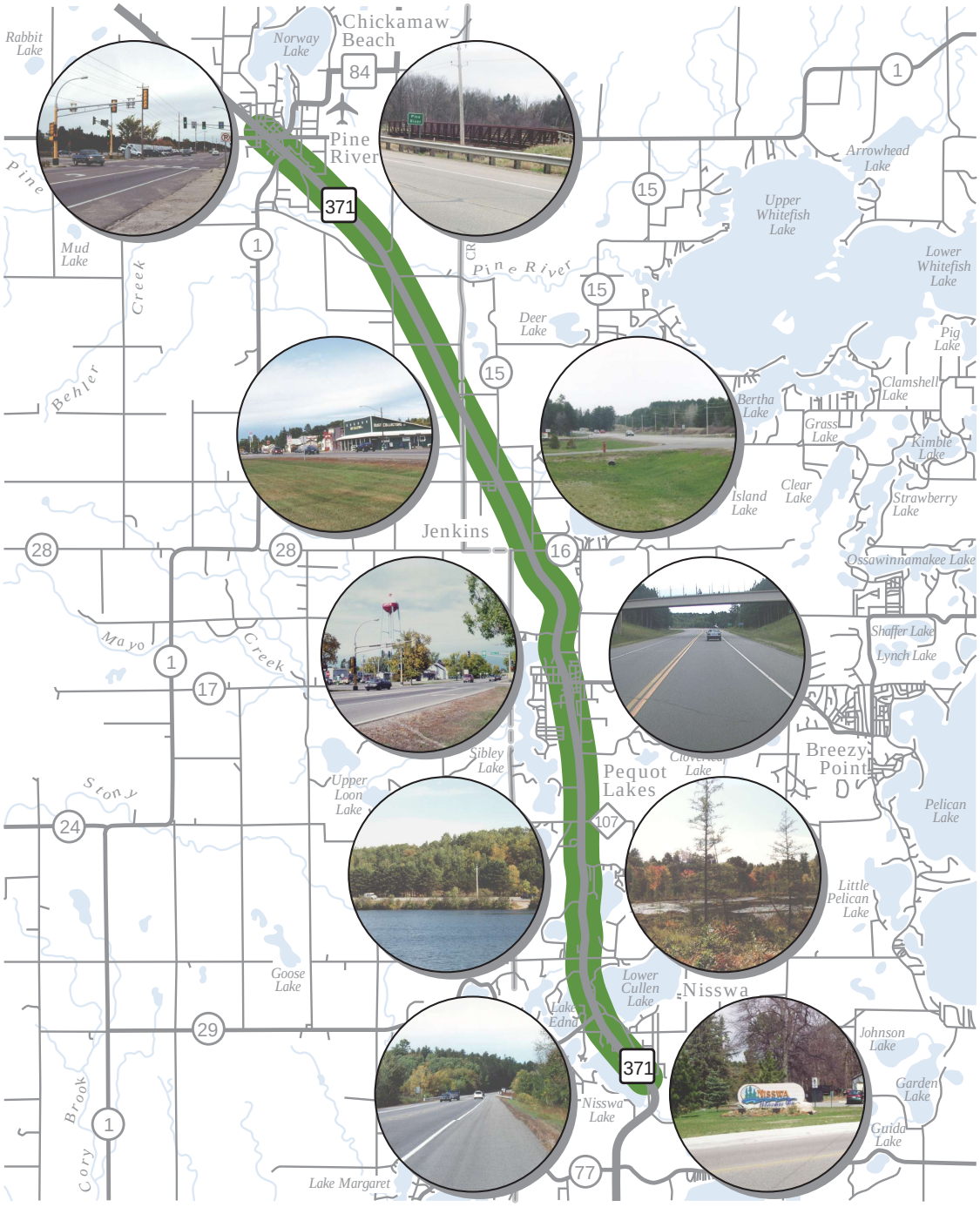
Highway 371 North Improvement Project

Final Environmental Impact Statement



January 2005

FHWA-MN-EIS-03-01-F

TRUNK HIGHWAY 371
In Cass and Crow Wing Counties, Minnesota

FINAL ENVIRONMENTAL IMPACT STATEMENT AND FINAL SECTION 4(f) EVALUATION

State Project Number: S.P. 1116-22

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

For the reconstruction Highway 371 from a two-lane highway to a four-lane limited access highway between the intersections of Crow Wing County Road 18 in Nisswa, Minnesota and Cass County Road 2/42 in Pine River, Minnesota. The project is located within Cass and Crow Wing Counties, Minnesota.

Submitted Pursuant to 42 USC 4332 (2)(C), 49 USC 303, and Minn. Stat. Chap. 116D
By the U.S. Department of Transportation Federal Highway Administration and the Minnesota Department of Transportation

This Final Environmental Impact Statement (EIS) is submitted for review pursuant to the above-noted statutes and other public law requirements, encompassing: Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, Section 4(f) of the Department of Transportation Act of 1966 (recodified at 49 USC 303), and Minnesota Statutes, Chapter 116D.

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1/7/05
Date

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COMMENTS ON THE FINAL EIS should be sent to the Mn/DOT Project Manager (address listed above).

This document is available in alternative formats to individuals with disabilities by calling the Mn/DOT Project Manager at the phone number listed above, or to individuals who are hearing or speech impaired by calling the Minnesota Relay Service at 1-800-627-3529

Figure 1 – Project Location Map

Figure 2 – Preferred Alternative Map

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List of Acronyms

APE – Area of Potential Effect
BMPs – Best Management Practices
CEQ – Council on Environmental Quality
EIS – Environmental Impact Statement
FHWA – Federal Highway Administration
LGU – Local Government Unit
Mn/DOT – Minnesota Department of Transportation
MNDNR – Minnesota Department of Natural Resources
MOA – Memorandum of Agreement
MPCA – Minnesota Pollution Control Agency
MSL – Mean Sea Level
NEPA – National Environmental Policy Act
NHPA – National Historic Preservation Act
NPDES – National Pollutant Discharge Elimination System
NRHP – National Register of Historic Places
ROD – Record of Decision
SHPO – State Historic Preservation Office
SWCD – Soil and Water Conservation District
SWPPP – Storm Water Pollution Prevention Plan
USACE – U.S. Army Corps of Engineers
USFWS – U.S. Fish & Wildlife Service
WCA – Wetland Conservation Act

1.0 REPORT PURPOSE AND FORMAT

The proposed improvements to Trunk Highway (Highway) 371 are considered a Federal Class I Action because of the potential for significant impacts on the natural and physical environment. Therefore, this Environmental Impact Statement (EIS) has been prepared to discuss the environmental impacts of this proposed Class I action.

The Draft EIS, which was distributed in December 2003, is incorporated by reference herein and made a part of the Final EIS.

This Final EIS has been prepared in accordance with Council on Environmental Quality (CEQ) Regulation 40 CFR 1503.4, which provides a methodology for preparing an "Abbreviated" Final EIS. This approach avoids repetition of material from the Draft EIS through incorporation by reference. This document includes minor changes and factual corrections from the Draft EIS. The Abbreviated Final EIS consists of two parts:

- Technical Attachment (contained herein), and
- Draft EIS (as published in December 2003)

This Technical Attachment contains the following elements:

- Errata Sheets; making necessary corrections to the Draft EIS
- The Proposed Project
  - The Preferred Alternative
  - Revisions to the Draft EIS Technical Analysis
  - Mitigation Commitments
- Response to Comments on the Draft EIS
- Appendices
  - Final Section 4(f) Evaluation

The Draft EIS issued in December 2003 remains unchanged and will be reissued only to individuals or agencies specifically requesting a copy.

Together, this Technical Attachment and Draft EIS constitute a full disclosure document that is intended to help public officials make decisions with a complete understanding of the environmental consequences of the action and take measures to protect, restore, and enhance the environment.

2.0 ERRATA SHEETS

The Draft EIS is incorporated by reference herein and made a part of the Final EIS.

The purpose of this section is to detail corrections to errors or omissions in the analysis documented in the Draft EIS. Based on a comprehensive review of all comments received on the Draft EIS, technical errors or omissions requiring errata sheets are provided for the following:

- Social and Community Environment
  - Community Resource Impacts for Alternatives 3 and 4
- Architectural and Archaeological Resources
  - Eligibility of the A.H. Cole Memorial building to the National Register of Historic Places (NRHP)
- Noise
  - Location of noise monitor sites #8 and #9
- Floodplains and Water Body Modifications
  - Hay Creek channel alteration and elevation

2.1 SOCIAL AND COMMUNITY ENVIRONMENT ERRATA SHEET

On pages 48-49 of the Draft EIS, Social and Community Environment section, the assessment of impacts to the Pequot Lakes city-owned building (old Sibley Township Town Hall) and the Jenkins Jehovah Witness Church property were incorrectly stated for Alternatives 3 and 4. The following provides a corrected assessment for Alternatives 3 and 4 for potential impacts to the old Sibley Township Town Hall and the Jenkins Jehovah Witness Church.

Alternative 3 – Existing Alignment with Pequot Lakes Bypass

The proposed interchange at the realigned intersection of CR 15/115 and TH 371 would potentially require the acquisition and relocation of the Jenkins Jehovah Witness Church.

Alternative 4 –Existing Alignment with Pequot Lakes and Jenkins Bypasses

As a result of the Pequot Lakes and Jenkins bypasses, the realigned highway would potentially impact the old Sibley Township Town Hall. Also, the preliminary construction limits of Alternative 4 indicate impacts to the Jehovah Witness Church property would be limited to right-of-way acquisition with no direct effect to the church building or parking area.

2.2 ARCHAEOLOGICAL AND ARCHITECTURAL RESOURCES ERRATA SHEET

Following the publication of the Draft EIS, it was determined that the A.H. Cole Memorial Building is eligible for listing on the NRHP.

The preferred alternative includes reconstruction and expansion of Highway 371 along the east property line of the A.H. Cole Memorial Building. The Minnesota Department of Transportation (Mn/DOT) Cultural Resources Unit has examined the proposed improvements associated with the preferred alternative and determined the project will not result in an adverse effect on the building or property. The State Historic Preservation Office (SHPO) concurrence letter is attached in Appendix C.

2.3 NOISE ERRATA SHEET

Table 13 and Figure 15 in the Noise section of the Draft EIS incorrectly illustrated the location of noise monitor sites #8 and #9 and their distance from the centerline of the highway. Noise monitor site #8 was located approximately 705 feet from Highway 371 at the north end of Edna Lake. Noise monitor site #9 is on the north end of Lower Cullen Lake approximately 2,640 feet east of Highway 371. Table 1 below provides the correct distances.

