Appendix P. Agency Coordination Following Draft EIS Availability

CITY OF WISCONSIN DELLS
RESOLUTION NO. 5590

BE IT HEREBY RESOLVED by the City of Wisconsin Dells, Columbia, Sauk, Adams and Juneau Counties, Wisconsin, based upon the recommendation of the Public Works Committee from their July 8, 2024 meeting;

Whereas WisDOT has requested local government review of and comment on the DRAFT Environmental Impact Statement (Draft EIS) for the I 39/90/94 Corridor Study; and,

Whereas the City of Wisconsin Dells has considered the Draft EIS and wishes to formally advise WisDOT of its preferences concerning the US 13 and US 12/WI 16 interchanges;

Now therefore it is resolved by the City of Wisconsin Dells Common Council as follows:

1. Wisconsin Dells prefers and supports the following interchange configurations as pictured and described in the attached pages from the Draft EIS:
    a. WIS 13 Interchange Split Diamond
    b. US 12/WIS 16 – Dimond Interchange.
2. Wisconsin Dells believes these configurations at these interchanges are in the best public interest, consistent with public and traffic safety, economic opportunity, and land use.

1 }

Edward E. Wojnicz

Edward E. Wojnicz, Mayor

Attest: Lisa A McClyman

Lisa A McClyman, Clerk/Treasurer

Vote: 6 ayes; 0 nays; 0 abs
Date Introduced: July 15, 2024
Date Passed: July 15, 2024
Date Published: August 29, 2024

Response to City of Wisconsin Dells

1. WisDOT selected the Trumpet alternative as best meets the study purpose and need; it performs better than the Split Diamond alternative for safety because it has fewer conflict points. The Trumpet alternative has overall lower impacts compared to the Split Diamond alternative. WisDOT also selected the US 12/WIS 16 Diamond alternative.

From: Wisconsin DOT
Subject: Comment for Project No. I-39/90/94 Corridor Study
Date: Tuesday, July 23, 2024 3:23:36 PM

A comment has been entered into PIMA for Project No. I-39/90/94 Corridor Study - The Wisconsin Department of Transportation (WisDOT) and the Federal Highway Administration (FHWA) are conducting the I-39/90/94 Corridor Study between US12/18 in Madison and US12/WIS16 in Wisconsin Dells. The study will also evaluate I-39 from where it splits from I-90/94 to Levee Road near Portage. The corridor is about 67 miles long and travels through Dane, Columbia, Sauk and Juneau counties.

1 } On behalf of the Village of Windsor, I provide you with the following comments: 1) the Village is supportive of the Modernization Hybrid or Modernization Plus Added General Purpose Lane for the corridor as long as one lane is dedicated to truck traffic; 2) the Village is supportive of the WIS 19 Interchange alternative with the U-Ramp; and 3) the Village wishes to reiterate our objection to any bypass alternative through our community. Sincerely, Jamie Rybarczyk, Village of Windsor, Community Development Director / Deputy Administrator

Received: 07/23/2024
Status: New
Stakeholder: Jamie Rybarczyk
Response Type: Do not send me a response
Comment Link

Response to Village of Windsor

1. WisDOT evaluated and found truck only lanes would not provide substantial benefit. In order for a truck only lane to be effective, sufficient truck percentage during the high demand periods would be needed. Although the Interstate can have high truck percentages, those higher percentages typically occur in the lower volume daytime hours and the overnight hours when there is sufficient capacity on the Interstate to achieve desirable traffic operations. These lower percentages would lead to low utilization of the lane and would cause additional congestion in the remaining general purpose lanes.

   Other challenges include getting the trucks to the inside truck only lane. Any other lane allocated as a truck lane could create a wall of semi-truck traffic which would make it troublesome for passenger cars to navigate between lanes or cause merging/diverging issues. Without barriers and/or enforcement, compliance with lane designations may become an issue with this type of restriction.

fill out the registration slip for verbal testimony and present it to a study team member. Registration slips can be found at the back of your handout.

