the confining layers of loam to clay loam overlying the aquifers.
Since the publication of the Draft SFEIS, additional information has been gathered for the Mountain Lake Wellhead Protection Zone (WPZ) and draft Drinking Water Supply Management Area (DWSMA) for the five municipal wells located within the City. The Middle Gap of the Preferred Alternative will pass through a “very low vulnerability” area of both the WPZ and DWSMA.

Potential minor impacts could occur near areas where streams or other surface waters, such as wetlands, may have connections to surficial sand and gravel aquifers. The Preferred Alternative may also require the abandonment of private wells and impact agricultural drain tile systems as a result of right-of-way acquisitions. For further information, see Draft SFEIS Section 4.2 – Geology/Groundwater.

Mitigation

Construction BMPs will be used to minimize potential impacts to surface water and ground water, especially within the designated WPZ and DWSMA located near Windom and Mountain Lake. The abandonment of any wells will be conducted in accordance with Minnesota Department of Health requirements. Continuity of existing farmland drain tile systems will be sustained during and after construction.

Vegetation

As discussed in Draft SFEIS Section 4.2 – Vegetation, there are no state or national forestlands, or large tree farms within the project area. Native vegetation can be found in limited areas including areas of remnant prairie, which has been found along several roadside ditches that parallel the Union Pacific railroad tracks. Since the Preferred Alternative primarily widens the highway to the opposite side of the railroad corridor there is a limited potential for impacts to areas of remnant prairie vegetation. One area that may be potentially impacted by the Preferred Alternative is associated with the Bingham Lake “Widen North” design option. This portion of the Preferred Alternative has been modified with a slight southern shift in the alignment in order to reduce impacts to Wetland #25 by approximately 0.5 acres. The result of this alignment shift is a potential impact of approximately 800 lineal feet of an identified prairie remnant located on the west side of Bingham Lake. This impact area was calculated based on the proposed right-of-way for the four-lane expressway section and may be minimized once more detailed construction limits are determined.

Mitigation

During the final design process, all efforts will be made to minimize potential impacts on native vegetation. Measures for vegetation protection will be based on the MnDOT Standard Specification for Construction 2572 (Protection and Restoration of Vegetation). In order to protect vegetation that lies outside of the construction limits, special attention will be paid to Construction Specification 2572.3A. Areas mapped as remnant prairie vegetation have been identified and will be avoided to the greatest extent practical. MnDOT will include language into the special provisions of the contract that will not allow work or equipment
staging to occur within the identified prairie remnant areas between the dates of April 1-August 1. Furthermore, appropriately locating staging areas that will be needed during the construction phase of the project and the use of protective fencing for sensitive areas within the right-of-way that occur outside the limits of construction are a few best practices that will be used. Mitigation for prairie impacts will also include the use of native prairie seed mixes to revegetate the areas impacted.

As indicated during early coordination with the MNDNR, invasive species are known to exist in the project area. Both Bingham Lake and Mountain Lake have Curly Pondweed. While these lakes are not close enough to the project to be directly impacted, they are close enough for the possibility of temporary water appropriations during construction. Use of water (dust control, etc.) from these two lakes will be prohibited. Purple loosestrife is also known to exist in the Highway 60 road ditch east of the City of Mountain Lake. Construction best management practices will be implemented for the prevention and control of spreading any invasive species in the project area.

MnDOT’s integrated roadside management planning guidelines will assist in minimizing the potential spread of invasive plant species through reestablishment of native plant communities in all disturbed areas as well as routine maintenance of the state highway right-of-way corridor.

**Fish and Wildlife**

See Draft EIS Section 4.2 – Fish and Wildlife for further details on the analysis conducted for potential Fish and Wildlife impacts.

The Preferred Alternative will have minor impacts on fish and wildlife habitat in the three remaining two-lane segments of Highway 60 including impacts to wetlands and associated wildlife habitats.

The Preferred Alternative and associated roadway side slopes will potentially alter the natural shoreline of Warren Pond and Clear Lake and even requiring fill to be placed below the ordinary high water (OHW) level of these water bodies. However, because the level of design detail is limited in the West Gap segment, the potential impacts were calculated based on the proposed right-of-way limits. The proposed right-of-way extends into the southern portion of Warren Pond and approximately 0.34 acres of potential impact is shown (Wetland #30). In the area of Clear Lake, the Preferred Alternative widens the highway to the north and would potentially impact approximately 1.17 acres of Clear Lake. Again, because the level of design detail is limited in the West Gap segment, the potential impacts were calculated based on the proposed right-of-way limits. Coordination with the MNDNR and design refinements will be pursued during the final design phase, which will define the construction limits and is expected to reduce and/or avoid potential impacts to Warren Pond Clear Lake and the associated fish and wildlife habitat.

No existing fish passage concerns have been identified in the project area. The MNDNR has stated their desire to maintain a control structure (stop logs) on the south end of Clear Lake. MnDOT has committed to maintaining this structure.
Sequencing/Mitigation

Impacts to wetlands and vegetation have been discussed and mitigation proposed is described in each respective section. If requested by MnDNR, appropriate fish passage measures would be implemented in accordance with MnDOT fish passage guidance and standards during the final design phase for implementation during and after construction. MnDOT has been and will continue to closely coordinate with the MNDNR to identify and resolve any fisheries issues that may arise.

State/Federal Threatened and Endangered Species

The Draft SFEIS included an assessment of threatened and endangered species (see Draft SFEIS Section 4.2 – State/Federal Threatened and Endangered Species).

Initial correspondence with MNDNR staff occurred in the early planning and design phases of the project. As a result of this coordination and a search of the Natural Heritage Database several prairie remnants along Highway 60 were noted in the project area. A few of these remnants were identified as Sites of Biodiversity and the Sullivant’s Milkweed (Asclepias sullivantii) a state-listed threatened species is known to occur within some of these prairie remnants. A field reconnaissance was conducted in May 2011 to confirm and map the locations of remnant prairies. Impacts to these sensitive resources are anticipated to be minimal because the majority of the construction activities associated with the Preferred Alternative are being proposed along the side of the highway opposite of the Union Pacific Railroad where the prairie remnants have been identified. Based on assessment of the proposed right-of-way needed for the Preferred Alternative, one area associated with the Bingham Lake design option appears to be impacted. The design option identified for this portion of the Preferred Alternative balances impacts on both the north and south sides of the existing alignment. As a result, the modified alignment reduces impacts to Wetland #25, located north of the highway, by approximately 0.5 acres and avoids commercial relocations on the south side of the highway. However, this alignment shift results in approximately 800 lineal feet of impact on an identified prairie remnant. This impact area was calculated based on the proposed right-of-way for the four-lane expressway section and may be minimized once more detailed construction limits are determined.

According to the official County Distribution of Minnesota’s Federally-Listed Threatened, Endangered, Proposed, and Candidate Species list provided by the Service, Cottonwood County is within the distribution ranged of the prairie bush clover (Lespedeza leptostachya), a federally-listed threatened species. According to the Service, there are no known occurrences of federally-listed species in Watonwan County. Critical habitat has not been designated in either of the project counties.

MnDOT’s Office of Environmental Stewardship (OES), in acting as the non-federal representative for the Federal Highway Administration, has made the determination that the Preferred Alternative will not affect federally-listed
threatened, endangered, proposed or candidate species. In addition the project will not result in the adverse modification of designated critical habitat.

**Sequencing/Mitigation**

Efforts will be made to avoid, minimize, or if necessary mitigate impacts to prairie remnants during the final design phase. Since construction in the West Gap is not likely to occur for several years, it is recommended that reevaluation of prairie remnant sites near Bingham Lake occur prior to the completion of the final design and start of construction. MnDOT will include language into the special provisions of the contract that will not allow work or equipment staging to occur within the identified prairie remnant areas between the dates of April 1-August 1. Furthermore, efforts to limit right-of-way acquisition and construction activities within these natural vegetation areas will be made including appropriately locating staging areas needed during the construction phase and through the use of protective fencing for areas within the right-of-way that occur outside the limits of construction. A substantial amount of right-of-way will be available with the Preferred Alternative that may be appropriate for prairie vegetation establishment. If state-listed species are encountered within construction limits or staging areas, the MNDNR will be consulted for plant salvage possibilities. MnDOT and the MNDNR have an established plant salvage program to implement when there are unavoidable impacts to native plants. Other additional measures (e.g. adjusting grading plans, salvaging topsoil, and reseeding with native seeds from a local source) may be incorporated as coordination continues between the MNDNR and MnDOT through final design and project construction.

**Prime and Statewide Important Farmland**

An extensive study of the potential effects of the proposed improvements to farmland in the project area was completed for the Draft SFEIS (see Draft SFEIS Section 4.2 - Prime and Statewide Important Farmland). Total farmland impacts, prime/unique farmland, and statewide important farmlands affected by the Preferred Alternative were calculated and are shown in Table 7. These acreages were calculated for the additional right-of-way needed for the proposed improvements using all soil classifications in the soil surveys that were classified as prime, unique, and/or important soils, including areas not currently being used for agricultural purposes (i.e. existing right-of-way, developments, and open space).

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<th>Table 7 – Summary of Direct Farmland Impacts</th>
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<tr>
<td><strong>Alternative</strong></td>
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<tr>
<td>Preferred Alternative – East Gap</td>
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<tr>
<td>Preferred Alternative – Middle Gap</td>
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<tr>
<td>Preferred Alternative – West Gap¹</td>
</tr>
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<td><strong>Total</strong></td>
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¹ Includes the Bingham Lake modified “Widen North” design option and Clear Lake “Full” design option.
The Farmland Protection Policy Act – Farmland Conversion Impact Rating Form (CPA 106) was completed in consultation with NRCS staff and was included in Appendix C of the Draft SFEIS.