Table 1
Highway 371 Monitored Noise Levels (dBA)

Site Number	Date	Time	L_{10}	L_{50}	Distance to Highway Centerline (feet)
8	11/06/02	2:10 p.m. – 3:11 p.m.	57.5	51.0	705′
9	11/07/02	8:40 p.m. – 9:44 a.m.	54.5	50.5	2,640′

Source: AGC Developments, SBP Associates, and SEH.

2.4 FLOODPLAINS AND WATER BODY MODIFICATIONS ERRATA SHEET

On pages 80-83 of the Draft EIS, Floodplains and Water Body Modifications section, the analysis incorrectly stated the location, elevation, and potential impacts to the Hay Creek waterway. This oversight is the result of a discrepancy between the Crow Wing County and Cass County Protected Waters maps, which identifies the designated Hay Creek waterway in different locations. As such, the floodplain analysis for Hay Creek in the Draft EIS analysis was incorrect. Table 2 provides a corrected assessment of potential impacts to the Hay Creek floodplain. This analysis is based on new information collected for the Hay Creek waterway as designated on the Cass County Protected Waters Map.

Table 2
Existing Highway 371 Roadway Grade Elevations at Floodplain Crossings Compared to Estimated 100-Year Flood Elevations

River Crossing By Waterway Name	Highway 371 Roadway Elevation	100-year Flood Elevation	Height of Roadway Grade Above 100-year Floodplain
Hay Creek	1,271 msl	1,265 msl	6 feet

msl= Mean Sea Level
Source: SEH

The flowage that was assessed as Hay Creek in the Draft EIS will be referred to as Unnamed Flowage-North. Furthermore, since the publication of the Draft EIS, an additional floodplain area has been identified north of County Road (CR) 16 in the City of Jenkins. This floodplain area will be referred to as Unnamed Flowage-South. Section 4.2 – Floodplains provides a complete assessment of floodplain impacts associated with the preferred alternative improvements (Alternative 2 from the Draft EIS).

3.0 PROPOSED PROJECT

The Draft EIS is incorporated by reference herein and made a part of the Final EIS. Figure 3 depicts the build alternatives that were considered in the Draft EIS.

3.1 THE PREFERRED ALTERNATIVE

The preferred alternative for the Highway 371 North Improvement Project is Alternative 2 from the Draft EIS. The alignment is illustrated on Figure 2 and is shown in greater detail on Figures A1 through A14, located in Appendix A. This section presents the reasons for selecting Alternative 2 as the preferred alternative, describes the primary design elements of the project, the design changes that have occurred since the completion of the Draft EIS, and provides a project cost estimate.

Reasons for Selecting the Preferred Alternative

After concluding the Draft EIS comment period on February 9, 2004, an evaluation process was initiated by Mn/DOT and FHWA to select a preferred alternative for the Highway 371 North corridor. The evaluation process considered all the public and agencies comments received, and weighed the project goals and needs against the technical analysis and potential effects of each alternative. Through this process, Alternative 2 was identified as the preferred alternative. The primary factors that led to the selection of Alternative 2 included:

- Reduced impacts on the natural environment
- Reduced relocation impacts (residential and commercial)
- Lowest project costs (construction and right-of-way)
- Highest benefit-Cost
- Benefit to economic access to businesses
- Highest community support and ability to implement recommendations

Impacts on the Natural Environment – Wetland, vegetation, and farmland impacts for Alternative 2 were lower than Alternatives 3, 4, and 5. In addition, alignment revisions to the preferred alternative have further reduced potential wetland impacts as documented in the Wetland Finding found in Section 4.2.

Relocation Impacts – Alternative 2 requires the least number of residential relocations.

Project Costs (Construction and Right-of-Way) – Alternative 2 is estimated to cost approximately $65 million, which is less than the other build alternatives. Furthermore, the preferred alternative will require the acquisition of approximately 134 acres of new right-of-way, which is substantially less compared to the other build alternatives (Alternative 3: 405 acres; Alternative 4: 416 acres; and Alternative 5: 280 acres).

Figure 3 – Draft EIS Build Alternatives

Benefit-Cost (B/C) – Alternative 2 has the highest benefit-cost ratio, meaning it provides the greatest amount of return for the investment.

Economic Impacts – Alternative 2 holds the greatest potential for benefiting existing highway commercial businesses located adjacent to the corridor.

Ability to Implement Recommendations (Community Support) – A thorough review of all public and agency comments was conducted. The City of Pequot Lakes and the City of Jenkins both passed resolutions stating their preferences for Alternative 2.

Description of the Preferred Alternative

The preferred alternative extends between Crow Wing CR 18 in Nisswa, Minnesota to Cass CR 2/42 in Pine River, Minnesota, a distance of approximately 16 miles (see Figure 1 and Figures A1 through A14 in Appendix A). It generally follows the existing highway alignment as a four-lane divided highway and consists of two through lanes in each direction with paved shoulders, separated by a depressed grass median in rural areas and a raised concrete median in urban areas. Left and right turn lanes will be constructed at various locations to provide safe access to/from public roadways and private drives that intersect or access Highway 371. Figure 4 depicts the typical roadway sections (urban and rural) for the preferred alternative. Several short frontage roads or connection roads will be constructed to consolidate access and/or maintain adequate connections to the local and regional road network.

Additional improvements associated with the preferred alternative include new and lengthened bridges, culvert replacement, storm water Best Management Practices (BMPs), and implementation of access management strategies.

The preferred alternative includes the implementation of access management controls that will enhance mobility along the roadway and improve overall traffic operations including reducing crashes. The four-lane divided highway will continue to provide access to all existing properties, but in several instances, only frontage roads and right-in/right-out access will be provided. The planning and design phase of the preferred alternative strove for full access intersections at intervals consistent with the Mn/DOT Access Management Policy: Highway Access Category System and Spacing Guidelines. Since this segment of Highway 371 is classified as a Medium Priority Interregional Corridor, the targeted full access spacing in the rural area of the corridor was 1-mile, while in the urban sections the target spacing was ¼-mile.

A detailed description of the preferred alternative is provided below by the three study segments (south, central, north) that were established in the Draft EIS.

Figure 4 – Typical Roadway Sections

South Segment – Extends from the intersection of CR 18 in Nisswa to the CR 107/168 intersection (see Figures A1 and A2 in Appendix A).

Highway 371 will be four-lane divided with a rural design cross section (depressed grass median and grass ditches). Through a large portion of this segment, the existing highway will serve as the southbound lanes, while two new lanes will be constructed to the east for northbound traffic. North of Lower Cullen Lake, the preferred alternative will be constructed on new alignment for a short distance, which will require the construction of bridges over a wetland basin located immediately south of the CR 29/107 intersection. This realignment is necessary to correct design deficiencies (horizontal and vertical curves) and avoid direct impacts to Edna Lake and West Twin Lake. Full access intersections will be provided at CR 18, Roy Lake Road, CR 29/107, Olson Road, and CR 107/168. Three-quarter access intersections (right-in/right-out and left-in only) will be provided at the junction of north CR 18 and Highway 371, north of the existing traffic signal in downtown Nisswa.

Central Segment – Extends from the CR 107/168 intersection in Pequot Lakes to 36th Street near the Crow Wing/Cass County line, which is located just north of the Jenkins city limits (see Figures A3 through A10 in Appendix A).

The four-lane divided alignment continues through this segment. The cross-section will transition between a rural and urban design extending through and between downtown Pequot Lakes and Jenkins. The rural design is characterized by a depressed grass median and grass ditches, while the urban design is a narrower roadway with raised concrete medians and curb and gutter. In the urban design areas, a storm water collection system will be built to convey runoff to treatment areas, such as detention ponds and infiltration areas.

Full access intersections will be provided at Morehouse Drive, CR 11, CR 17, CR 16, CR 15, and Ultra Flight Drive. Three-quarter access intersections (right-in/right-out and left-in only) will be provided at Derkson Road, West Lake Road, Grove Street, and Lilac/Veteran Street.

North Segment – Extends from the 36th Street intersection north of Jenkins to the CR 2/42 intersection in Pine River (see Figures A11 through A14 in Appendix A).

The preferred alternative continues north as a rural four-lane divided highway to the south limits of Pine River where it transitions and continues to the north project limits as an urban roadway section before transitioning back to a two-lane undivided roadway to the north.

Except for the section of highway through downtown Pine River, the existing highway will primarily serve as the new southbound lanes, while two new lanes will be constructed to the east for northbound traffic. Through downtown Pine River, the existing highway will serve as the northbound lanes with the majority of new construction occurring to the west.

Full access intersections will be provided in the North Segment at 32nd Street/CR 115/Hassman Road, CR 44, new intersection south of 20th Avenue, TH 84, and CR 2/42. Three-quarter access intersections (right-in/right-out and left-in only) will be provided at 20th Avenue and CR 1/Elwell Road/Ridge Avenue.

3.2 FUNDING AND SCHEDULING

Funding

The Highway 371 North Improvement Project has been listed in the Mn/DOT (District 3 - Baxter) 10-year plan. It is anticipated that federal funds would be the primary source of funding (80 percent) with a 20 percent state match.

Schedule for Environmental Review

Completion Date	Task/Activity
October 2002	Federal Notice of Intent
November 2002	Release of SD/DSDD for public comment; begin 30-day comment period
December 2002	Public Scoping Meeting
February 2003	Final Scoping Decision Document
February 2003	State EIS Preparation Notice
November 2003	Amended Scoping Decision Document
December 2003	Distribute Draft EIS for agency/public comment; start of Draft EIS comment period
January 2004	Public Hearing on Draft EIS
March 2004	Selection of Preferred Alternative by Mn/DOT
Winter 2005	Distribute Final EIS
Winter 2005	Mn/DOT Adequacy Determination
Winter 2005	FHWA ROD
2007-2011	Final Design and Right-of-Way Acquisition
2011-2012	Construction Starts

Project Cost

The construction cost estimate for the preferred alternative is presented in Table 3. The estimate includes construction (pavement and structures) and right-of-way acquisition costs.

Table 3
Preliminary Cost Estimates (2004 dollars)

Alternative	Construction Costs[1]	Right-of-way Acquisition Costs	Total Costs
Preferred Alternative	$51,100,000	$8,800 000	$59,900,000

[1] Includes four-lane roadway, frontage roads, local road and driveway connections, trail relocation, and other mitigation.