When your name is called, please approach the microphone and state your name and address. You may also provide the name of any organization or business you are representing if so desired. We ask that you please limit your verbal testimony to three minutes, so everyone has an opportunity to present their testimony. Once everyone has had the opportunity to present verbal testimony, you may present additional testimony as time allows.

MS. KOBRYN: I now call on Bill Chang to present their verbal testimony.

MR. CHANG: Hello, my name is Bill Chang. I am the Village Administrator for the Village of DeForest. And I would like to make comments in regards to the County Highway B interchange.

As some of you know, the travel center being proposed -- is being proposed at this intersection. EIS provides two alternatives to this interchange. One, the first one being a

Mobile if the travel center moves forward and reconstructs privately the interchange to a -- reconstructs the interchange to a diamond.

I just want to make the comment that given the current negotiations between the village and the travel center. You know, it's not a sure thing at this point, and by which the developer is going to move forward and/or reconstruct that intersection before I believe that the study should consider the build alternative first and foremost.

Secondly, in regards to the -- the travel center developer has asked for the village and/or other parties to join in a cost share for that improvement since it does impact more than the travel center itself. So we invite DOT to have that conversation with those before us, as obviously if the project does not move forward to the maximum or the highest level standard improvement, the resulting issues would need to be then considered in the overall study.

We also believe that, lastly, here that there is a situation whereby the development may move forward without the public improvement and, you know, that is not a route that we would

want to go here. We would rather work with the DOT to get this right the first time around.

That concludes my comments.

MS. KOBRYN: Thank you for providing testimony.

I now call on Rod Rotar to present their verbal testimony.

THE WITNESS: My name is Rod Rotar. I live here in Madison, but I also spend about 20 percent of the year up in the Sauk City -- not Sauk City, Sauk County. And the two things I brought up earlier, I just want to give my view on what I see going on there.

The Xanadu Road bridge is right now a very dangerous bridge because it is just exactly wide enough for two cars. There's a lot of people seasonally that use it -- as everyone knows Wisconsin Dells gets very busy in the summer. But this walking path, which is huge -- I been on it myself -- but a lot of people use it day-to-day, especially in the summer. Especially we will see a lot of the international students who are moving into town, they will walk that way to go -- and what it does, it takes them to Home Depot, Walmart, Kohl's, and all of that. It is a faster

Response to Village of DeForest

(Note: The comment in the public testimony about County B is in reference to County V, which is part of the Corridor Study.)

The Draft EIS evaluated two alternatives, including the No Build and the Diamond alternative. WisDOT selected the No Build alternative assuming the County V interchange would be reconstructed prior to Interstate construction and the interchange reconstruction would be privately funded to accommodate the traffic volumes generated by the development. Should the private development not occur at County V, WisDOT would re-evaluate the Final EIS to validate the Diamond alternative as a Selected Alternative.

Greater Madison MPO 2024 Resolution No. 13

I-39/90/94 Draft Environmental Impact Statement (DEIS) Comments Regarding North-South Bus Rapid Transit (N-S BRT)

WHEREAS, the Greater Madison MPO is the designated Metropolitan Planning Organization for the Madison, Wisconsin Metropolitan Area with responsibilities to perform regional transportation planning and programming, in cooperation with the Wisconsin Department of Transportation and Metro Transit, the major transit operator; and

WHEREAS, both the I-39/90/94 Preliminary Engineering and Environment Document and the North-South Bus Rapid Transit are incorporated in the Greater Madison MPO Transportation Improvement Program;

WHEREAS, both projects are needed to meet the mobility needs of the Greater Madison Metropolitan Area and key components of *Connect Greater Madison 2050,* the adopted long-range Regional Transportation Plan;

WHEREAS, the mission for the Greater Madison MPO is to lead the collaborative planning and funding of a sustainable, equitable transportation system;