The Preferred Alternative will also have direct and indirect impacts on farming operations. There are a number of farm fields that are within the proposed right-of-way limits that would lose cultivated land. The primary farmland impacts created by the Preferred Alternative are the result of widening the highway to accommodate the additional two travel lanes.

The construction of a rural four-lane divided highway will also result in fewer access points than currently exist which may make farming operations and travel between farm fields more difficult in some areas. In general, a reduction in the number of access points may require farm machinery to travel greater distances to cross the highway. The center grass median may also result in greater travel distances for operations that exist on both sides of the highway corridor.

A consideration for farm drainage systems has been included in the preliminary design of the Preferred Alternative. The primary areas of potential impact to field drain tile will result in locations where the new expanded roadway is proposed to be constructed in areas that are currently being farmed. During the final design and right-of-way acquisition phase of the project, MnDOT will discuss potential farm drainage impacts with agricultural landowners. Some drain tile information has already been gathered for the East Gap, but additional information will be requested for the Middle and West Gaps and will be utilized in the final design. The purpose of obtaining this information is to protect the integrity of each field tile drainage system as much as possible, while still allowing for the timely construction of the proposed improvements. In addition, special attention will also be given to construction activities to ensure soil compaction is minimized.

Mitigation

Without compromising the design of the Preferred Alternative, all practical measures to minimize harm to prime, unique, and/or statewide important farmlands and overall farm operations have been applied in accordance with the Farmland Protection Policy Act and the Minnesota Agricultural Land Preservation and Conservation Policy Act. Furthermore, safe and efficient access to farmland has been considered as part of the preliminary design of the preferred alternative.

Any acquisition of farmland will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Mn/DOT is committed to reestablishing effective field tile drainage systems. Potential impacts to individual properties will be determined on a case-by-case basis as part of the final design and right-of-way acquisition process.

Visual Quality

As described in Section 4.2 – Visual Quality in the Draft SFEIS, the construction of the Preferred Alternative will create visual quality impacts. The Preferred
Alternative will have an effect on the existing visual scene and resources for both travelers and neighbors. The improvements will require additional pavement and clearing of some natural areas. The reconstruction and capacity expansion of Highway 60 as a rural four-lane divided expressway will convert farmlands, grasslands, and open space areas to highway right-of-way.

Mitigation

No mitigation is required for visual impacts. However, during the final design phase, a corridor landscaping plan will be prepared.

Indirect Impacts

See Draft SF&EIS Section 4.2 – Indirect Impacts for a complete discussion of indirect impacts associated with the Highway 60 project. Potential short-term and long-term indirect impacts resulting from the Preferred Alternative include:

- Potential for changes in land use patterns resulting from road realignments and/or access changes.
- Short-term economic benefit of increased private sector income during construction; and
- Farmland and agricultural business productivity.

Each of these potential indirect impacts is further discussed below.

Changes in Land Use Patterns

Future land use in the project area is determined by many factors, including the availability of municipal services (sewer and water), environmental amenities, and economic conditions. Construction of a new or improved highway can create conditions that can aid in the change of development patterns. However, highway construction by itself does not cause new development if there are not market forces that support new development and changes in land use. Furthermore, in order for potential land use changes to occur, the development plans have to be consistent with local land use and zoning regulations.

Although new development is expected within the communities along Highway 60, the desire to occupy a particular site may precede the ability to extend orderly municipal services to these sites. Linear development along a highway corridor may result in longer utility lines to service these properties. The desire to occupy these locations can also artificially raise land prices and may affect property values of undeveloped adjoining parcels.

Short-Term Economic Benefits from Construction

Short-term economic benefits from construction include the purchase of local goods and services to construct the proposed transportation improvements. This includes such items as purchase of supplies and construction materials, and payment of skilled labor over the course of one or more construction seasons. The sale of local goods and services to construction workers from outside the community is also a short-term economic benefit.
Farmland and Agricultural Business Productivity

The Preferred Alternative would convert farmlands to highway right-of-way and in areas adjacent to the highway may create a higher demand for development. The timeframe of project construction and City/County zoning regulations will determine if, when and where future development may occur.

Mitigation

In the context of the existing regulatory framework and the mitigation activities for project impacts, and with respect to simultaneous land use planning and local government regulatory activities, indirect impacts of the project are expected to be minimal. Such potential indirect impacts may be avoided and/or minimized through land use controls and roadway access restrictions.

Cumulative Potential Effects

Cumulative potential effects of the project alternatives, including the Preferred Alternative, were previously discussed in Section 4.2 of the Draft SFES. Cumulative potential effects are not causally linked to the Preferred Alternative, but are the total effect of past, present, and reasonably foreseeable actions with similar effects in a broader geographic area. The purpose of a cumulative potential effect analysis is to identify impacts that may be minimal when examined within the context of the proposed action, but that may accumulate and become more concerning in combination with a number of actions. Cumulative effects are defined by the Council on Environmental Quality (CEQ) as the following:

Cumulative Effects: “Impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.” (40 CFR 158.7)

As documented in the environmental reviews and analysis, this project will result in direct impacts to the built environment (homes and businesses) and the natural environment (wetlands, vegetation, water quality, and farmland). Some induced development may occur as a result of the Preferred Alternative. The potential for new highway-oriented businesses (convenience stores, gas stations, restaurants) have been accounted for near the communities (Bingham Lake, Butterfield, Mountain Lake, St. James, and Windom. Governmental agencies responsible for regulating land use through planning and zoning processes at the local government level can greatly assist in the protection and minimization of water quality, wetland, and farmland impacts from future developments in the surrounding areas. Specific BMPs and construction techniques should be used to avoid, minimize, and mitigate potential effects that are identified during the permitting and approval processes for individual projects.

Conclusion

Cumulative potential effect may exist in issue areas related to land consumption; land development, wetlands, water quality, farmlands, and vegetation/wildlife habitat. The cumulative potential effects to these resources are typically
considered through local and county comprehensive planning efforts, permitting regulations and environmental review processes of NEPA and MEPA. In addition to permitting processes that engage legislation protecting resources such as wetlands, many of these potential cumulative impacts can be avoided or minimized through the continued application and enforcement of land use planning, land development controls (zoning and subdivision ordinances), and roadway access restrictions. Furthermore, local and state resource agencies such as the MNDNR, MPCA, Board of Water and Soil Resources (BWSR), Soil and Water Conservation District (SWCD), and others can work with local jurisdictions to develop resource preservation plans and land use standards that focus on preserving natural and environmental resources. Local development controls could greatly assist in protecting or even enhancing sensitive resources in the study area, if local units of government are willing to implement protective actions and enforce strong land use regulations.

Therefore, in the context of the existing regulatory framework and the mitigation activities for project impacts, and with respect to simultaneous land use planning and local government regulatory activities and implementation of BMPs, the incremental impact on the built environment and the natural environment from the Highway 60 Gaps Project along with the cumulative potential effects from past, present, and reasonably foreseeable projects is not anticipated to result in substantial impacts to any one or combination of resources.

4.3 WHAT ARE THE CONSTRUCTION IMPACTS?

Potential environmental effects associated with construction can include traffic congestion, traffic detours, economic (business access), noise, water quality and soil erosion, borrow and excess materials, utility disruption, and farmland impacts. The potential impacts along with applicable mitigation measures for each of these areas are discussed below.

Traffic Congestion

Construction of the three highway segments is projected to occur under separate construction lettings with one segment being completed before construction on the next segment begins. As a result, traffic delays, travel difficulty to adjacent properties, and increased congestion within the specific project segments are anticipated to occur only on a short-term or temporary basis. A construction staging plan will be developed for each segment and will be completed during the final design phase of that particular segment. Staging plans will assess potential traffic congestion impacts associated with construction and will attempt to address property access needs, while minimizing the length of construction.

Traffic Detours

A construction staging plan will be completed during the final design stage of each highway segment and will identify potential detours. Efforts will be made to minimize disruptions to traffic patterns while maximizing directness of detoured routes. Minor detours may also be needed when traffic is switched over from the old traffic lanes to the new lanes. This would minimize short-term impacts on emergency services (police, fire, and rescue) and transit services throughout the
individual project segments. Furthermore, the existing 2-lane highway in each of the three segments will remain in-place during construction, which will minimize disruptions in traffic and reduce the likelihood of lengthy detours.

**Economic (Business Access)**

The project is expected to generate both direct construction jobs and indirect jobs to support construction related activities. The exact number of jobs cannot be determined at this time. A recent calculation prepared by FHWA shows that for every million dollars spent on highway and bridge construction, approximately 27 jobs could be supported throughout the economy.

The proposed improvements may alter access to properties along the corridor. However, alternative access will be provided in all cases. Existing businesses within the project area may experience negative short-term impacts during construction due to traffic disturbances/detours. The Preferred Alternative will limit potential adverse economic impacts since the improvements will be constructed on an alignment adjacent to the existing highway, which will continue to be used during construction to ensure that traffic movements and access to businesses are maintained.

**Construction Noise**

The construction activities associated with implementation of the Preferred Alternative will result in increased noise levels relative to existing conditions. Noise levels due to construction activities in the three gap segments of Highway 60 will vary depending on the types of equipment used, the location of the equipment, and the operating mode. During a typical work cycle, construction equipment may be idling, preparing to perform tasks, or operating under a full load. Equipment may be congregated in a specific location or spread out over a larger area. Some construction could potentially occur in close proximity to existing noise-sensitive land uses. Adverse impacts resulting from construction noise are expected to be localized and temporary. All construction equipment will be properly equipped to minimize potential construction noise impacts.