Source: SEH

In comparison to the cost estimates for Alternative 2 in the Draft EIS, the estimate for the preferred alternative is slightly lower primarily because of reduced right-of-way costs.

4.0 REVISIONS TO THE DRAFT EIS

4.1 PREFERRED ALTERNATIVE DESIGN REFINEMENTS

The design of Alternative 2, which has been identified as the preferred alternative, has been modified since completion of the Draft EIS in response to public and agency comments and to reduce social, economic, and environmental impacts to the extent practical.

Centerline Spacing

The centerline spacing for the rural design segments has been reduced from 100 feet to 90 feet. Furthermore, the centerline spacing for the segment between CR 18 in Nisswa through the lakes area (Edna Lake, Lower Cullen Lake, East Twin Lake, and West Twin Lake) has been reduced to 75 feet to minimize impacts on this unique, environmentally sensitive area. The centerline spacing will widen to 90 feet for a short distance at the intersection of Highway 371 and CR 29/CR 107 for safety and operational purposes because this intersection experiences higher volumes of recreation vehicles and trucks. The centerline spacing in the urban sections remains at 48 feet.

Frontage Roads/Local Road Connections

The majority of the frontage and backage road concepts remain unchanged. Some modifications have occurred to improve safety and operations, further reduce impacts, and address comments. Modifications include, but are not limited to, the following:

- Removal of proposed frontage road connecting Lower Cullen Road and Wilderness Ridge Road
- Extension of west side frontage road from CR 29/107 to the south to consolidate private drives and reduce access to the highway
- Removal of east side frontage road south of Derkson Road in Pequot Lakes
- Realignment of proposed backage road connecting Government Drive and Front Street in Pequot Lakes
- Realignment of Ultra Flight Drive north of downtown Jenkins
- New east side frontage road located north of CR 44
- Modification of frontage road and local road connections near 20th Avenue south of downtown Pine River

Access

All full access intersections shown for Alternative 2 in the Draft EIS remain for the preferred alternative with the exception of 20th Avenue near the south

end of Pine River. A new, full access intersection is being proposed at the next intersection to the south, and 20th Avenue is proposed to be a ¾ access intersection. This access change was made in response to the public and Wilson Township officials expressing a need to provide full access at their industrial park. In addition, the ¾ access intersection previously located between Roy Lake Road and CR 29/107 has been removed, and access is being supplemented with an extension of the west side frontage road. All private access along the corridor is proposed to be closed, consolidated, or right-in/right-out access only. Access details will be further determined through discussions with the communities and during the right-of-way acquisition process.

4.2 REVISIONS IN THE DRAFT EIS ANALYSIS AND MITIGATION COMMITMENTS

The design refinements noted above have resulted in modifications to the technical analysis presented in the Draft EIS. The revised analysis is presented below.

Right-of-Way and Relocation

Overall, changes in the alignment design have been minor, and the resulting modifications to the right-of-way impact assessment are not substantial in any specific area. Table 4 provides the revised estimate of potential right-of-way and relocation impacts.

Table 4
Preferred Alternative Right-of-Way and Relocation Impacts

Alternative	Additional Right-of-Way Needed (acres)	Number of Relocations		
		Residential	Commercial	Total
Preferred Alternative	**134**	**6**	**5**	**11**

Note: Right-of-way impacts for the preferred alternative are based on the preliminary layout and are subject to change as a result of the right-of-way acquisition process.
Source: SEH

Comparing Table 4 with Tables 6 and 7 in the Draft EIS reveals a decrease in right-of-way needed. Based on the more detailed construction limits for the preferred alternative, it was determined one additional residential relocation would likely occur as compared to Alternative 2 in the Draft EIS.

Residential Relocations

As indicated in Table 4, the preferred alternative requires acquisitions and relocation of six residences. Three of the residences are located in southern Pequot Lakes between the CR 29/107 and CR 107/168 intersections, and the other three are located in Wilson Township south of the auto dealership.

Upon review of the properties affected and the general real estate market conditions and trends in and around the study area, it is anticipated that

adequate replacement housing sites will be available at the time right-of-way acquisition activities are initiated for the project.

Business Relocations

In general, the businesses identified below, which are proposed for acquisition, are presently on sites that offer good highway access and visibility. A comparison of the characteristics of the sites to be acquired and the various commercial zoning districts indicates there is a reasonably good chance of finding suitable replacement sites for these businesses. Some or all of these businesses may be able to find new locations within the Highway 371 corridor. However, the distance from the highway, type of access, and visibility may be different from existing conditions.

In order to more fully understand the impacts of acquiring the five commercial establishments, further information was collected.

Nisswa Area

The construction of a new CR 18 intersection will impact Dick Parks Gas (see Figure A1). This business employs approximately 5 to 10 people to service LP gas tanks. Through contacts with the City of Nisswa and a review of current land uses, there is adequate land in the area available for relocation of the business.

Pequot Lakes Area

United Building Center, located east of existing Highway 371 and north of Sibley Street, will be impacted as a result of constructing a frontage road that will connect Front Street and Sibley Street (see Figure A6). The business sells construction materials and employs approximately 10 to 15 people. The business intends to relocate in the area, and currently, there are sufficient vacant commercial properties available for relocation.

Country Cooking is a small cafe/restaurant (5 to 10 employees) located near the intersection of Front Street and Highway 371 (see Figure A6). The cafe will be impacted as a result of constructing a frontage road that will connect Front Street and Sibley Street. Current land uses indicate there are sufficient vacant commercial properties available for relocation.

A vacant commercial building located on West Lake Road will be impacted as a result of constructing the backage road west of Highway 371 (see Figure A6). Contacts with the City of Pequot Lakes verified the building as vacant.

Jenkins Area

Jenkins Auto is located along the east side of Highway 371 just south of Veteran Street (see Figure A8). The used auto sales business, which employs one person, will be impacted to construct a frontage road and new access intersection. Current land uses indicate there are sufficient vacant commercial properties available for relocation.

Pine River Area

One additional commercial establishment is affected by the project, but is not considered a relocation. Mn/DOT holds a property lease with Gilchrist Realty (approximately three employees) for a building located on Mn/DOT owned right-of-way immediately south of the Pine River Depot. Mn/DOT is currently negotiating a short-term lease with the business owner. The lease will be terminated by Mn/DOT prior to construction, and the business will be required to move off the state owned right-of-way. It is likely the business will relocate in the area, and currently, there are sufficient vacant commercial properties available.

Right-of-Way and Relocation Mitigation

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and 49 CFR Part 24 provides that assistance be granted to persons, businesses, farms, and non-profit organizations that are displaced by public improvements, such as the Highway 371 North Improvement Project.

Mn/DOT 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 certain 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.

If necessary, Last Resort Housing provisions will be implemented to ensure comparable replacement housing is available to each displacee. These provisions may include increased replacement housing payments or other alternate methods based on reasonable costs.

Relocation costs will also be made available to all acquired businesses. In addition to the advisory services, payment may be made for certain expenses pertaining to:

- Actual, reasonable, and necessary moving costs
- Reestablishment expenses (e.g., advertising, signage, utility hookups)
- Loss of tangible personal property as a result of relocation or discontinuance of a business

- Costs incurred in searching for a replacement site
- Fixed payment in lieu of moving and reestablishment costs

Parks and Public Recreational Areas

As stated in the Draft EIS, the Paul Bunyan Trail will be impacted as a result of the preferred alternative. A Final Section 4(f) Evaluation has been completed, which includes an assessment of trail impacts, avoidance and minimization measures, and mitigation (see Appendix B). Staff from Mn/DOT and Minnesota Department of Natural Resources (MNDNR) Trails and Waterways Division have continued to coordinate throughout the EIS process. A letter from the MNDNR regarding the potential trail impacts and mitigation plan is included in the Final Section 4(f) Evaluation.

Section 106 (Architectural & Archaeological 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 cultural resources investigation of the proposed Highway 371 corridor was conducted. The historic, architectural, and archaeological investigations resulted in technical reports that are available for review at the Mn/DOT and SHPO offices in St. Paul, Minnesota.

Based on the reports, there are a total of five historic resources eligible for the National Register of Historic Places within the area of potential effect (APE) for the preferred alternative: Drew Cabin complex, the Molstad property, the Brainerd and Northern Minnesota Railroad, A.H. Cole Building, and Pine River Railroad Depot. Portions of the Brainerd and Northern Minnesota Railroad and the Pine River Railroad Depot will be impacted as a result of the preferred alternative. The Final Section 4(f) Evaluation (located in Appendix B) provides greater detail of potential effects to the Brainerd and Northern Minnesota Railroad and the Pine River Railroad Depot. The assessment concluded there will be no adverse effect and no property acquired on the Drew Cabin complex, Molstad property, and A.H. Cole Building. Appendix C contains the Mn/DOT Cultural Resources Unit findings and determinations and the SHPO concurrence letter.

The mitigation measures have been incorporated into a Memorandum of Agreement (MOA) that was developed and approved by Mn/DOT, FHWA, the U.S. Army Corps of Engineers (USACE), the SHPO, City of Pine River, City of Pequot Lakes, Pine River Chamber of Commerce, and Heritage Group North (see Attachment B in Appendix B).

Noise

With the selection of the preferred alternative, a more detailed analysis of noise impacts was undertaken. The objective was to quantify the impacts of

the preferred alternative using a more detailed model that considers the refined alignment, locations of specific receptors, and the topography of the area. The modeling results were used to determine the need for and cost reasonableness and feasibility of potential noise walls.

As described in the Draft EIS, existing noise levels along Highway 371 were measured at nine locations. Figure 15 of the Draft EIS depicts the noise monitoring locations, and Table 13 of the Draft EIS indicates the measured noise levels. The purpose of the monitoring was to establish base case conditions and to assist in calibrating the noise prediction model. Since publication of the Draft EIS, noise monitoring was conducted at one additional location near Lower Cullen Lake on July 5, 2004. The data collected from this monitoring event was not used in the calibration of the noise model because heavy levels of traffic and congestion along Highway 371 resulted in greatly reduced travel speeds and notably lower noise levels.

Post-development traffic noise levels were predicted using Mn/DOT's MINNOISE computer model. The MINNOISE model is a Mn/DOT modified version of the FHWA's Optima/Stamina model. The model is used to predict noise levels from highway projects and to assist with the assessment and development of noise barriers. Modeled results were compared to Minnesota noise standards and federal noise abatement criteria to determine the potential effects of the preferred alternative.