WHEREAS, Goal 4 in *Connect Greater Madison 2050*, "Equity", aims to "provide convenient, affordable transportation options that enable all people, regardless of age, ability, race, ethnicity, or income, to access jobs, services, and other destinations to meet their daily needs… and ensure that the benefits of the regional transportation system are fairly distributed, taking into consideration current inequities resulting from past decisions, and that environmental justice populations are not disproportionately impacted.";

WHEREAS, Goal 5 in *Connect Greater Madison 2050*, "Environmental Sustainability", seeks to "minimize transportation-related greenhouse gas emissions that contribute to global climate change; avoid, minimize, and mitigate the environmental impacts of the transportation system on the natural environment and historic and cultural resources…";

WHEREAS, 18 percent of minority households and 31 percent of low-income households in the City of Madison do not have access to a car;

WHEREAS, the North-South Bus Rapid Transit fulfills an important equity role in area transportation, with the ridership shed consisting of 51% percent lower income families, 42% people of color, 19% car-free households and 8% people with disabilities;

WHEREAS, WisDOT has just released a Draft Environmental Impact Statement (DEIS) for the I-39/90/94 project with comments due August 12, 2024.

WHEREAS, the Preferred Alternative presented in the I-39/90/94 DEIS represents a considerable investment of $2.5 billion dollars focused on motor vehicle mobility;

WHEREAS, in the Commitments to Mitigation portion of the DEIS, the document proposes mitigation for greenhouse gas emissions through the Transportation Demand Management (TDM) and Transportation

Systems Management and Operations Alternative (TSMO) measures anticipated as part of the Build Alternatives.

WHEREAS, the TSMO alternatives being considered include Madison's Bus Rapid Transit;

WHEREAS, the DEIS further states *"WisDOT will . . . . support transit service implementation. . . ."* as part of the mitigations to offset greenhouse gas emissions.

WHEREAS, WisDOT and the City of Madison are in the process of determining if Bus Rapid Transit can travel on Connecting Highways and how much dedicated running way will be allowed;

NOW, THEREFORE, BE IT RESOLVED that the Greater Madison MPO requests that mitigation for greenhouse gas emissions be specifically included in the Commitments to Mitigation incorporated in the Record Of Decision. 1 }

The Greater Madison MPO further requests, underscoring the mission and vision of our region and organization, that as part of this mitigation WisDOT commit to approving key elements of the N-S BRT on Fish Hatchery Road, Park St, and Packers Ave reflecting our shared commitment to sustainable and equitable transportation.

The Greater Madison MPO requests that as WisDOT is recognizing BRT as a greenhouse gas mitigation measure, that WisDOT financially participate in BRT construction costs at levels commensurate with costs associated with Park St reconstruction. In doing so, the MPO is encouraging collaboration that will ensure a more sustainable and equitable future for the Greater Madison Region. 2 }

August 7, 2024

_____

Date Adopted

Mark Opitz

_____

Mark Opitz, Board Chair
Greater Madison MPO

Response to GMMPO

1. WisDOT remains committed to reducing GHG emissions to the greatest extent practicable by incorporating TDM/TSMO measures described in the Final EIS and mitigation measures described in detail in Section 3.18.5 of the Final EIS.
2. Accommodating additional BRT services outside the study corridor is beyond the scope of the I-39/90/94 Corridor Study; however, WisDOT remains committed to working with the city of Madison to support BRT implementation in a manner that maintains traffic operations and safety on roads under WisDOT jurisdiction.

From: Kinney, Jeremy M CIV USARMY CEMVP (USA) <Jeremy.M.Kinney@usace.army.mil>
Sent: Thursday, August 08, 2024 6:59 PM
To: Schmidt, David - DOT (DTSD) David2.Schmidt@dot.wi.gov>
Cc: Hemesath, Lisa (FHWA) lisa.hemesath@dot.gov>

Subject: RE: I-39/90/94 Corridor Study – Draft EIS available for review and notice of Public Hearing

Good evening,

The Corps has completed our review of the Draft EIS and has no comments.