Table 8 shows peak noise levels monitored at 50 feet from various types of construction equipment. This equipment is primarily associated with site grading/site preparation, which is generally the roadway construction phase associated with the greatest noise levels.

**Table 8 – Typical Construction Equipment Noise Levels at 50 feet**

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Manufacturers Sampled</th>
<th>Number of Models in Sample</th>
<th>Peak Noise Level (dBA)</th>
<th>Range</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backhoes</td>
<td>5</td>
<td>6</td>
<td>74 - 92</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>Front Loaders</td>
<td>5</td>
<td>30</td>
<td>75 - 96</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Dozers</td>
<td>8</td>
<td>41</td>
<td>65 - 95</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Graders</td>
<td>3</td>
<td>15</td>
<td>72 - 92</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Scrapers</td>
<td>2</td>
<td>27</td>
<td>76 - 98</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>Pile Drivers</td>
<td>N/A</td>
<td>N/A</td>
<td>95 - 105</td>
<td>101</td>
<td></td>
</tr>
</tbody>
</table>

Source: US EPA and FHWA
Elevated noise levels are, to a degree, unavoidable for this type of project. MnDOT will require that construction equipment be properly muffled and in proper working order. While MnDOT and its contractor(s) are exempt from local noise ordinances, it is the practice to require contractors to comply with applicable noise restrictions and ordinances to the extent reasonable. Advanced notice will be provided to affected communities of any planned abnormally loud construction activities. Night construction may sometimes be required to minimize traffic impacts and to improve safety, but construction will be limited to daytime hours as much as possible. Construction is expected to last at least two construction seasons for each gap segment.

Any associated high-impact equipment noise, such as pile driving, pavement sawing, or jack hammering, will be unavoidable with construction of the proposed project. Pile-driving noise is associated with any bridge construction and sheet piling necessary for retaining wall construction. While pile-driving equipment results in the highest peak noise level, as shown in Table 9, it is limited in duration to the activities noted above (e.g., bridge construction). The use of pile drivers will be prohibited during nighttime hours.

**Water Quality and Soil Erosion**

The potential for soil erosion and impacts on water quality are greatest at the time a project requires the removal of vegetation and topsoil for initial clearing, grubbing, and grading activities. Areas adjacent to water resources have the highest potential for adverse impacts. Erosion control measures as suggested by the MPCA will be installed to minimize potential soil erosion impacts from construction activities. These practices may include, but are not limited to, the following, sedimentation basins, silt control devices (silt fences, hay bales), slope drains, and rapid revegetation of exposed construction areas. As part of the final design of the Preferred Alternative an erosion control plan, also known as a Stormwater Pollution Prevention Plan (SWPPP), will be prepared and submitted as part of the NPDES Construction Stormwater permit.

**Borrow or Excess Material**

The selection of borrow material for the construction of the Preferred Alternative will be the responsibility of the construction contractors. Existing gravel/borrow sites, in some instances, are identified in the contract special provisions. Due to the cost of hauling aggregate resources, it is assumed that the potential area of effect would be within close proximity of the corridor. The haul distance could be shorter or longer because it is highly dependent upon the location from the borrow site.

MnDOT has no authority over land use outside the state’s right-of-way. Such matters, including gravel mining, generally fall under the jurisdiction of local units of government as part of land use ordinances. The State of Minnesota has designated local units of government as the RGU for environmental review and analysis of gravel mining operations. Any new sites would be subject to environmental reviews under Minnesota Rule Chapter 4410.4300, Subp. 12 and will require an archaeological survey of the site. At the time of construction, MnDOT will be notifying the Planning and Zoning Department of both
Cottonwood County and Watonwan County informing them of the potential gravel needs for the proposed action. The extraction of gravel resources could affect sensitive resources in the area. Both counties have existing land use regulations that ensure appropriate environmental reviews occur for gravel mining requests.

The disposal of excess material will be conducted in accordance with MnDOT specifications, environmental regulations, and according to a project disposal plan that will be prepared by the Contractor and approved by MnDOT.

**Utility Disruption**

Construction activities may result in temporary impacts to local utilities. Coordination and cooperation with the local service providers has been and will continue to be maintained throughout the project development process.

**Farmland Impacts**

Within the study area, construction activities may temporarily disrupt farm operations and/or farm businesses such as planting, growing, and harvesting of crops. Temporary impacts could also result from loss of productivity of croplands directly adjacent to construction activities or loss of customers to a farm-related business during construction of the highway improvements.

Temporary farm-related impacts may include soil compaction from construction equipment, removal and replacement of drain tile, and the removal of crops and topsoil for staging areas and construction. Some loss in yield will occur from soil compaction in these areas or from loss of drain tile efficiencies. Soil compaction impacts are expected to last no more than one to two years following completion of construction and field drain tile systems will be replaced or restored to pre-construction effectiveness.

**Relationship Between Local Short-Term Uses of Man’s Environment and the Maintenance and Enhancement of Long-Term Productivity**

All highway projects require the investment or commitment of some resources found in the existing environment. Short-term refers to the immediate consequences of the project whereas long-term relates to its direct or secondary effects on future generations.

*Potential Adverse Use*

*Reduction of Energy and Material Resources*

The materials used in the construction of the project will be unavailable for other uses. These include the construction of non-highway facilities.

*Loss of Vegetation*

In addition to permanent vegetation loss as a result of an expanded highway, construction activities will result in short-term losses of vegetation adjacent to the improvements. If necessary, MnDOT will consider and coordinate plant salvage of important or rare native vegetation that could be affected by the Preferred Alternative. Revegetation design will be coordinated with visual quality,
erosion control, and shoreline and embankment stabilization components of the project to ensure minimal impacts as a result of temporary vegetation loss.

**Loss of Wetlands**

The Preferred Alternative is expected to directly impact wetlands. Due to the scattered distribution of wetlands, the impact on wetlands cannot be completely avoided. See Final SFEIS Section 4.2 Wetlands for a discussion of avoidance and minimization efforts as well as compensatory mitigation commitments. A net gain in wetland acreage is expected as a result of compensatory mitigation.

**Impacts on Water Resources**

The Preferred Alternative has the potential to create temporary impacts on water resources due to the close proximity of drainage ditches, wetlands, and lakes. All practical efforts will be made to minimize impacts on water resources.

**Short-Term Economic Impacts**

The construction of the expanded highway will require the acquisition of property and will remove this land from the tax rolls resulting in some short-term loss of property tax revenues. This short-term loss is anticipated to be offset due to the increased value of land served by the improved highway.

Also, the Preferred Alternative will require at least one business relocation. Such acquisition could affect the tax base for local units of government through a short-term loss in tax revenues. Short-term construction detours may require that typical business relationships be temporarily altered. This may include short-term changes in the conduct of business and trade activities until the highway improvements are fully integrated.

**Inconveniences from Construction**

Construction will cause minor traffic delays and short-term inconveniences for motorists in the area. Construction detours and higher levels of congestion may result due to construction activities.

**Significant Capital Investment**

Financial commitments to the project include acquisition, relocation, and construction costs. These public dollars will not be available for other uses. In addition, the land converted to highway use represents a reduction in tax base. These costs are to be recovered through more efficient travel and reduced user costs and an increase in the overall tax base due to the improved accessibility and mobility within the project area and region.

**Long-Term Gains in Productivity**

**Reduction in Travel Time and Cost of Travel**

A continuous four-lane highway has the ability to accommodate high volumes of traffic and increased volumes of heavy commercial traffic. The presence of free flowing traffic will reduce motorist travel times and fuel consumption, which will reduce the overall cost of travel.
**Economic Benefit**

The economic advantage lies in the long-term efficiencies that an improved transportation system will provide. These efficiencies include travel time savings, increased safety, business expansion opportunities, and increased tourism. The Preferred Alternative has some degree of beneficial economic impacts. The travel time savings will be a benefit to trucking companies, shippers, salespeople, tourists, and to commuters going to and from work. The travel time saved by shippers and salespeople will result in reduced costs for businesses, making them more competitive in the marketplace.

**Reduction of Crashes**

The construction of a continuous four-lane divided expressway will improve safety for motorists using the highway and will reduce the severity of crashes (i.e., head-on and side-swipe collisions).

**Improvements in Surface Water Drainage**

Within the project study area of the three gap segments of Highway 60, there are currently very few stormwater management techniques being practiced. The Preferred Alternative includes stormwater treatment facilities that will collect and treat highway runoff prior to discharging to receiving water bodies.

**Irreversible and Irretrievable Commitment of Resources**

**Land Consumption**

The Preferred Alternative will require the acquisition of undeveloped and developed land for the purpose of roadway construction. Within the foreseeable future, this commitment of property to roadway use is considered irreversible and irretrievable as long as the facility continues to serve the public good. However, if a greater need arises for use of the land or if the highway facility is no longer needed, the land could be converted to another use. At present, there is no reason to believe such a conversion would ever be necessary or desirable.

**Social and Cultural Resources**

The displacement and relocation of residences and other resources (including historic properties) of the built environment (public and private) are considered to be irreversible and irretrievable. No historic property impacts were identified.