Modeled Noise Assessment

The probable noise impacts of the preferred alternative have been analyzed and documented in the Highway 371 Reconstruction Project Noise Impact Assessment and Noise Wall Mitigation Analysis Report, dated July 2004 and the addendum dated August 2004. This section summarizes the findings of the report. A copy of the complete report is available for review at the Mn/DOT District 3 Office in Baxter.

A total of 60 noise receptor sites (43 residential and 17 commercial) were evaluated. The noise receptor sites are illustrated throughout Figures A1 through A14, located in Appendix A. Both daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) peak hour traffic conditions (worst case) were modeled. In contrast to the analysis that was performed in the Draft EIS, the new analysis took into account the differences in elevation between the roadway and the potentially affected receptors.

Noise walls were also modeled in selected locations. Possible noise walls were sited in locations considered potentially feasible candidates for noise mitigation based upon relatively higher development densities.

Model Results

Noise levels were modeled for the year 2030 (based on the projected 2030 traffic volumes) for the No-Build Alternative and the preferred alternative.

Tables 5 and 6 illustrate the results of the noise analysis for daytime and nighttime values for the 43 residential receptors. Tables 7 and 8 illustrate the results of the noise analysis for the 17 commercial receptors. Results are shown in decibels (dBA) for an L_{10} (meaning the noise level that is exceeded 10 percent of the time.

South Segment

For the No-Build Alternative, seven out of twelve residential receptors were modeled as exceeding the daytime standard of 65 dBA, and all twelve were modeled as exceeding the nighttime standard of 55 dBA. For the preferred alternative, daytime noise levels will increase to a varying degree at ten of the residential receptors, while two receptors (R9 and R11) show a slight decrease. The nighttime standards will be exceeded at all 12 residential receptors. It should be noted that monitoring of existing conditions indicates the nighttime standards are already exceeded at 10 of the 12 residential receptors, independent of any effects from the proposed project.

Comparing the preferred alternative against the existing conditions indicate that 10 residential receptors within the south segment will have a noticeable increase in daytime noise levels, and one receptor will have a noticeable decrease (a 3 dBA change is considered the limits of human perception). Furthermore, three residential receptors will experience a substantial increase (change of 5 dBA or more).

One commercial receptor was modeled in the south segment. Noise levels at this receptor indicate 2030 daytime noise levels for the No-Build Alternative approach the state standard, and exceed the standard for the preferred alternative. When comparing the 2030 preferred alternative against the existing conditions, the noise model predicts this one commercial receptor will experience a substantial increase (change of 5 dBA or more) in noise levels.

Central Segment

For the No-Build Alternative, 12 out of 22 receptors were modeled as exceeding the daytime standard and 20 were modeled as exceeding the nighttime standard. For the preferred alternative, daytime noise levels will increase at 19 receptors and 21 out of 22 receptors will exceed nighttime standards. Only Receptor R16 would remain below the nighttime standard. It should be noted that monitoring indicates the nighttime standards in the central segment are already exceeded at 19 of the 22 receptors (existing), independent of any effects from the proposed project.

Comparing the preferred alternative against the existing conditions indicate that 18 receptors will have a noticeable increase, and one receptor will have a noticeable decrease (change of 3 dBA). Furthermore, eight receptors will experience a substantial increase (change of 5 dBA or more).

Table 5
Highway 371 Modeled L_{10} Daytime Noise Levels (Residential Receptors)
See Appendix A for Receptor Locations

	Receptor[1]	Existing	2030 No-Build	2030 No-Build vs. Existing Change*	2030 Build	2030 Build vs. Existing Change*	2030 Build vs. 2030 No-Build Change
South Segment	R1	64	67	**3**	70	***6***	**3**
	R2	61	63	2	64	**3**	1
	R3	58	60	2	61	**3**	1
	R4	57	60	**3**	61	**4**	1
	R5	65	67	2	68	**3**	1
	R6	67	71	**4**	70	**3**	-1
	R7	66	68	2	73	***7***	***5***
	R8	64	67	**3**	67	**3**	0
	R9	71	76	**5**	69	-2	***-7***
	R10	56	58	2	59	**3**	1
	R11	66	69	**3**	62	**-4**	***-7***
	R12	60	63	**3**	66	***6***	**3**
Central Segment	R13	69	71	**3**	66	**-3**	***-5***
	R14	62	65	**3**	63	1	-2
	R15	64	67	**3**	71	***7***	**4**
	R16	54	56	2	57	**3**	1
	R17	59	64	**5**	62	**3**	-2
	R18	65	67	2	71	***6***	**4**
	R19	60	62	2	64	**4**	2
	R20	66	68	2	70	**4**	2
	R21	66	69	**3**	71	***5***	2
	R22	68	70	2	72	**4**	2
	R23	66	68	2	71	***5***	**3**
	R24	57	59	2	60	**3**	1
	R25	60	62	2	62	2	0
	R26	64	67	**3**	66	2	-1
	R27	68	70	2	71	**3**	1
	R28	53	57	**4**	58	***5***	1
	R29	59	62	**3**	67	***8***	***5***
	R30	60	64	**4**	65	***5***	1
	R31	64	67	**3**	69	***5***	2
	R32	64	67	**3**	68	**4**	1
	R33	61	64	**3**	65	**4**	1
	R34	61	63	2	64	**3**	1
North Segment	R35	62	65	**3**	68	***6***	**3**
	R36	60	63	**3**	66	***6***	**3**
	R37	59	62	**3**	64	***5***	2
	R38	59	62	**3**	64	***5***	2
	R39	59	62	**3**	62	**3**	0
	R40	65	67	2	68	**3**	1
	R41	60	63	**3**	63	**3**	0
	R42	64	67	**3**	67	**3**	0
	R43	60	63	**3**	63	**3**	0

Shaded values identify modeled noise levels that meet or exceed the state standards.

[1] See Appendix A for receptor locations.

* **0** ≥ 3 dBA change (noticeable); ***0*** ≥ 5 dBA change (substantial)

Source: AGC Developments, Inc.

Table 6
Highway 371 Modeled L_{10} Nighttime Noise Levels (Residential Receptors)
See Appendix A for Receptor Locations

	Receptor[1]	Existing	2030 No-Build	2030 No-Build vs. Existing Change*	2030 Build	2030 Build vs. Existing Change*	2030 Build vs. 2030 No-Build Change
South Segment	R1	60	63	3	66	*6*	3
	R2	57	60	3	61	4	1
	R3	54	57	3	58	4	1
	R4	54	56	2	58	4	2
	R5	61	64	3	64	3	0
	R6	63	67	4	66	3	-1
	R7	62	65	3	69	*7*	4
	R8	61	64	3	63	2	-1
	R9	67	72	5	65	-2	*-7*
	R10	53	55	2	56	3	1
	R11	62	65	3	59	-3	*-6*
	R12	57	60	3	62	*5*	2
Central Segment	R13	65	68	3	62	-3	*-6*
	R14	58	61	3	59	1	-2
	R15	60	63	3	67	*7*	4
	R16	50	53	3	54	4	1
	R17	55	60	5	59	4	-1
	R18	61	64	3	68	*7*	4
	R19	56	59	3	61	*5*	2
	R20	62	65	3	66	4	1
	R21	62	65	3	68	*6*	3
	R22	64	67	3	69	*5*	2
	R23	62	65	3	67	*5*	2
	R24	53	56	3	57	4	1
	R25	56	59	3	59	3	0
	R26	60	63	3	63	3	0
	R27	64	67	3	67	3	0
	R28	51	53	2	55	4	2
	R29	56	59	3	63	*7*	4
	R30	57	60	3	61	4	1
	R31	60	63	3	65	*5*	2
	R32	60	63	3	64	4	2
	R33	57	60	3	61	4	1
	R34	57	60	3	61	4	1
North Segment	R35	59	61	2	65	*6*	4
	R36	57	60	3	62	*5*	2
	R37	55	58	3	60	*5*	2
	R38	56	59	3	60	4	1
	R39	55	58	3	59	4	1
	R40	61	64	3	64	3	0
	R41	57	59	2	59	2	0
	R42	61	63	2	63	2	0
	R43	57	59	2	60	3	1

Shaded values identify modeled noise levels that meet or exceed the state standards.

[1] See Appendix A for receptor locations.

* **0** ≥ 3 dBA change (noticeable); ***0*** ≥ 5 dBA change (substantial)

Table 7
Highway 371 Modeled L_{10} Daytime Noise Levels (Commercial Receptors)
See Appendix A for Receptor Locations

	Receptor[1]	Existing	2030 No-Build	2030 No-Build vs. Existing Change*	2030 Build	2030 Build vs. Existing Change*	2030 Build vs. 2030 No-Build Change
South Segment	C1	66	69	3	73	***7***	4
Central Segment	C2	64	67	**3**	69	***5***	2
	C3	66	68	2	71	***5***	**3**
	C4	67	69	2	71	**4**	2
	C5	66	69	**3**	69	**3**	0
	C6	64	66	2	66	2	0
	C7	67	70	**3**	69	2	-1
	C8	68	70	2	71	**3**	1
	C9	63	65	2	67	**4**	2
	C10	64	67	**3**	68	**4**	1
	C11	64	68	**4**	68	**4**	0
	C12	69	73	**4**	72	**3**	-1
	C13	65	68	**3**	72	***7***	**4**
North Segment	C14	64	66	2	64	0	-2
	C15	62	65	**3**	65	**3**	0
	C16	65	67	2	68	**3**	1
	C17	70	73	**3**	71	1	-2

Shaded values identify modeled noise levels that meet or exceed the state standards.

[1] See Appendix A for receptor locations.

* **0** ≥ 3 dBA change (noticeable); ***0*** ≥ 5 dBA change (substantial)

Table 8
Highway 371 Modeled L_{10} Nighttime Levels Assessment (Commercial Receptors)
See Appendix A for Receptor Locations

	Receptor[1]	Existing	2030 No-Build	2030 No-Build vs. Existing Change*	2030 Build	2030 Build vs. Existing Change*	2030 Build vs. 2030 No-Build Change
South Segment	C1	62	65	**3**	69	***7***	**4**
Central Segment	C2	60	63	**3**	65	***5***	2
	C3	62	64	2	67	***5***	**3**
	C4	63	66	**3**	68	***5***	2
	C5	63	66	**3**	65	2	-1
	C6	60	63	**3**	62	2	-1
	C7	63	66	**3**	65	2	-1
	C8	64	67	**3**	67	**3**	0
	C9	59	62	**3**	63	**4**	1
	C10	61	64	**3**	64	**3**	0
	C11	61	64	**3**	63	2	-1
	C12	66	69	**3**	68	2	-1
	C13	61	64	**3**	68	***7***	**4**
North Segment	C14	60	63	**3**	61	1	-2
	C15	58	61	**3**	61	**3**	0
	C16	61	63	2	64	**3**	1
	C17	66	68	2	66	0	-2

[1] See Appendix A for receptor locations.
* **0** ≥ 3 dBA change (noticeable); ***0*** ≥ 5 dBA change (substantial)

Twelve commercial receptors were modeled. For the No-Build Alternative, three commercial receptors exceed the daytime standard of 70 dBA. For the preferred alternative, five of the twelve commercial receptors exceed the daytime standard. When comparing the 2030 preferred alternative against the existing condition, the noise model predicts three commercial receptors in the central segment will experience a substantial increase in noise levels.

North Segment

For the No-Build Alternative, three of the nine receptors were modeled as exceeding the daytime standard, and all nine exceed the nighttime standard. For the preferred alternative, daytime noise levels will increase to a varying degree at five receptors as compared to the No-Build Alternative. The preferred alternative exceeds nighttime standards at all nine receptors. Monitoring indicates the nighttime standards in the north segment are already exceeded at all nine receptors, independent of any effects from the proposed project.

Comparing the preferred alternative against the existing conditions indicate that all nine receptors within the north segment will have a noticeable

increase (change of 3 dBA) and four receptors will experience a substantial increase (>5 dBA) in daytime noise levels.

Four commercial receptors were modeled. One commercial receptor exceeds the daytime standard of 70 dBA for the existing condition, the No-Build Alternative, and the preferred alternative. When comparing the 2030 preferred alternative against the existing conditions, the model predicts two commercial receptors will experience a noticeable increase in noise levels, but none will experience a substantial increase.

Mitigation

Mn/DOT has a standard set of criteria used to determine if and where noise walls are reasonable and feasible to construct. According to these criteria, noise wall locations are considered when one of the following factors exists:

- The noise levels in a neighborhood are presently in excess of the state's noise standards.
- The predicted noise levels in a neighborhood are expected to be in excess of the state's noise standards for the design year of the project. Mn/DOT usually considers the design year to be 20 years after the start of construction.
- The noise levels in a neighborhood are predicted to be "substantially" above current noise levels in the project design year. "Substantial" is defined as 5 dBA or greater.
- The predicted noise level approaches the standard. Approaching is defined as the predicted level being within 1 decibel from the standard.

If one of the above conditions is met, noise walls are considered for construction based on the following factors:

- Noise wall feasibility
- Cost reasonableness
- Land owner and community support

In order for a noise wall to be constructed by Mn/DOT, it must be able to be constructed at a "reasonable" cost. "Reasonable" cost is defined as $3,250/dBA reduction per residence or housing unit. This is determined by dividing the total cost of a wall (estimated at $15 per square foot) by the total decibel reduction for houses that are predicted to receive at least a 5 decibel reduction.

A detailed analysis of the effect of 10-foot and 20-foot noise walls was conducted at three locations along the project corridor. These locations were selected based on the relatively higher density of residential and/or development associated with overnight or established outdoor uses. The locations of the modeled noise walls are shown on Figure 5.

Figure 5 – Analyzed Noise Walls

The first step was to determine the effectiveness of each noise wall. The results of the assessment indicated that the three 20-foot noise walls do create a substantial reduction (> 5dBA) in noise levels for several receptors. The three areas were then studied in greater detail to determine feasibility and cost reasonableness from a cost-benefit perspective. The results of this analysis are presented in Table 9.

Table 9
Noise Wall Cost-Reasonableness Assessment

Wall Number	Location	Length	10-foot Wall Cost	20-foot Wall Cost
1	West of Highway 371 near Fritz's Campground	1,317 feet	$15,288/dBA	$2,659/dBA
2	West of Highway 371 and north of CR 29	1,298 feet	N/A*	$10,816/dBA
3	East of Highway 371 and west of Lower Cullen Road	647 feet	N/A*	$19,410/dBA

* 10-foot walls did not produce 5 dBA reductions at Noise Wall 2 or 3

As shown in Table 9, a 20-foot noise wall near Fritz's Campground (Wall 1) meets the Mn/DOT cost reasonableness threshold of $3,250/dBA per resident or overnight housing unit. According to Minnesota Rules Chapter 7030.0040, Subpart 2, campsites are included in the MPCA Noise Area Classification 1 and were included in the cost reasonableness calculations.

Since it was determined that the construction of Wall 1 was feasible and at a reasonable cost, the next step was to determine land owner and community support. Mn/DOT staff met with the owners of Fritz's Resort and Campground to discuss the proposed project design and noise issue. The resort and campground owners stated they were opposed to the construction of a noise wall in front of their commercial business because it would limit visibility from the highway and did not feel that a noise wall would be aesthetically appropriate in the rural and natural setting.

In summary, based on the results of the noise mitigation analysis, Mn/DOT is not proposing construction of noise walls as part of the Highway 371 North Improvement Project.

There are other noise mitigation and abatement options that can be considered by local units of government if desired. Options include:

- Buffering via Zoning Ordinance: Roadway rights-of-way and building setback requirements can be used within zoning ordinances to increase the distance from the highway. This option would help prevent future impacts; however, existing developments would not benefit unless redevelopment occurred.
- Acoustical Site Planning: Site planning can be used for the arrangement of newly constructed buildings to shield more sensitive land uses from noise impacts. Again, existing developments will only benefit if redevelopment occurs.

Mn/DOT will work with local government jurisdictions choosing to pursue any noise mitigation and abatement options along the corridor.

Water Quality and Surface Water Drainage

Water quality within the lakes located adjacent to the highway are presumed to be in good condition. The most consistent water quality data for area lakes is collected and published by the MPCA as part of the Citizen Lake Monitoring Program. Since 1973, the program has enlisted citizens to take weekly transparency measurements (secchi disk) and record perceptions of the physical appearance and recreational suitability of lakes. The information is then entered into the EPA's STORET national water quality data bank.

Several of the area lakes have had more extensive monitoring conducted during single seasons at various times since about 1986, but there is no long-term lake chemistry database on any particular lake within the project corridor. Some of the monitored parameters have included total phosphorus, transparency, chlorophyll-a, temperature, dissolved oxygen, ph, and possibly nitrates and/or ammonia. These parameters are usually collected once a month during the open water season in an effort to establish average lake values.

Furthermore, there are a small number of stream sites in the area that were selected randomly and sampled during 1999 to develop a fisheries IBI (index of biotic integrity). A couple of sites exist along the Pine River and smaller tributaries where volunteers through the Citizen Stream Monitoring Program measure and record transparency and temperature data.

Additionally, the Pine River Watershed Protection Foundation has completed some water chemistry work near the north end of the project and MNDNR Fisheries staff conducts intermittent water quality monitoring on lakes that are managed for sport fishing.

Surface Water Drainage

Existing surface water drainage from Highway 371 and the supporting roadways within the project area discharge directly to area lakes, streams, and rivers. This untreated roadway runoff contributes sediment with attached phosphorous to receiving water bodies, which adversely affects the water quality.

A preliminary assessment of urban storm water collection and treatment needs associated with the preferred alternative has been completed to determine if special considerations are required and whether substantial impacts would result from constructing a system. The assessment concluded there are no special design or treatment strategies required, and the construction of the system will not result in substantial impacts (i.e., wetland filling, right-of-way or relocation impacts).

A detailed storm water pollution prevention plan (SWPPP) will be developed during the final design phase. This plan will be completed in accordance with

the National Pollutant Discharge Elimination System (NPDES) Phase II permit requirements. Potential BMPs will likely include: grassed swales with berms, wet swales, vegetated filter strips, rock ditch checks, infiltration basins, detention ponds, and curb and catch basins in urban design segments.

The preferred alternative will have minimal effect on the existing drainage system including actual watershed areas and their boundaries. Existing culverts will need to be extended, resized, and potentially relocated to accommodate the wider roadway. Some areas may experience higher peak flows at culvert crossings as a result of increases in impervious surface. In addition, several new culverts and/or ditches will be constructed to maintain adequate drainage.

Floodplains

Presidential Executive Order 11988 – "Floodplain Management" and Minnesota Statutes 103F.101 to 103F.155 require federal and state agencies, in carrying out their proposed projects, to provide leadership and action to reduce the risk of flood loss and minimize the impacts of floods on human safety.

The Draft EIS identified the federal and state requirements for floodplain encroachments. The Draft EIS also identified and assessed several potential floodplain areas that could be encroached upon. The floodplain assessment followed the guidance provided in the Mn/DOT Highway Project Development Process manual. Supporting references include the United States Geological Service (USGS) Quadrangle Maps, aerial photographs, and Flood Insurance Rate Maps (FIRM) for the project area. MNDNR Ordinary High Water Levels do not exist for the subject floodplains discussed below.

The preferred alternative transversely encroaches (travels across) six floodplains in Crow Wing and Cass Counties. These areas are listed below.

- Cullen Brook – This stream channel and associated wetland complex conveys water from Lower Cullen Lake to Nisswa Lake. The preferred alternative encroaches on the floodplain in Section 11, Township 135 North, Range 29 West.

- Hay Creek – This waterway connects Jokela Lake west of Highway 371 to Upper Hay Lake, located east of Highway 371. The preferred alternative encroaches on the floodplain in the northwest quadrant of Section 27, Township 137 North, Range 29 West.

- Unnamed Flowage-North – This waterway begins just west of Highway 371 and connects with Hay Creek on the east side of the Highway. The preferred alternative encroaches on the floodplain in the southwest quadrant of Section 27, Township 137 North, Range 29 West.

- Unnamed Flowage-South – This waterway begins as part of a large wetland complex located west of Highway 371. The floodplain area crosses Highway 371 approximately 2,700 feet north of CR 16 in the City

of Jenkins. The preferred alternative encroaches on the floodplain in the southeast quadrant of Section 34, Township 137 North, Range 29 West.

- South Fork of the Pine River – This stream channel flows under Highway 371 in the southeast quadrant of Section 6, Township 137 North, Range 29 West.
- Pine River North Fork (Norway Brook) – This waterway conveys water from Norway Lake to the South Fork of the Pine River. The preferred alternative encroaches on the floodplain in Section 6, Township 137 North, Range 29 West.

The preferred alternative roadway elevations are at or within several feet of the existing Highway 371 elevations, and the preferred alternative roadway grade at these floodplain crossings is above the 100-year flood elevation (Table 10). The transverse crossing length measurements presented in the table are approximations.