**Construction Materials**

The action will result in the commitment of materials such as steel, cement, aggregate, and bituminous. These resources are largely irretrievable except for those items that have some value as salvage and can be recycled. A benefit-cost analysis was completed and presented in the Benefit-Cost Analysis section of the Draft SFEIS. Part of the analysis considered the cost of construction materials as well as the value of material that could be salvaged sometime in the future. Therefore, all construction materials needed for the Preferred Alternative are not considered to be fully irretrievable resources.
Financial Resources
The improvements will require a considerable amount of federal and state financial commitment. The total cost for constructing the Preferred Alternative is estimated to be approximately $50 million. While these public funds are not directly retrievable, the investment will enhance the safety of the users of Highway 60, the cost of travel along the roadway, and the economic vitality of the region.

Natural Resources
The Preferred Alternative will require the commitment of natural resources including the loss of vegetation, wetland functions and values, and other wildlife habitat. The commitment of these resources may in part be irreversible and irretrievable. Avoidance and minimization measures will be incorporated into the final design of the Preferred Alternative. Mitigation measures will be employed in an attempt to counter all remaining impacts.

5.0 PERMITS AND APPROVALS
It is anticipated that federal, state, and local permits, approvals, and concurrences will be required as the project proceeds with construction. The following permits/approvals/concurrence will likely be required prior to construction of the proposed action:

- SFEIS Adequacy Determination – MnDOT
- SFEIS Record of Decision – FHWA
- Section 404 Permit – USACE
- Section 401 Water Quality Certification – MPCA
- National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit – MPCA
- Minnesota Wetland Conservation Act (WCA) – MnDOT
- Public Waters Work Permit – MNDNR
- Orders for crossing drainage ditches from requisite ditch authorities

6.0 WHO RECEIVED COPIES OF THE FINAL SFEIS?

6.1 FEDERAL AGENCIES

- U.S. Environmental Protection Agency
- U.S. Fish & Wildlife Service
- U.S. Army Corps of Engineers
- Natural Resources Conservation Service/U.S. Department of Agriculture
- U.S. Department of Interior
6.2 **STATE AGENCIES/ORGANIZATIONS**

- Environmental Quality Board
- Board of Water & Soil Resources
- Minnesota Department of Public Service
- Minnesota Department of Commerce
- Minnesota State Historic Preservation Office
- Minnesota Department of Natural Resources
- Legislative Reference Library
- Minnesota Department of Health
- Minnesota Department of Agriculture
- Minnesota Pollution Control Agency

6.3 **LOCAL AGENCIES/ORGANIZATIONS**

- City of Bingham Lake
- City of Butterfield
- City of Mountain Lake
- City of St. James
- City of Windom
- Cottonwood County
- Watonwan County
- Cottonwood County Soil and Water Conservation District
- Watonwan County Soil and Water Conservation District
- Butterfield Township
- Lakeside Township
- Midway Township
- Mountain Lake Township
- St. James Township

6.4 **OTHER**

- Butterfield Library
- Mountain Lake Library
- St. James Library
- Windom Library

7.0 **PROJECT COORDINATION AND PUBLIC INVOLVEMENT**

MnDOT is committed to public involvement at all levels in decision-making related to the Highway 60 Project. MnDOT has engaged area property owners, business owners, residents, and local, county, regional, and state agencies in the
development of the project in the past, and this engagement continues as part of the SFEIS process. The public and agency involvement/outreach efforts associated with the SFEIS include the following:

- Public Open House Meetings
- Draft SFEIS Public Hearings
- Agency Coordination Meetings/Workshops
- Individual Landowner/Business-Owner Meetings
- Project Mailings
- Project Website Updates

### 7.1 Public Open Houses/Public Hearings

Since the FEIS was completed in 1984, several coordination meetings have been conducted with each of the affected communities and counties. In July 2008, an open house meeting was held to discuss the ongoing improvements being made to Highway 60 and to listen to public concerns over the remaining two-lane highway sections between St. James and Windom.

On June 14, 2011 an open house was held to provide an update on the project development process and provide information to the public regarding the SFEIS.

During the agency/public comment period for the Draft SFEIS document, MnDOT conduct two public hearings on December 13th and 15th, 2011, to engage project stakeholders and solicit their comments, questions, and concerns.

### 7.2 Agency/Public Coordination

MnDOT has regularly involved resource, regulatory agencies, and local units of government in the project development process. Coordination meetings and workshops with the various resource/regulatory agencies and local units of government are anticipated throughout the planning and design phases.

### 7.3 Project Mailings

Informational mailings have been periodically prepared and distributed to affected property owners and business owners in the project area with the intent of providing up-to-date project related information.

### 7.4 Project Web Page

A project web page has been established at that provides up-to-date information. The site provides an additional means of distributing information such as new project developments, and planning/design changes. The site is located at: [http://www.dot.state.mn.us/d7/projects/hwy60stjames/](http://www.dot.state.mn.us/d7/projects/hwy60stjames/)
8.0 RESPONSE TO COMMENTS ON THE DRAFT EIS

The following section provides a response to public and agency comments received during the comment period for the Highway 60 Draft SFEIS.

8.1 OPPORTUNITIES FOR PUBLIC COMMENT AND GUIDELINES FOR RESPONDING TO COMMENTS

The Draft SFEIS for the Highway 60 Gaps Project was distributed in November 2011 to agencies and organizations on the official distribution list, as well as additional agencies/organizations that had either requested a copy of the document, and/or that could be affected by the proposed project. The comment period for the Draft SFEIS officially closed on January 4, 2012.

Two public hearing/open house meetings were held to receive comments on the proposed project and Draft SFEIS. The hearings were held as follows:

   Tuesday, December 13, 2011
   3:00 p.m. to 6:00 p.m.
   Windom Community Center, 1750 Cottonwood Lake Drive, Windom, MN 56101

   Thursday, December 15, 2011
   4:00 p.m. to 7:00 p.m.
   Butterfield Fire Hall, 103 2nd Street, Butterfield, MN 56120

At the public hearings, attendees were invited to provide comments through one of two ways: written comments and oral statements.

- **Written Statements:** Attendees were invited to submit written comments on comments sheets provided at the open house or in letter form. Comments could also be submitted via e-mail.

- **Oral Statements:** Statements were recorded by an audio recorder and electronically documented by a staff member at the meeting.

A total of 16 comment letters were received from private citizens, business representatives, interest groups, agencies, and other government entities during the comment period. One oral statement was given at the Butterfield hearing. All comments are considered part of the Public Hearing Record for the Draft SFEIS.

Consistent with environmental rules, substantive comments are responded to in this Final SFEIS. Written responses have been provided for comments pertaining to analysis conducted for and documented in the Draft SFEIS. Responses have been prepared for statements noting incorrect or unclear information or content requirements. Comments agreeing with the Draft SFEIS, project information, general opinions, statements of fact, or statements of preference were not formally responded to. Written comments are summarized and responded to in Section 8.2. Copies of all government, agency, and organized interest group letters have been included in Section 8.3 of this Final SFEIS.
8.2 AGENCY AND PUBLIC COMMENTS AND RESPONSES

Copies of comments submitted by governmental agencies, residents, landowners, businesses, or other interest groups are listed below and included on the following pages with “footnote” responses in the margin.

- U.S. Department of Interior
- U.S. Environmental Protection Agency
- Natural Resources Conservation Service
- Minnesota Department of Agriculture
- Minnesota Department of Health
- Minnesota Pollution Control Agency
- City of Bingham Lake
- MN Department of Natural Resources
- Kurt Blomgren
- Elaine Kroeker
- Wes Kroeker
- Paul Tumer
- Mark Redman
- Mike Miller
- Lauren Raney
- Bruce and Lisa Turner
Response 1: Section 4(f) comments noted, no response necessary.
Response 2: MnDOT’s Office of Environmental Stewardship (OES) staff contacted the US Fish & Wildlife Service to discuss comments regarding the Migratory Bird Treaty Act (MBTA). It has been determined by MnDOT that the only prime nesting habitat within the project area occurs in the West Gap where prairie remnants have been identified. Since the West Gap segment is scheduled to be the last segment constructed (scheduled for 2017), it is recommended that the prairie remnant locates be reevaluated prior to final design on the West Gap. Furthermore, MnDOT will include language into the special provisions of the contract that will not allow work or equipment staging to occur within the identified prairie remnant areas between the dates of April 1-August 1.

Response 3: Coordination with MNDNR has occurred and no wildlife concentrations have been identified in the project area. MnDOT has reviewed both sides of the project corridor looking for locations where habitat exists and has not identified areas needing such treatment. The Service has not provided information on specific locations where they believe this type of accommodation should be considered for inclusion in the Preferred Alternative.
**Response 4:** Section 4.2 of the Final SFEIS disclosed potential impacts of the Preferred Alternative on prairie remnants. The preliminary design of the Preferred Alternative has made attempts to avoid and/or minimize impacts to prairie remnants to the greatest extent possible, while balancing impacts to prairie remnants against wetland avoidance (e.g. Clear Lake area) and highway safety. If prairie remnants are impacted as a result of the Preferred Alternative, native prairie seed mixes, appropriate to the site conditions, will be used to revegetate disturbed areas.

**Response 5:** Coordination contacts noted, no response necessary.
We appreciate the opportunity to provide these comments.

Sincerely,

Michael T. Chvezik
Regional Environmental Officer

cc:
NPS-WASO-EQD (wason_eqd_extrev@nps.gov)
NPS-MWR-PC (nicholas_chevance@nps.gov)
PWS-Twin Cities (richard_davis@fws.gov)
Philip Forst  
Federal Highway Administration  
380 Jackson St., Ste. 500  
St. Paul, MN 55101  

RE: Draft Supplemental Final Environmental Impact Statement for Trunk Highway 60 from St. James to Windom, Cottonwood and Watonwan County, MN; CEQ # 20110384

Dear Mr. Forst:

The U.S. Environmental Protection Agency has received and reviewed Federal Highway Administration’s (FHWA) Draft Supplemental Final Environmental Impact Statement (Draft Supplemental EIS), dated November 2011, for proposed improvements to Trunk Highway 60 (Highway 60) in Cottonwood and Watonwan Counties, Minnesota. This letter provides our comments on the Draft Supplemental EIS, pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality’s NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

Highway 60 is a principal arterial northeast-southwest highway in southwestern Minnesota. A Final EIS (FEIS; 1983) and Record of Decision (ROD; 1984) were previously prepared for a 52-mile segment of Highway 60 from St. James to Worthington. The preferred alternative identified in the FEIS/ROD consisted of constructing Highway 60 on new alignment to modern highway design standards with subsequent stages to provide added capacity with construction to a four-lane divided highway. To date, nearly 35 miles of the Highway 60 corridor between St. James and Worthington has been constructed as a four-lane divided highway; however, three segments (totaling approximately 17 miles) of the original EIS study limits remain as two-lane highway sections between St. James and Windom.

The Draft Supplemental EIS proposes actions by FHWA and the Minnesota Department of Transportation (MnDOT) to upgrade the three gap segments from two-lane roadway to four-lane divided highway. The gaps are known as the West Gap, the Middle Gap, and the East Gap.
Response 1: The wetland assessment and delineation followed the methodology set forth in the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, Waterways Experiment Station, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (U.S. Army Corps of Engineers, Version 2.0 August 2010). Furthermore, the wetland delineation report, included in the Supplemental Information CD-ROM with the Draft SFEIS, contains the USACE Wetland Delineation Data Form-Midwest Region for each wetland area assessed. These forms contain the appropriate vegetation, soils, and hydrology information needed in a wetland assessment/delineation. Streams and ditches are not included in the wetland delineation because they are not wetlands. Figures A1 through A14, located in Appendix A of the Draft SFEIS, clearly illustrated the wetland boundaries and their relationship to the highway right-of-way. The existing right-of-way “curve” shown on Figure A12 is associated with a former roadway that no longer exists, but the right-of-way is still publically owned. The alternatives considered in this portion of the project area remain south of the “curve” area. The information gathered as part of the wetland assessment and delineations is of sufficient detail to identify the preferred alternative and determine the potential for significant environmental harm. A detailed wetland permitting and review process for each segment will further consider the delineations and potential impacts based on the construction limits of the improvements.
Response 2: The locations identified in the EPA’s Table 1 were reviewed and it was determined that the majority of these sites had previously been reviewed during the field delineations and found to be man-made upland drainage ditches primarily for conveyance of roadway runoff. Isolated wet drainage ditches that were created in upland (i.e., non-hydric) soils, or failed to meet all three wetland parameters were not included in the Draft or Final SFEIS.

Other areas were found to be outside the proposed right-of-way and therefore are avoided from potential impact. Additional investigations and documentation was distributed to the EPA in February 2012. In addition, an interagency wetland field meeting/review, consisting of staff from EPA, USACE, MNDNR, MPCA, and local SWCD, was held on April 12, 2012. The meeting provided an opportunity for resource agency and MnDOT staff to discuss the wetland delineations and potential impacts resulting from the proposed highway improvements. The EPA’s Potential Wetland Areas listed in Table 1 were further reviewed by a wetland professional and were again reviewed during the field review meeting. Two additional wetland areas (Wetlands #32 and #33) were identified and have since been delineated and added to the Wetland Section of the FSFEIS. No impacts to these additional wetlands are anticipated.
Response 3: A copy of the Wetland Delineation Report was submitted to the U.S. Army Corps of Engineers (USACE) and a member of their staff was present at the April 12, 2012 interagency field review meeting. Based on coordination with USACE staff, since the mapped wetland areas are under the jurisdiction of the WCA and will be replaced in accordance with joint USACE and WCA requirements, a formal determination regarding USACE wetland jurisdiction is not needed. However, all areas mapped as wetlands will be included in the Section 404 permit application.

Response 4: The wetland acreages listed on page 109 of the Draft SFEIS were erroneous, while the number on pages 7 and 88 are correct. The Final SFEIS provides updated wetland impacts for the Preferred Alternative (see Section 4.2 – Wetlands of the FSFEIS).

Response 5: The SFEIS documents provide an overview of the likely wetland compensation/mitigation for impacts resulting from the highway improvements. Furthermore, a detailed mitigation and replacement plan will be prepared and submitted as part of the wetland permitting process. The impact minimization measures listed in EPA’s letter will be considered during final design, but these measures need to be
determined applicable, practicable, and feasible before they would be included in the Highway 60 Project. The Final SFEIS (see Section 4.2 – Wetlands) contains a description of a currently active wetland bank site that contain credits that are available for use through the MnDOT and BWSR Cooperative Wetland Replacement Program.

**Response 6:** MnDOT re-reviewed this issue and have determined that due to the limited utilities and wetlands in the project area, MnDOT does not foresee additional wetland impacts resulting from utility relocations.
Response 7: The locations identified in EPA’s Table 2 were reviewed and the first three coordinate points correspond with agricultural drainage ditches and no drainage feature was observed for the fourth coordinate point. Currently, these drainage ditches cross under Highway 60 via culvert structures or parallel the roadway. As described in the Water Quality and Surface Water Drainage and Floodplain and Water Body Modification section of the Final SFEIS, MnDOT will maintain the flow of all drainage ditches impacted by the project. The design of the Preferred Alternative will require the extension and/or replacement of ditch culverts. During the final design phase, MnDOT hydraulics staff will coordinate with the appropriate ditch authority (Cottonwood County and Private Landowners) for the proposed changes to each of these agricultural drainage ditch locations. All areas where agricultural ditches are impacted will be included in the wetland permit.

Response 8: Coordination with the MNDNR fisheries staff has occurred and no areas of fish passage concerns were identified. Therefore, only if fish passage concerns are raised at specific locations will MnDOT consider the types of design options identified in the EPA’s letter. The design of culvert crossings (type, location, size) will be based on the hydrologic conditions of each crossing.
Response 9: MnDOT is committed to maintaining the flow of all agricultural drainage ditches located in the project area. As described in the Water Quality and Surface Water Drainage and Floodplain and Water Body Modification section of the Final SFEIS, potential impacts to agricultural drainage ditches are expected to be minimal since the roadway improvements will be constructed immediately adjacent to the existing highway corridor. Specific design details, including new and/or replacement culverts, will be identified as part of the final design.

Response 10: The Preferred Alternative will cross an existing agricultural drainage ditch (Judicial County Ditch No. 2,) located just east of Bingham Lake, which will require an extension of the existing culvert under Highway 60 to allow for the construction of the additional lanes to the north of the existing highway. Another private agricultural drainage ditch, located near Watonwan County Road 2 outside of Butterfield, will be relocated for a distance of approximately 500 lineal feet in order to construct the
additional travel lanes immediately south of the existing highway corridor. MnDOT will require that appropriate erosion control and water quality measures be incorporated into any ditch improvements.

**Response 11:** Several minimization measures and mitigation commitments have been outlined in Section 4.0 of the Draft and Final SFEIS documents. In addition, best management practices for all construction will be followed to minimize potential adverse impacts from the construction of the Preferred Alternative. BMPs and other construction techniques (as listed in the EPA’s letter) will be specified in the stormwater pollution prevention plan (SWPPP) as part of the NPDES permit and included in other required permits.

**Response 12:** The Final SFEIS contains updated figures in Appendix A that depict the Preferred Alternative and the potential impacts to project area wetlands. Two additional wetland basins (Wetlands #32 and #33) have been delineated since the publication of the Draft SFEIS and the interagency field review meeting held in April 2012.

**Response 13:** See details in Section 4.2 – Wetlands of the Final SFEIS. Wetland replacement will be provided in accordance with state and federal regulations at the time of final design, project permitting, and construction. Replacement acreage for the East Gap improvements will require the use of wetland banking. MnDOT’s existing wetland bank system will provide eligible credits for wetland replacements. There are existing accounts and credits located in Watonwan County that are held by MnDOT. This site is located within the Bank Service Area and will be used for the replacement acreage for the East Gap. The replacement plan for the Middle and West Gaps are not known at this time. Due to the number of years until these gap segments are constructed, additional bank sites could be developed to accommodate the replacement needs of the Middle and West Gaps. Therefore, no specific information on wetland banking sites for the Middle and West Gaps is provided at this time, but will be pursued during the final design phase for each highway segment.
Response 13: See response on previous page.

Response 14: The identified Preferred Alternative includes Bingham Lake “Widen North” design option with a modification that slightly shifts the alignment to the south near the Highway 60/Cottonwood County Road 2 intersection. This modification was proposed in part to minimize impacts to Wetland #25 located north of Highway 60. However, the result of this alignment shift is a potential minor impact to an identified prairie remnant. The preliminary impact area was calculated based on the proposed right-of-way for the four-lane expressway section. The final design of the Preferred Alternative will attempt to avoid and minimize prairie remnant impacts to the greatest extent possible, while balancing impacts to wetlands and other resources. Mitigation for prairie impacts will include the use of native prairie seed mixes to revegetate the areas impacted. Furthermore, MnDOT will include language into the special provisions of the contract that will not allow work or equipment staging to occur within the identified prairie remnant areas between the dates of April 1-August 1.