Table 10
Highway 371 Floodplain Crossings

Waterway Name	100-Year Flood Elevation (msl)	Preferred Alternative Elevation (msl)	Roadway Height Above 100-Year Floodplain (feet)	Type of Crossing	Length of Crossing (feet)
Cullen Brook	1,196	1,205	9	Transverse	1,750
Hay Creek	1,265	1,271	6	Transverse	15
Unnamed Flowage-South	1,253	1,260	7	Transverse	15
Unnamed Flowage-North	1,258	1,266	8	Transverse	15
South Fork of the Pine River	1,270	1,275	5	Transverse	120
Pine River (Norway Brook)	1,280	1,282	2	Transverse	100

Notes: msl = Mean Sea Level
Source: FIRM and SEH

Hay Creek will require further analysis during the final design to develop a rechannelization and crossing concept that is favorable for effective fish passage. Presently, the Hay Creek channel flows in a southeasterly direction approaching Highway 371. The channelized creek then flows east under the highway through a culvert before turning south where it flows within the Highway 371 road ditch. The northbound lanes of the preferred alternative will impact the channelized portion of Hay Creek and require approximately 1,230 feet of the creek to be realigned. Coordination with the MNDNR Fishery and Area Hydrology staff will occur to discuss design options to ensure fish passage will not be hindered and an acceptable modification of the creek is constructed.

No impacts to natural and beneficial floodplain values are anticipated from the preferred alternative. Fish passage will be maintained at all crossings. Boat passage, which presently only occurs on the two Pine River crossings, will be maintained following construction. No effects to state or federal threatened or endangered species are anticipated (see Threatened and Endangered Species section and the Biological Opinion). Wetland impacts will occur within these floodplains, and these will be addressed in the wetland

permit application and replacement plan for the project. Water quality impacts will be minimized through erosion control and slope stabilization practices as required under NPDES permitting. A MNDNR Public Waters Permit will be required for Public Waters crossings.

No increased risk of flooding will result from the preferred alternative. The project will not result in any headwater or tailwater elevation changes. There are no special hydraulic features planned at the six crossings. The preferred alternative also crosses several small drainage ways. During final design, these drainage ways will be examined for localized flooding problems and corrected to the extent practicable.

The preferred alternative will not result in or cause incompatible floodplain development. No new access is being provided to the floodplain areas.

Overall, there is a low risk of flooding based on the type and location of floodplains located within the project area. There has been no history of overtopping the existing highway or flooding within any developments within close proximity of the project corridor.

Mitigation and Floodplain Permitting

The preferred alternative will be designed to ensure no restrictions to the channels of Cullen Brook, Hay Creek, Pine River, Norway Brook, and the two unnamed flowages in the City of Jenkins. This will be accomplished using appropriately sized culverts or bridging the open water channels. The USFWS Biological Opinion identifies several crossings where wildlife passage should be accommodated through the use of longer or wider bridges or culverts. Additional dredging or fill activities within the designated 100-year floodplain of any of the watercourses identified in the MNDNR Public Waters Inventory will be addressed in the MNDNR Public Waters Permit to be obtained. Dredge or fill activities that occur within wetlands located within the 100-year floodplain will also be addressed and permitted through the USACE Section 404 wetland permit and the Minnesota Wetland Conservation Act (WCA) of 1991 wetland approval.

No Practicable Alternative Finding

Several new alignment alternatives were considered during the scoping phase and in the Draft EIS. The evaluation considered an eastern bypass option that would have avoided impacts to Cullen Brook and a western bypass option that would have avoided impacts to Cullen Brook, Hay Creek, and the two unnamed flowages. The study concluded there would be marginal gains in traffic volume relief on Highway 371, the existing roadway would still need to be upgraded in order to operate as a safe facility, and the overall environmental impacts would be greater. As a result, new alignment alternatives were eliminated as an option for the project.

All floodplain areas transversely cross each build alternative considered in the Draft EIS. The preferred alternative was selected because it minimizes social and environmental impacts associated with the proposed improvements,

including but not limited to, vegetation, farmlands, economics, right-of-way, and relocations.

Wetlands

The abundance of wetlands in this region of Minnesota makes avoidance nearly impossible for a long linear construction project like the Highway 371 North Improvement Project. The need for an improved transportation facility in the study area is best met by the preferred alternative (Alternative 2), which is also the least environmentally damaging of the build alternatives considered in the Draft EIS.

Wetland impacts associated with the preferred alternative have been minimized throughout the project development process, and direct impacts to West Twin and Edna Lakes have been eliminated. Incorporating minimization measures has reduced the impact on wetlands from 22.28 acres at the time of the Draft EIS to 17.74 acres. The minimization measures included:

- Reduced rural typical section centerline spacing from 100 feet to 90 feet
- Extended 75-foot centerline spacing through the Lakes Area
- Shifted the highway near CR 17 to minimize impacts on a wetland adjacent to Sibley Lake (Wetland #21)
- Extended the urban section at the south end of downtown Jenkins, which reduced the centerline spacing and minimized impacts to Wetland #34

Table 11 shows an updated estimate of impacts by wetland type and topographic setting. Appendix D provides a more complete accounting of expected impacts to each wetland basin.

Table 11
Wetland Impact Acres by Type* and Topographic Setting

Wetland Type	Topographic Setting of Wetland					
	Isolated	Tributary	Flow Through	Riverine	Floodplain	Total
Type 1	0.18	0	0	0	0	**0.18**
Type 2	1.08	0	0	0	0.37	**1.45**
Type 3	1.06	0	0.13	0	0	**1.19**
Type 6	6.58	4.3	0.55	0	3.49	**14.92**
TOTAL	**8.9**	**4.3**	**0.68**	**0**	**3.86**	**17.74**

*Based on Wetlands of the United States, FWS Circular 39
Source: Mn/DOT and SEH

Additionally, approximately 1,200 feet of Hay Creek, which is currently channelized in the east roadway ditch north of Jenkins, will be relocated. Coordination with local MNDNR staff will determine the best location and configuration of the new channel so that water quality and fish movement will be enhanced.

The wetland impacts presented in Table 11 cannot be avoided without incurring excessive costs, additional commercial or residential relocations, and compromising public safety by reducing highway design standards (slopes, clear zones, curves).

Mitigation

Replacement of unavoidable wetland impacts will be in compliance with Section 404 of the CWA and related USACE regulations, the Minnesota WCA, and MNDNR Public Waters regulations. Fisheries habitat, floral diversity, water quality and wildlife habitat have been identified as the primary functions and values associated with wetlands in the corridor. Fishery and wildlife impacts have been avoided during project development to the maximum extent possible, and where impacts were unavoidable, mitigation includes creation of wildlife crossings and extended bridges or box culverts to improve fish and wildlife passage. Floral diversity of wetlands in the corridor will be protected by limiting encroachment and providing both a local seed source and additional native seeding of both wetland and upland areas. Water quality should actually be improved over the existing condition by providing NPDES storm water treatment within the corridor where none currently exists. Based on these considerations, wetland functions will be adequately replaced.

Potential on-site mitigation has proven to be very difficult to locate and will be further explored during final design. Mn/DOT is researching the removal of abandoned roadway and trail near the junction of CR 107/29. Preliminary indications show that approximately 1.5 acres could be restored at this location. Another potential site exists in the City of Jenkins at a site that has been subject of wetland violations in the past. If restoration at this site is determined feasible, Mn/DOT will contact the property owner. A detailed mitigation plan will be completed during the final design phase of the project, which will occur after the National Environmental Policy Act (NEPA) process has been completed. Additionally, contacts have been made with USACE, Crow Wing County and Cass County Soil and Water Conservation District (SWCD) staff, and other state and local agency personnel to identify potentially restorable wetlands in the area. No potential wetland mitigation sites were identified through these contacts. If local searches are unsuccessful or inadequate, the remaining replacement acreage will be from the District approved statewide wetland bank at the Staples Wildlife Management Area (Rice Lake).

Wetland Permitting

A Combined Wetland Permit application will be submitted to the USACE for wetlands impacted under federal jurisdiction and the WCA Local Government Unit (LGU) and MNDNR for wetlands impacted under state jurisdiction. In accordance with the WCA, the wetland permit application will contain a detailed wetland replacement plan. Prior to submittal, each affected wetland boundary will be delineated in accordance with the USACE 1987 Manual on Identifying Wetlands of the United States. Wetland delineations will provide

exact wetland location and acreage amounts above and beyond the field mapped boundaries. The wetland permit application will be submitted following the Record of Decision (ROD) (federal) and Adequacy Determination (state) and once the final design of the preferred alternative is nearing completion.

Wetland Coordination

Coordination has been and will continue to occur for this project with wetland regulatory staff from local, state, and federal resource agencies. These efforts will continue throughout the final design and permitting process. Coordination to date has included a meeting with the USACE project manager regarding replacement ratios and several meetings and telephone conversations with MNDNR staff regarding impacts to fisheries, wetlands, and streams.

Only Practicable Alternative Finding

The wetland analysis and documentation has been prepared (following the FHWA Technical Advisory TR6640.8A (October1987) and in compliance with Executive Order 11990. A full range of alternatives have been considered, and the least environmentally damaging alternative that meets the project purpose and need objectives has been selected. Based upon the above considerations, it is determined there is no practicable alternative to the proposed construction in wetlands, and the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use.

Threatened and Endangered Species

Affected Environment

The project counties (Cass and Crow Wing) are within the breeding range of the bald eagle (Haliaeetus leucocephalus – federal status, Threatened), the range of the gray wolf (Canis lupus – federal status, Threatened), and the Canada lynx (Lynx Canadensis – federal status, Threatened).

Environmental Consequences

On July 30, 2004, the USFWS concurred with the determination on the potential affects on the bald eagle and gray wolf. This precludes further action as required under Section 7 of the Endangered Species Act. However, if new information indicates that the bald eagle or the gray wolf may be adversely affected, consultation must be reinitiated.

Mn/DOT and FHWA have entered into formal consultation with the USFWS, under Section 7 of the Endangered Species Act of 1973, as amended, following the determination that the project may affect the Canada lynx.

Biological Opinion – Canada Lynx

A Biological Opinion for the Highway 371 North Improvement Project was issued by the USFWS on September 22, 2004. A complete copy of the

Biological Opinion is available at the Mn/DOT District 3 Offices in Baxter, Minnesota.