Response 15: Comments noted.
U.S. Environmental Protection Agency (Page 8 of 8)

Please send one copy of the Final Supplemental EIS and ROD to my attention once it becomes available. We look to the Final Supplemental EIS and ROD to disclose the rationale for selecting the final route(s). If you have any questions about this letter, please contact Ms. Liz Peloso, PWS, of my staff at 312-886-7425 or via email at peloso.elizabeth@epa.gov.

Sincerely,

Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosure

c: Dave Studenski, USACE-St. Paul District
   Tony Sullivan, USFWS
   Kevin Molloy, MPCA
   Peter Leete, MnDNR
   Peter Harff, MnDOT
   Mark Benson, SEH Inc.
Response 1: USDA farmland program information noted, no response necessary.

Response 2: The FPPA Farmland Conversion Impact Rating Form CPA 106 (used in replacement for AD 1006 for linear corridors) was completed with the assistance of the local NRCS staff and included in Appendix C of the Draft SFEIS.
Peter Harff  
Page 2  

Please refer specific FPPA requests in Cottonwood and Watonwan counties to Joe Kristoff, Area Resource Soil Scientist, at (507) 537-0541 or joseph.kristoff@mn.usda.gov.

Sincerely,

[Signature]

PAUL FLYNN  
Environmental Review and Justice Program

cc:  
Joe Kristoff, ARSS, NRCS, Marshall, MN
Response 1: A continuous rural four-lane divided highway will result in fewer access points than currently exist making farming operations more difficult in some areas. Farm operators/machinery will still have access to the highway, but crossing from one side of the highway to the other may be restricted due to the center grass median. See Final SFEIS Section 4.2 Prime and Statewide Important Farmland for more details.

Response 2: The Bingham Lake “North Bypass” design option is not part of the Preferred Alternative.

Response 3: Further consideration of farmland drainage systems and one-on-one conversations are occurring with landowners in East Gap, which is scheduled to begin final design in spring 2012. Similar efforts are proposed with subsequent segments (Middle and West Gaps) when more detailed design occurs. During the final design and right-of-way acquisition phase, MnDOT will discuss potential farm drainage impacts with individual landowners and/or contractors. In many instances, tile information (location, size) will be requested and utilized in the final design to protect the integrity of each field tile system as much as possible, while still allowing for the highway improvements. Special attention will also be given to construction activities to ensure soils characteristics are not compromised through soil compaction. Any acquisition of farmland will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act.
3 Cont.

1. Compile tile maps for each parcel. This might require visiting local drainage contractors, checking records at the soil office, and/or visiting with current and previous landowners.
2. Keep copies of each original tile map. The original maps will be very helpful in locating the drainage lines.
3. Involve a drainage contractor in the initial layout and design of the reroute of the drainage systems. Contractors familiar with drainage systems in that area can be helpful when trying to find the correct location when using old or original maps.
4. Research the direction and flow of the watersheds that drain into each tile system to ensure proper sizing of new tile mains.
5. Consider rerouting all drainage tiles prior to road construction to provide drainage contractors with more time to deal with any unknowns.

Once again, thank you for the opportunity to provide comments on the FEIS. Please feel free to contact me if you have any questions regarding this matter.

Sincerely,

Becky Balk, Agricultural Land Use Specialist
Agricultural Development and Financial Assistance Division

Cc: Charlie Poster, Assistant Commissioner
    Bob Patton, Local Government Outreach Coordinator

Response 3: see previous page for response.
Response 1: Since the publication of the Draft SFEIS, additional information has been gathered from the City of Mountain Lake regarding the designated Wellhead Protection Zone (WPZ) and draft Drinking Water Supply Management Area (DWSMA) for the five municipal wells located within the City. The Middle Gap of the Preferred Alternative will pass through a “very low vulnerability” area of both the WPZ and DWSMA. If required, specific BMPs and storm water management strategies will be defined for the Middle Gap to ensure the protection of groundwater and drinking water in the area.
Response 1: MnDOT acknowledges that roadway runoff can have impacts on water resources located outside the construction limits and highway right-of-way. In order to minimize impacts, highway runoff will be collected in treatment ponds to minimize water quality impacts on receiving water resources.

Response 2: A wetland permit will outline BMPs, including in-water techniques, to avoid/minimize impacts.

Response 3: Construction BMPs will be included in the final design plans and construction standards to ensure potential impacts on wetlands are minimized during construction activities.

Response 4: MnDOT will seek viable wetland mitigation sites for potential impacts associated with each of the three gap segment. Existing bank systems will also be reviewed to determine if eligible credits exist.

Response 5: If required, a dewatering plan will be prepared and included in the SWPPP as part the NPDES Permit.
Response 6: The Final SFEIS shows the greatest extent of impact to farmland. Following a more detailed hydraulics study, which will be conducted during the final design of each segment, some treatment ponds may be moved or shifted, resized, or eliminated. The final configuration will, at a minimum, comply with NPDES permit requirements by providing treatment for the full area of new impervious. MnDOT has and will continue to seek other opportunities to treat additional runoff from existing impervious areas.
Response 7: Comments noted and appropriate corrections have been made to the Final SFEIS.
Response 1: MnDOT has been made aware of several City service lines in the area including those mentioned in this comment letter. Section 4.2 – Utilities of the Final SFEIS further discusses these lines. During the final design phase, MnDOT will further coordinate with the City of Bingham Lake regarding existing and any new utility infrastructure that could be impacted by the Highway 60 improvements.

Response 2: As documented in Section 3.1 Preferred Alternative of the Final SFEIS, the identified Preferred Alternative includes a modified Bingham Lake “Widen North” design option that slightly shifts the alignment to the south near the Highway 60/County Road 2 intersection. This modification will not require the acquisition of any businesses on the south side of the highway. The former vehicle salvage business property on the north side of the highway will be acquired as a result of this design option.
Response 1: MnDOT has received the MNDNR coordination letter dated June 1, 2011. As stated, this letter was included in Appendix B of the Draft SFEIS and the contents of the letter and coordination that took place was used in the preparation of the preliminary layout and Draft SFEIS document. MnDOT will continue to coordinate with the MNDNR through the design and permitting phases for each of the three gap segments.

Response 2: As documented in Section 3.1 – Preferred Alternative, the Final SFEIS identifies the Preferred Alternative that includes Clear Lake “Full” design option for the West Gap segment. This design option was identified as part of the Preferred Alternative because it best addresses the project purpose and need. Additional coordination with area MNDNR staff occurred prior to the completion of this Final SFEIS to discuss potential impacts to Clear Lake and mitigation options. Further coordination with MNDNR staff will occur during the final design process and consideration will be given to additional design elements in the area of Clear Lake.
Response 3: A mitigation plan will be prepared in consultation with the MNDNR prior to the submittal of wetland and public water work permits. Since the three gap segments will be constructed in separate construction phases, it is anticipated that separate permits will be submitted during the final design process for each of the gap segments and that varying types of mitigation will be developed based on the potential level of impacts. The potential impacts to Clear Lake and Warren Pond are associated with the West Gap, which is tentatively scheduled to begin construction in 2017.

Response 4: As documented in Section 3.1 Preferred Alternative of the Final SFEIS, the identified Preferred Alternative includes Bingham Lake “Widen North” design option with a modification that slightly shifts the alignment to the south near the Highway 60/County Road 2 intersection. This modification was proposed in part to minimize impacts to Wetland #25 located north of Highway 60. However, the result of this alignment shift is a potential impact of approximately 800 lineal feet of an identified prairie remnant. The preliminary impact area was calculated based on the proposed right-of-way for the four-lane expressway section and may be minimized once more detailed construction limits are determined. During the final design of the West Gap segment, MnDOT will consider further avoidance and minimization measures (adjusting grading plans, salvaging topsoil, reseeding with native seeds from local sources, etc.) to limit impacts. If avoidance is not feasible MnDOT will coordinate with the MNDNR and implement an established plant salvage program. MnDOT will also include language into the special provisions of the contract that will not allow work or equipment staging to occur within the identified prairie remnant areas between the dates of April 1-August 1.
MnDOT had received this earlier MNDNR coordination letter, dated June 1, 2011. The contents of this letter and the ensuing coordination between state agencies were used in the preparation of the preliminary layout and Draft SFEIS document. Therefore, formal responses to this early coordination letter are not provided in this Final SFEIS – Response to Comments section.

MnDOT will continue to coordinate with the MNDNR through the design and permitting phases for each of the three gap segments. Furthermore, this letter was included in Appendix B of the Draft SFEIS.
f. Native vegetation management throughout the project corridor. A native vegetation management plan to protect the existing native vegetation and to establish or enhance areas that are not currently comprised of native vegetation would be considered as a mitigation measure as well. This is already being done in part to preserve the aerie prairie remnants in the project corridor, though additional efforts would be considered beneficial.

It is not known if any or all of these measures will be designed into the project, but this is the starting point we established for consideration of mitigation measures for impacts to Public Waters that this project may impact.

2. The Minnesota Natural Heritage Information System (MNHS) has been queried to determine if any rare plant or animal species, native plant communities, or other significant natural features are known to occur within an approximate one-mile radius of the project area. Based on this query, the Minnesota County Biological Survey (MCBS) has identified several sensitive prairie remnants along T16N. These are identified as either Sites of Biodiversity or as Railroad ROW prairie remnants (see the cover envelope for a map of locations). Individual state (threatened) species (S偌laeus Millocumb) are known to exist in prairie remnants in Section 25 T16N R3W. I am also aware that MnDOT has mapped the remnants within the T1660 right of way. All of these should be included as the project moves along the environmental process.

a. Activities in road rights-of-way can negatively affect adjacent native plant communities, especially through the introduction of non-native plant species. Actions to minimize disturbance to these areas of ecological significance should be taken. We also encourage the expansion of these areas by planting suitable compatible native vegetation in adjacent areas. A general guidance sheet for the protection of Areas of Environmental Sensitivity is included (Chapter 10) in the manual “Best Practices for Maintaining DNR Natural Public Waters/ WPA Permit 03-2006-0011”. I have attached page 1-10 to the cover envelope. This page may be used in your projects documents. A pdf version of the entire manual may be found at:


In summary, page 1-10 states, 1) Locate field offices, storm water outfalls, and storm water collection areas as well as areas close to the identified sensitive areas in accordance with MnDOT spec 2572-A. 2) Identify “Areas of Environmental Sensitivity” on all plans. In addition, should grading outside the PI (Point of Interest) be proposed: 1) Walk the perimeter of the sensitive area with the grading foreman so that all personnel understand and agree on the edge of the area. 2) Hardstand Best Management practices may be required for protection of the area, and 3) Revegetate disturbed areas with native species suitable to the local habitat. In addition, procedures should be taken to ensure that borrow and disposal areas are not located within native plant communities and that, if adjacent to native plant communities, the above actions are taken to minimize disturbance. These protection measures are similar to MnDOT’s Standard Specifications for Construction #378.

The Natural Heritage Information System (MNHS) is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. If information becomes available indicating additional listed species or other rare features, further review may be necessary.

3. Carpenter Wildlife Management Area (WMA) is located on the west side of the City of Blooming Lake.

4. Local Grant-in-Aid snowmobile trails utilize the right-of-way at various locations. Design of the project should not preclude its continued use.

5. Invasion species are known to exist in the project area:

a. Blooming Lake and Mountain Lake have Carly Pondweed. While these lakes are not close enough to the project to be directly impacted, they are close enough for temporary water appropriations by contractors. A Preliminary Invasive Species Permit may be required for water from these lakes. It is preferred that water from these lakes not be utilized for this project (cost control, etc.).
b. People furniture is known to exist in the T1660 road ditch east of the City of Mountain Lake. Similar precautions should be taken to prevent its spread.

6. Maps attached to the cover envelope for this letter show approximate locations of the above items (MCBS sites, Public Waters, Trails, WMA lands, invasive species). For exact locations, either contact me or download GIS shapefiles from the DNR’s Data Desk website at http://data.dnr.state.mn.us/.
If you have questions regarding this letter, please e-mail me at peter.leete@state.mn.us or call at (651) 366-3634.

On behalf of the DNR, Sincerely,

Peter Leete
Transportation Hydrologist
DNR Ecological & Water Resources

Office location:
MnDOT Office of Environmental Stewardship
395 John Ireland Blvd., mail stop 620, St. Paul, MN 55155

C: ERDB file 20100913
Response: One of the primary purpose and need objectives for the project is to improve safety along the Highway 60 corridor. The Preferred Alternative will be designed to achieve this objective to the greatest extent practical. Property access (number, type, location) will be discussed with individual property owners at the time final design is occurring for each gap segment. MnDOT is currently working with landowners in the East Gap to discuss the Preferred Alternative and impacts to adjacent properties, including access. The Middle and West Gaps will follow a similar approach when the design of the Preferred Alternative is advanced in these gap segments.
Elaine Kroeker Comments

Highway 60
Windom to St. James Project

Name: Elaine Kroeker
Address: 38000 Hwy 60, Spirit Lake
Phone #: 218-478-3491
E-mail: 

Comment:

Response: The Preferred Alternative will be designed to improve safety along the entire Highway 60 corridor. The intersection of Highway 60 and Cottonwood County Road 2/2nd Avenue will be improved as part of the West Gap improvements. The Preferred Alternative also includes the realignment of 510th Avenue in order to create a single access point to Highway 60 at 2nd Avenue (see Figure A2).
Wes Kroeker Comments

Highway 60
Windom to St. James Project

Name: Wes Kroeker
Address: 25550 Co. Rd. #2
Phone #: 507-227-6795
E-mail: wskroeker@frontier.net

Comment:

My concern is for improved safety at the 2nd exit off HWY 60. I live north of 60 on Cottonwood #2. When I come from the north and turn onto 60, I have a short time to develop speed and then make a turn off to the left for the exit. The existing road layout makes it difficult for the driver to use the exit properly. The proposed roundabout would make my trip to the pit plant much safer. The existing roundabout on 60 is not very helpful at night time. A roundabout would do a better job. I have been involved in two accidents on HWY 60 at 2nd Avenue.

I have lived in Windom for over 40 years and I would appreciate it if I could drive across the 60 and make my turn to exit on the east side of 60 on the county road across from Miller Steel Inc. as you have proposed. I also have building 4 homes in the area of the County Road 2 intersection.

Response: The Preferred Alternative will be designed to improve safety along the entire Highway 60 corridor. The intersection of Highway 60 and Cottonwood County Road 2/2\textsuperscript{nd} Avenue will be improved as part of the West Gap improvements. The Preferred Alternative also includes the realignment of 510\textsuperscript{th} Avenue in order to create a single access point to Highway 60 at 2\textsuperscript{nd} Avenue (see Figure A2). As documented in Section 3.1 Preferred Alternative of the Final SFEIS, the identified Preferred Alternative includes Bingham Lake “Widen North” design option with a modification that slightly shifts the alignment to the south near the Highway 60/County Road 2 intersection.
Response: As documented in Section 3.1 Preferred Alternative of the Final SFEIS, the identified Preferred Alternative includes Bingham Lake “Widen North” design option with a modification that slightly shifts the alignment to the south near the Highway 60/County Road 2 intersection.
Mark Redman Comments

<table>
<thead>
<tr>
<th>Name:</th>
<th>Mark Redman</th>
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</thead>
<tbody>
<tr>
<td>Address:</td>
<td>415 84H Street, Bingham Lake, MN 54000</td>
</tr>
<tr>
<td>Phone #:</td>
<td>707-831-1800</td>
</tr>
<tr>
<td>E-mail:</td>
<td>mredman180@com</td>
</tr>
</tbody>
</table>

Comment:

As documented in Section 3.1 Preferred Alternative of the Final SFEIS, the identified Preferred Alternative includes Bingham Lake “Widen North” design option with a modification that slightly shifts the alignment to the south near the Highway 60/County Road 2 intersection. This modification will not require the acquisition of any businesses on the south side of the highway. The former vehicle salvage business property on the north side of the highway will be acquired as a result of this design option.
Response: As documented in Section 3.1 Preferred Alternative of the Final SFEIS, the identified Preferred Alternative includes Bingham Lake “Widen North” design option with a modification that slightly shifts the alignment to the south near the Highway 60/County Road 2 intersection. This modification will not require the acquisition of any businesses on the south side of the highway. The former vehicle salvage business property on the north side of the highway will be acquired as a result of this design option. Also, the Preferred Alternative will be designed to improve safety at the intersection of Highway 60 and Cottonwood County Road 2/2nd Avenue. The Preferred Alternative includes the realignment of 510th Avenue in order to create a single access point to Highway 60 at 2nd Avenue (see Figure A2).
Response: As discussed with Mr. Raney in a telephone conversation on 12/27/11, the absence of a wetland designation at the aforementioned tile locations will have no effect on MnDOT’s commitment to work with the landowner to resolve impacts to tile lines and intakes that may be caused by the construction of Highway 60. MnDOT hydraulics staff will be meeting with affected property owners in the future to make sure MnDOT has the correct locations for field tile and to discuss how to mitigate any impacts. The wetland designation in the Draft SFEIS was based on a delineator’s review of the plants, soils, and moisture. In addition, certain wet areas may not be considered “jurisdictional” wetlands because of being formed by the construction of the existing roadway.
Bruce and Lisa Turner Comments

To: Peter Harff
From: Bruce and Lisa Turner
51714 County Road 44
Bingham Lake, MN. 56118
blturner82@gmail.com

Comment on Highway 60 Bingham Lake bypass
We would prefer the original roadway, with the new lane to the South or north, but not two new lanes to the North.
We believe agricultural land is a very valuable resource for food production, now and into the future. We need to conserve our resources as much as possible, so please look to other viable alternatives for this project. Using the original alignment and adding the new lane to the North or south would conserve this resource. We would be totally against making two new lanes to the North and destroying many acres of agricultural land.
Since the environmental impact study on the salvage yard came back with minimal contaminants, the road should go through here without any issues.
Let the project begin.
Bruce and Lisa Turner

Response 2: As documented in Section 3.1 Preferred Alternative of the Final SFEIS, the identified Preferred Alternative includes Bingham Lake “Widen North” design option with a modification that slightly shifts the alignment to the south near the Highway 60/County Road 2 intersection. This design option will minimize impacts to agricultural land. The former vehicle salvage business property on the north side of the highway will be acquired as a result of this design option.
Appendix A

Preliminary Layout Sheets of the Preferred Alternative
Area = 1.57 acres

Type 1 Wetland #21

MINNESOTA DEPARTMENT OF TRANSPORTATION

T.H. 60 FROM WINDOM TO ST. JAMES

BUILD ALTERNATIVE

WEST GAP

Figure A5
MINNESOTA DEPARTMENT OF TRANSPORTATION
T.H. 60
FROM WINDOM TO ST. JAMES
BUILD ALTERNATIVE
MIDDLE GAP / EAST GAP