In 1998, the lynx was proposed for listing as a threatened species under the Endangered Species Act (63 Federal Register, July 8, 1998) and was listed effective April 23, 2000. Cass and Crow Wing Counties are within the range of the Canada lynx, but no lynx records have been confirmed within the Highway 371 North project impact zone. The Biological Opinion concludes that the effects of the proposed highway improvement project is not likely to jeopardize the continued existence of the Canada lynx. Also, since no critical habitat has been designated for the species, none will be affected by the proposed project.

Mitigation

Mitigation for potential impacts to threatened and endangered species is only acceptable after every effort has been made to avoid impacts by selecting the best highway alignment location while considering impacts to other resources, including wetlands, vegetation, and social impacts. The preferred alternative alignment has been adjusted to the greatest extent possible to avoid and minimize impacts to all social, natural resources, and wildlife. The following measures were recommended by USFWS as part of the Biological Opinion:

- Maintain and/or provide for wildlife passage at the following locations: Cullen Brook (existing: culvert; bridge proposed), County Road 107 (existing: no structure; bridge proposed), Hay Creek (existing and proposed: culvert), stream south of Hay Creek (existing and proposed: culvert), south fork of Pine River (existing and proposed: bridge), and Norway Brook (existing: culvert; bridge or culvert proposed).
- Mn/DOT, FHWA, and USFWS shall jointly develop a monitoring or tracking plan to assist in determining the use of wildlife passages.
- Investigate other mitigation measures that could be incorporated into the final design that would reduce habitat fragmentation impacts.

With the implementation of the proposed mitigation for the Canada lynx, the Biological Opinion has determined that the proposed preferred alternative is not likely to jeopardize the continued existence of the Canada lynx, and since no critical habitat has been designated for the species, none will be affected by the proposed project.

5.0 RESPONSE TO COMMENTS ON THE DRAFT EIS

5.1 OPPORTUNITIES FOR PUBLIC COMMENT AND GUIDELINES FOR RESPONDING TO COMMENTS

The Draft EIS for the Highway 371 North Improvement Project was distributed in December 2003 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 EIS officially closed on February 9, 2004.

A public hearing to receive comments on the proposed project and Draft EIS was held as follows:

Wednesday, January 14, 2004, 5:00 p.m. to 8:00 p.m.
Pequot Lakes School Complex
4276 West Lake Street
Pequot Lakes, MN 56472

At the public hearing and meeting, an informational presentation was held to provide a project update and a summary of the key issues and impacts addressed in the Draft EIS. Furthermore, an informational handout describing the proposed project and the issues and impacts were made available to each attendee. All attendees were invited to provide comments through one of two ways: oral statements to a court reporter and/or through written comments.

- Written Statements: Attendees were invited to submit written comments on cards provided at the open house or in letter form. Comments could also be submitted via e-mail.
- Oral Statements: Statements were recorded by a certified court reporter during the public hearing.

A total of 101 written comments and 14 oral testimonies were received from private citizens, business representatives, interest groups, agencies, and other government entities during the comment period. All written and oral comments were incorporated into the Public Hearing Record for the Draft EIS.

Following the Draft EIS comment period, a review of the public and agency comments was conducted. Based on this input and the technical information presented in the Draft EIS, Alternative 2 was selected as the preferred alternative.

Consistent with state and federal environmental review rules, substantive comments are responded to in this Final EIS. Written responses have been provided for comments pertaining to analysis conducted for and documented

in the Draft EIS. Specifically, responses have been prepared for statements noting: incorrect or unclear information or content requirements.

A response was not provided for comments agreeing with the Draft EIS/project information, general opinions, statements of fact, or statements of preference. Oral testimony and written citizen comments are summarized and responded to in Section 5.2 below. Copies of all government, agency, and organized interest group letters are included and responded to in Section 5.3.

5.2 SUMMARY AND RESPONSE TO ORAL TESTIMONY AND WRITTEN COMMENTS FROM THE PUBLIC

Right-of-Way/Property Impacts (16 Comments)

1. Comments regarding partial or full property acquisition included property owners supporting acquisition, property owners against acquisition, and general concern regarding the acquisition process of residential and commercial property.

   Response: Where possible, the preferred alternative has been modified to reduce right-of-way impacts. The properties that have been identified for acquisition are either directly impacted by the reconstruction project or are parcels where reasonable access cannot be maintained. Right-of-way acquisition will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and 49 CFR Part 24. Persons interested in obtaining additional information can contact the Mn/DOT District 3 Right-of-Way Engineer at 218.828.2549.

Noise (10 Comments)

1. Several comments expressed concern about the existing noise levels along Highway 371 and stated the project will further increase noise levels and requested mitigation measures be implemented.

   Response: The noise analysis indicated noise levels at certain areas adjacent to the Highway 371 corridor would exceed federal and state noise standards for both the preferred alternative and No-Build Alternative. As a result, a detailed noise analysis, including a noise abatement feasibility assessment, was conducted for the preferred alternative and concluded that Mn/DOT requirements concerning cost reasonableness were not met. In order for a noise wall to be constructed by Mn/DOT, it must be able to be constructed at a "reasonable" cost. "Reasonable" cost is currently defined by Mn/DOT as $3,250/dBA reduction per residence. This is determined by dividing the total cost of a wall (currently estimated at $15 per square foot) by the total decibel reduction for houses that are predicted to receive at least a 5 decibel reduction. As a result, noise mitigation is not proposed as part of the preferred alternative.

2. One comment questioned the assumptions made in calculating noise levels because the monitoring of existing conditions was conducted on weekdays in August and November rather than on a summer weekend when traffic volumes are typically higher and highway generated noise levels increase.

   Response: The primary purpose of the noise monitoring is to calibrate the MINNOISE noise model to ensure it is representing field conditions. Therefore, if the monitoring was conducted in November, the model, assuming November traffic volumes, is adjusted until it reflects the actual monitored condition. A calibrated model, using the appropriate traffic levels, will then be able to reflect noise levels for any time period.

Roadway Design and Access (24 Comments)

1. Several comments expressed concern that the design of Highway 371 will impact private property and/or natural resources and requested that further minimization measures be considered.

   Response: A four-lane rural design roadway is proposed because it provides the greatest safety and operational benefits. In an effort to reduce impacts without compromising safety, the rural centerline spacing has been reduced from 100 feet to 90 feet. In addition, the 75-foot centerline spacing proposed in the Draft EIS through portions of the Cullen Brook and Twin Lakes area has been extended to further reduce impacts.

2. Several comments were concerned about potential changes in access to existing and planned developments as a result of the four-lane divided highway and further access restrictions.

   Response: The preferred alternative includes access management measures that will enhance mobility along Highway 371 and improve overall traffic operations and safety. Access will be maintained to all remaining properties either via frontage roads, right-in/right-out driveways, or consolidated driveways.

3. One comment expressed concern about the design and location of the frontage roads. The commentor was concerned that the width of the frontage road would create additional impacts on private property.

   Response: Frontage road design will be consistent with standards for local roads and the anticipated use of the road.

4. Several comments expressed concern about the high speed of existing traffic, the highway design speed, and the potential posted speeds after completion of the project.

   Response: The rural four-lane divided section assumes a 70 mph design speed and following completion of the project will likely be posted at 65 mph according to Minnesota Statute 169.14 for rural expressways.

The urban four-lane divided sections of the highway (downtown Pequot Lakes, Jenkins, and Pine River) assume a design speed of 45 mph. After completing the project, a speed study will be conducted in urban settings or areas of special concern to determine the posted speed limit.

5. Numerous comments were received stating a preference for whether or not the preferred alternative should remain on its existing alignment (Alternative 2) or should bypass the downtown district for the City of Pequot Lakes only (Alternatives 3), the City of Jenkins only (Alternative 5), or bypass both communities (Alternative 4).

   Response: No response necessary for statements of preference.

6. Several comments suggested additional traffic signals be installed along the corridor.

   Response: Traffic signal warrants have been established nationally to provide criteria that can be used to define the relative need for and appropriateness of traffic signal control. Traffic signals should not be installed unless one or more of the signal warrants are met. The satisfaction of a warrant or warrants is not in itself justification for a traffic signal. Information should be obtained by means of engineering studies and compared with the requirements set forth in the warrants. The Highway 371 North preferred alternative has been designed to minimize future signals.

7. Several comments suggested improving side street approaches to Highway 371 to handle future traffic volumes.

   Response: The preferred alternative will include minor improvements to several side street approaches. These improvements primarily involve adding turn lanes. Furthermore, Mn/DOT has identified several future improvements to county roads and local streets that would better ensure the local street network continues to operate satisfactorily. These improvements are not part of this project and are the responsibility of the local unit of government with jurisdiction over the roadway.

8. One comment suggested rerouting the highway further west along Cass CR 1 to Highway 210 near Pillager.

   Response: Location alternatives were considered during the scoping phase of the project. A technical memorandum entitled: Highway 371 North Improvement Project: Development of Alternatives and Initial Screening, was completed on October 29, 2002. The technical analysis determined a new corridor would not attract enough traffic to avoid the need to upgrade existing Highway 371. As a result, these alternatives were dismissed from further consideration.

Traffic and Safety (16 Comments)

1. Several comments expressed concern over future traffic volumes and the resulting safety and congestion problems.

   Response: The preferred alternative will be designed to accommodate future traffic levels throughout the corridor.

2. Several comments expressed concern over the safety conditions of the existing roadway and design deficiencies including the lack of turn lanes and sight distance at skewed intersections.

   Response: The primary purpose for the Highway 371 North project is to address the safety issues, congestion, and design deficiencies that characterize the corridor. The proposed improvements will better serve the current and forecast traffic volumes and improve safety by reducing the number of direct access points onto the highway, improving roadway geometrics, and adding roadway capacity.

3. One comment questioned the one fatal crash that is documented in the Pequot Lakes area of the corridor because they did not recall such a crash.

   Response: Mn/DOT crash data and law enforcement reports were utilized to determine the historical crash information presented in the Draft EIS. The data indicates that 18 fatal crashes have resulted in 24 deaths between 1984-2001 and 1 fatal crash occurred within the Pequot Lakes area of the corridor.

Economic/Business Impacts (41 Comments)

1. Several comments were concerned about the fiscal impacts associated with a bypass of downtown Pequot Lakes and/or Jenkins.

   Response: The preferred alternative does not include a bypass of downtown Pequot Lakes or Jenkins.

2. Several comments were concerned about access to existing businesses as a result of the reconstructed four-lane divided highway.

   Response: The proposed project includes access management measures aimed at improving safety and enhancing mobility along Highway 371 while maintaining reasonable access to adjacent land uses. Access to Highway 371 from existing businesses will be provided via frontage roads, consolidated driveways, and right-in/right-out accesses.

3. One comment suggested constructing Highway 371 as a four-lane divided highway on the existing alignment would further divide the Pequot Lakes business district.

   Response: The preferred alternative will introduce a wider road alignment through the Pequot Lakes business district. Mn/DOT will work with the

City to minimize to the extent practical, the adverse effects of the wider corridor on the business district, including changes in access, parking, and signage.

Environmental/Natural Resource (30 Comments)

1. Several comments were received regarding concern about the impacts of the project on natural resources, including wildlife, farmland, vegetation, wetlands, and lakes.

   Response: The preferred alternative has been designed to minimize impacts to natural resources including wildlife, wetlands, and lakes, while still meeting the purpose and need objectives for the highway project. Extensive analysis was conducted to identify resources in the project area. This information was used to incorporate minimization measures and to document potential impacts of the project on these resources.

2. Several comments were received regarding concern that water quality in area lakes could be negatively impacted due to increased impervious surface, runoff, and road chemicals.

   Response: The preferred alternative is being designed in a manner to treat storm water runoff from the highway corridor prior to discharging the water to receiving water bodies. Currently, highway runoff directly discharges into receiving water bodies. The Final EIS identifies best management practices for conveying and treating storm water runoff from the proposed improvements. A Storm Water Pollution Prevention Plan will be submitted to the Minnesota Pollution Control Agency (MPCA) for review and compliance with the Phase II National Pollutant Discharge Elimination System Permit requirements. This plan will ensure that proper controls and practices are established along the project corridor and proper protection is given to the natural resources located within and adjacent to the corridor.

3. One comment expressed concern over the commitment of local governments in implementing BMPs for future development that may occur in the project area.

   Response: It is ultimately the responsibility of local government units to address water quality issues for newly developed areas. Mn/DOT is committed to implementing BMPs for the preferred alternative and has offered to cooperate with local authorities in efforts to address water quality issues in areas adjacent to the proposed corridor.

4. Several comments expressed concern over the potential loss of trees along the highway.

   Response: In some cases, the preferred alternative will result in the loss of trees and vegetation. The City of Pequot Lakes has a city-owned tree

farm with hundreds of evergreen trees that the City intends to plant along the new alignment to buffer the adjacent land uses from the highway.

5. One comment was concerned about the proposed realignment of the highway and the deep wetlands located southeast of the Highway 371/CR 29/107 intersection.

   Response: The preferred alternative does propose to realign the highway in the area of the CR 29/107 intersection for safety purposes. However, the design of the preferred alternative includes bridging these wetlands to minimize impacts.

6. One comment stated the Draft EIS was incorrect in stating no large tree farms would be impacted as a result of any of the alternatives.

   Response: Mn/DOT acknowledges the existence of several large, heavily wooded parcels of land. The preferred alternative does not affect any of these properties.

7. One comment was concerned with the potential effects on air quality as a result of increased traffic volumes.

   Response: Since the traffic analysis demonstrates that the preferred alternative will result in acceptable levels of service, and the project is not located in an area where air quality conformity requirements apply; an air quality analysis was not conducted. Furthermore, when compared to the No-Build Alternative, the preferred alternative will reduce congestion and, therefore, minimize potential air quality effects.

Costs (9 Comments)

1. Several comments suggested the additional costs of the bypass alternatives and interchanges are not cost effective.

   Response: The preferred alternative does not include bypassing Pequot Lakes or Jenkins, and no interchanges are being proposed.

2. One comment identified additional costs would be incurred by the City of Pequot Lakes if the highway is improved on the existing alignment.

   Response: The preferred alternative will require relocation of certain utilities. Local cost participation will be required in conformance with the Mn/DOT Cooperative Cost Participation Policy. Mn/DOT will continue to work with the cities of Nisswa, Pequot Lakes, Jenkins, and Pine River to arrive at a final cost participation agreement.

Pedestrian Safety (6 Comments)

1. Several comments expressed safety concerns regarding pedestrians crossing Highway 371 and requested a pedestrian overpass/underpass be constructed along Highway 371.

   Response: Pedestrian safety will continue to be a concern given the traffic volumes and traffic speed on Highway 371. Mn/DOT will coordinate with the communities to attempt to direct pedestrians to crossing points at the major intersections. Pedestrian phasing will be included at signalized intersections. Mn/DOT is not proposing any pedestrian overpasses/underpasses; however, Mn/DOT will work with any community that may choose to construct a grade-separated crossing.

2. One comment suggested improving the design and character of the relocated segments of the Paul Bunyan Trail.

   Response: Mn/DOT will continue to coordinate with DNR Trails and Waterways staff to ensure adequate mitigation is provided for impacts to the Paul Bunyan Trail. A letter of understanding prepared by Mn/DOT and a concurrence letter from the MNDNR identify agreed upon mitigation measures (see Attachment A in Appendix B).

Miscellaneous Comments (24 Comments)

1. Several comments expressed concern regarding the visual effect of a four-lane roadway, how it will affect the rural character of the towns, and how the new highway may affect the appearance of future developments.

   Response: Aesthetic and landscape design considerations will be developed with the goal of maintaining or enhancing the visual quality of the highway corridor and preserving the character of the surrounding environment. Mn/DOT is committed to working with the communities, as well as other interested parties to develop a context sensitive design of the highway. Visual effects from future developments is a local planning and zoning issue that needs to be addressed by the local units of government.

2. Several comments expressed concern regarding construction impacts including noise, utilities, and traffic delays.

   Response: Construction activities can create short-term adverse impacts on local streets, intersections, and surrounding properties. Measures will be taken to limit impacts connected with construction activities including preparation of a construction-staging plan and adherence to local and state regulations.

3. One comment expressed concern with the potential impacts to Bobberland Park and associated impacts on community events held in the park.

Response: *The preferred alternative does not require acquisition of land from the Bobberland Park. However, a portion of the green space that borders the existing highway corridor is Mn/DOT's right-of-way, which is needed for the four-lane expansion. The City of Pequot Lakes has indicated the highway project will not adversely affect community events at the park.*

4. One comment identified the importance of the Pine River Depot and several other historical properties in the area.

   Response: *The Pine River Depot has been identified as a property eligible for listing on the National Register of Historic Places and a Section 4(f) resource. Mn/DOT has been and will continue to coordinate with the SHPO, City of Pine River, and Heritage Group North to determine the appropriate mitigation for impacts to the structure.*

5.3 AGENCY COMMENTS AND RESPONSES

Copies of comments submitted by the following governmental agencies and special interest groups are included on the following pages.

Federal

- U.S. Environmental Protection Agency
- United States Department of Interior
- U.S. Army Corps of Engineers

State

- Minnesota Department of Natural Resources
- Minnesota Pollution Control Agency
- Minnesota Historical Society

Local

- City of Pequot Lakes
- City of Jenkins
- Pequot Lakes-Breezy Point Area Chamber of Commerce
- Heritage Group North
- Minnesota Lakes Association

See separate file for Responses to Agency Comment Letters

6.0 PERMITS AND APPROVALS

The following federal, state, and other local permits and approvals are required for construction of the preferred alternative.

- Section 404 Permit – USACE
- Section 401 Water Quality Certification – MPCA
- Public Waters Permit – MNDNR
- NPDES Phase II Permit – MPCA
- Section 106 Completion – MOA signed by SHPO, Mn/DOT, FHWA, USACE, and all consulting parties
- WCA Approval and Permit – Mn/DOT
- Municipal Approval – Cities of Nisswa, Pequot Lakes, Jenkins, and Pine River
- Adequacy Determination – Mn/DOT
- Record of Decision – FHWA

7.0 PREPARERS

Agency/Organization and Name	Final Environmental Impact Statement Responsibility
Federal Highway Administration	
Cheryl Martin	Review of Final EIS; assure compliance with Federal regulations
Minnesota Department of Transportation – District 3	
Tony Hughes	Mn/DOT District 3 Project Manager
Craig Robinson	Review of Final EIS, special studies, and technical memoranda
John Mackner	Wetlands, Review water quality/natural resource sections
Dave Buss	Review of Project Purpose & Need, Traffic Analysis, and Forecasting
Gary Dirlam	Review of Project Purpose & Need, Traffic Analysis, and Forecasting
Minnesota Department of Transportation – Central Office	
Gerry Larson	Review of Final EIS; assure compliance with Mn/DOT guidance and procedures
Craig Johnson	Archaeological Resources; assure compliance with Section 106 regulations
Jackie Sluss	Historical and Architectural Resources; assure compliance with Section 106 regulations
Short Elliott Hendrickson Inc.	
Chris Hiniker	Consultant Project Manager
Mark Benson	Principal-in-Charge/Quality Control
Bob Rogers	Preparation of Environmental Documentation/Public Involvement
Peter Rafferty	Traffic Analysis and Forecasting
Heather Redetzke	Preliminary Design
Nathan Blanchard	Preliminary Design
Brad Kovach	Vegetation, Fish & Wildlife, State/Federal Threatened & Endangered Species, Floodplains, Farmlands
Brad Digre	GIS: Alignment Impact Assessment, Graphics
Tammy Orf	Word Processing
Candis Nord-Sheptak	Graphics
Subconsultants	
AGC Developments Inc. Al Perez	Noise Monitoring and Modeling
George Orning	Land Use, Local Government Liaison

8.0 LIST OF AGENCIES AND ORGANIZATIONS TO WHOM COPIES OF THE FINAL EIS ARE SENT

8.1 FEDERAL AGENCIES

- U.S. Environmental Protection Agency
- U.S. Fish & Wildlife Service
- U.S. Army Corps of Engineers
- Advisory Council on Historic Preservation
- U.S. Department of Interior

8.2 STATE AGENCIES/ORGANIZATIONS

- Environmental Quality Board
- Board of Water & Soil Resources
- Minnesota Department of Commerce
- Minnesota State Historic Preservation Officer
- Minnesota Department of Natural Resources
- Legislative Reference Library
- Technology & Science – Minneapolis Public Library
- Minnesota Department of Health
- Minnesota Department of Agriculture
- Minnesota Pollution Control Agency

8.3 LOCAL AGENCIES/ORGANIZATIONS

- City of Nisswa
- City of Pequot Lakes
- City of Jenkins
- City of Pine River
- Cass County
- Crow Wing County
- Wilson Township
- Pine River Township
- Region 5 Development Commission
- Brainerd Public Library
- Kitchigami Regional Library – Pine River
- Cass County Natural Resource Conservation Service
- Crow Wing County Natural Resource Conservation Service
- Pequot Lakes-Breezy Point Area Chamber of Commerce

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