LEGEND
- Proposed Centerline Alignments
- Proposed Storm Water Pond
- Proposed Right of Way
- Existing Right of Way
- Existing Railroad Right of Way
- Historic Railroad
- Property Relocation
- Wetland Boundary
- Wetland Impact
- Prairie Remnant Location
- Noise Monitoring & Receptor Sites
- Analyzed Noise Barrier
- Access Closure
- Potentially Contaminated Properties
  - High Risk
  - Medium Risk
  - Low Risk

DATE: 5/24/2012

Wetland #11
5/24/2012 4:25:00 PM

MIDDLE GAP / EAST GAP SEGMENT

EAST TERMINI OF MIDDLE GAP SEGMENT

PROPOSED CENTERLINE ALIGMENT

PROPOSED STORM WATER POND

PROPOSED RIGHT OF WAY

EXISTING RIGHT OF WAY

EXISTING RAILROAD RIGHT OF WAY

HISTORIC RAILROAD

PROPERTY RELLOCATION

WETLAND BOUNDARY

WETLAND IMPACT

PRAIRIE REMNANT LOCATION

NOISE MONITORING & RECEPTOR SITES

ANALYZED NOISE BARRIER

ACCESS CLOSURE

POTENTIALLY CONTAMINATED PROPERTIES

= High Risk

= Medium Risk

= Low Risk

MATCH LINE - SEE SHEET 8

MATCH LINE - SEE SHEET 11
Wetland #6

Wetland #5

LEGEND

- Proposed Centerline Alignments
- Proposed Storm Water Pond
- Proposed Right of Way
- Existing Right of Way
- Existing Railroad Right of Way
- Historic Railroad
- Property Relocation
- Wetland Boundary
- Wetland Impact
- Prairie Remnant Location
- Noise Monitoring & Receptor Sites
- Analyzed Noise Barrier
- Access Closure
- Potentially Contaminated Properties

- High Risk
- Medium Risk
- Low Risk

5/29/2012

MINNESOTA DEPARTMENT OF TRANSPORTATION
T.H. 60
FROM WINDOM TO ST. JAMES
BUILD ALTERNATIVE
EAST GAP

FIGURE A12
TH 60 Gaps Project – Windom to St. James  
GREEN SHEETS

Transmittal:

<table>
<thead>
<tr>
<th>Action</th>
<th>Who</th>
<th>Date</th>
<th>Expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by:</td>
<td></td>
<td></td>
<td>To the best of my knowledge all commitments made in environmental documents and public discussions have been captured here</td>
</tr>
<tr>
<td>Received in Detail Design by:</td>
<td></td>
<td></td>
<td>Commitments documented here will be honored or renegotiated</td>
</tr>
<tr>
<td>Updated in Detail Design by:</td>
<td></td>
<td></td>
<td>To the best of my knowledge all commitments specified in the Green Sheets have been incorporated into the plans or renegotiated and any new commitments have been added</td>
</tr>
<tr>
<td>Received in Construction by:</td>
<td></td>
<td></td>
<td>Commitments documented here will be honored or renegotiated</td>
</tr>
<tr>
<td>Completed in Construction:</td>
<td></td>
<td></td>
<td>To the best of my knowledge all commitments specified in the Green Sheets have been constructed or renegotiated and any new commitments have been added</td>
</tr>
<tr>
<td>Received post Construction:</td>
<td></td>
<td></td>
<td>Commitments documented here will be honored or renegotiated</td>
</tr>
<tr>
<td>Completed post Construction:</td>
<td></td>
<td></td>
<td>All commitments have been fulfilled or renegotiated</td>
</tr>
</tbody>
</table>

Commitments that are considered standard operating procedures are included in a simple list at the end of this document.

Special Commitment – copy this table for each commitment, fill in completion dates on the left and additional description on the right.

<table>
<thead>
<tr>
<th>“Summary Name”</th>
<th>“Description”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Done in Design</td>
<td></td>
</tr>
<tr>
<td>Done in Construction</td>
<td></td>
</tr>
<tr>
<td>Done post Construction</td>
<td></td>
</tr>
<tr>
<td>No Further Work Required</td>
<td></td>
</tr>
<tr>
<td><strong>Native Prairie Remnants</strong></td>
<td>Coordinate with DNR to protect prairie remnants during design and construction and identify mitigation if impacts occur.</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Done in Design</td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td>Done in Construction</td>
</tr>
<tr>
<td>NA</td>
<td>Done post Construction</td>
</tr>
<tr>
<td></td>
<td>No Further Work Required</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Migratory Bird Act</strong></th>
<th>Coordinate with USFWS to ensure prime nesting areas (identified prairie remnants) are protected to the extent practical and include special provision language in the contract prohibiting work or equipment staging within the identified prairie remnant areas between April 1-August 1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Done in Design</td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td>Done in Construction</td>
</tr>
<tr>
<td>NA</td>
<td>Done post Construction</td>
</tr>
<tr>
<td></td>
<td>No Further Work Required</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Warren Pond</strong></th>
<th>Coordinate DNR during final design to identify potential impacts to Warren Pond. Coordinate mitigation if needed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Done in Design</td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td>Done in Construction</td>
</tr>
<tr>
<td>NA</td>
<td>Done post Construction</td>
</tr>
<tr>
<td></td>
<td>No Further Work Required</td>
</tr>
<tr>
<td><strong>Warren Pond/Cottonwood Lake Water Control System (Pumping Station)</strong></td>
<td>Coordinate with DNR and City of Windom on potential impacts to the water level control system (pump house) located on the south end of Warren Pond. Determine mitigation if impacted.</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>Done in Design</td>
<td></td>
</tr>
<tr>
<td>Done in Construction</td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td>Done post Construction</td>
</tr>
<tr>
<td>No Further Work Required</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Clear Lake</strong></th>
<th>Coordinate with DNR during final design to identify viable design elements that could reduce impacts on Clear Lake (without compromising highway safety) and to identify mitigation strategies/options.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Done in Design</td>
<td></td>
</tr>
<tr>
<td>Done in Construction</td>
<td></td>
</tr>
<tr>
<td>Done post Construction</td>
<td></td>
</tr>
<tr>
<td>No Further Work Required</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>RCUT</strong></th>
<th>Consider RCUTS instead of standard intersections at locations such as CSAH 2 in Bingham Lake. Inform FHWA of decisions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Done in Design</td>
<td></td>
</tr>
<tr>
<td>Done in Construction</td>
<td></td>
</tr>
<tr>
<td>Done post Construction</td>
<td></td>
</tr>
<tr>
<td>No Further Work Required</td>
<td></td>
</tr>
</tbody>
</table>
**Landscaping**

Landscaping should be done at entrances to Bingham Lake and Windom.

| Done in Design | | | |
| Done in Construction | | | |
| Done post Construction | | | |
| No Further Work Required | | | |

**STANDARD OPERATING COMMITMENTS – PLACE AN X IN THE COLUMN AS COMPLETED**

<table>
<thead>
<tr>
<th>Commitment</th>
<th>Design</th>
<th>Construction</th>
<th>Post Construction</th>
<th>No Further Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right of way acquisitions and relocations will follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>During the final design, a review of ditch crossings will consider upstream flooding and maintaining flow. If determined “Waters of the U.S.”, Section 404 permitting will apply.</td>
<td></td>
<td></td>
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<tr>
<td>The final design will ensure the integrity of field tile/intakes are maintained.</td>
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<tr>
<td>The right-of-way process will compensate for triangulation or severance as part of farmland acquisition.</td>
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<tr>
<td>A wetland technical evaluation panel (TEP) will be assembled for the purpose of reviewing the wetland delineations for each gap segment. All wetlands will be flagged prior to the TEP field review.</td>
<td></td>
<td></td>
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<tr>
<td>MNDNR Public Waters permit will be obtained for each segment, if required.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>A NPDES permit (MN R 100001) will be obtained for each segment.</td>
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</tr>
<tr>
<td>Coordination will occur with local ditch authorities for any jurisdictional ditch modifications. If determined “Waters of the U.S.”, Section 404 permitting will apply.</td>
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<tr>
<td>MnDOT will test for contaminants in soils at sites identified as being medium or high risk sites.</td>
<td></td>
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</tr>
<tr>
<td>Commitment</td>
<td>Design</td>
<td>Construction</td>
<td>Post Construction</td>
<td>No Further Action</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
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<td>--------------</td>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>All applicable wetland permits will be obtained for each segment. Wetland</td>
<td></td>
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<tr>
<td>delineations for the Middle and West Gaps will be reevaluated if more than 5</td>
<td></td>
<td></td>
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<tr>
<td>years old.</td>
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<tr>
<td>During the final design of the West Gap, coordination with Bingham Lake</td>
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<tr>
<td>will occur regarding existing and/or planned utilities (sewer/water).</td>
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<tr>
<td>MnDOT will request Municipal Approval from Bingham Lake for improvements</td>
<td></td>
<td></td>
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<tr>
<td>within the city limits.</td>
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<tr>
<td>A Traffic Management Plan will be prepared during the final design for each</td>
<td></td>
<td></td>
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<tr>
<td>segment. The plan will identify how access can be provided/maintained to all</td>
<td></td>
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</tr>
<tr>
<td>homes, businesses, farms (fire, police, and rescue) during construction.</td>
<td></td>
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</tr>
<tr>
<td>Native seed mixes will be used in revegetating areas of disturbance unless</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>there is reason not to use this type of seed mixture. Coordination with the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNDNR may need to occur to identify potential areas of concern.</td>
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<tr>
<td>MnDOT will include language into the special provisions of the contract that</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>will not allow work or equipment staging to occur within prime nesting areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(identified prairie remnants) between the dates of April 1-August 1.</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>