Thanks,
Jeremy Kinney
Lead Project Manager
U.S. Army Corps of Engineers
St. Paul District - Regulatory
332 Minnesota St., Suite E1500
St. Paul, MN 55101
Cell: (651) 443-1929

From: Schmidt, David - DOT (DTSD) <David2.Schmidt@dot.wi.gov>
Sent: Thursday, June 20, 2024 10:49 AM
Cc: Hemesath, Lisa (FHWA) <lisa.hemesath@dot.gov>; Schmidt, David - DOT (DTSD) <David2.Schmidt@dot.wi.gov>
Subject: [Non-DoD Source] I-39/90/94 Corridor Study – Draft EIS available for review and notice of Public Hearing

Hello,

The Wisconsin Department of Transportation (WisDOT) and the Federal Highway Administration (FHWA) have completed the Draft Environmental Impact Statement (Draft EIS) for the I-39/90/94 Corridor Study and it is available for review and comment. You can find a copy of the document, along with appendices at our website: I-39/90/94 Study - Environmental information (wisconsindot.gov).

Hard copies of the Draft EIS are also available for review on or after June 28, 2024, at the Wisconsin Southwest Region Office, Madison Public Library – Pinney, Portage Public Library, Kilbourn Public Library, DeForest Area Public Library, Madison Public Library – Central Library, Sun Prairie Public Library, Madison Public Library – Hawthorne.

The Draft EIS has been prepared in accordance with the National and Wisconsin Environmental Policy Acts, and FHWA regulations for preparing environmental documents.

Comments on the Draft EIS are due by August 12, 2024, and should be sent to FHWA and WisDOT at the addresses listed below. Questions about the proposed I-39/90/94 alternatives or Draft EIS may be directed to WisDOT.

Lisa Hemesath
Federal Highway Administration
525 Junction Road, Suite 8000
Madison, WI 53717
(608) 829-7503
Lisa.Hemesath@dot.gov

David Schmidt, PE
Wisconsin Department of Transportation
2101 Wright Street
Madison, WI 53704-2583
(608) 246-3867
David2.Schmidt@dot.wi.gov

Please plan to attend an upcoming public hearing.

The virtual public hearing will be held on Monday, July 29, 2024 via YouTube Live at www.tinyurl.com/InterstateVirtualPH. If interested parties do not have internet access, they may call (608) 571-2209 followed by Conference ID: 588 603 889# to listen to the virtual public hearing. The virtual public hearing will begin at 5 p.m. and will end when all interested persons have provided testimony or 7 p.m., whichever occurs first.

The Madison in-person public hearing session will be held on Tuesday, July 30, 2024, from 4 to 7 p.m. at the Madison College Traux Building, Conference Room D1630, 1701 Wright St., Madison, WI 53704.

The Wisconsin Dells in-person public hearing session will be held on Thursday, August 1, 2024, from 4 to 7 p.m. at the Wisconsin Dells High School, HH Bennett Hall and Cafeteria, 1501 Brew Farm Road, Wisconsin Dells, WI 53965.

Sincerely,

David Schmidt, P.E.
Project Manager
Division of Transportation System Development
Wisconsin Department of Transportation
(608) 246-3867 office
(608) 516-9041 cell
david2.schmidt@dot.wi.gov
wisconsindot.gov

Department of Transportation

Thomas Lynch, PE, PTOE, PTP, AICP, Director of Transportation

Madison Municipal Building
215 Martin Luther King Jr Blvd
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Phone: (608) 266-4761
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August 9, 2024

David Schmidt, PE

Wisconsin Department of Transportation (DTSD)
Southwest Region Madison Office
2101 Wright Street
Madison WI, 53704

Subject: I-39/90/94 DEIS City of Madison Comments

We greatly appreciate the collaborative approach WisDOT has taken on this study as it seeks to improve interstate travel. We also appreciate WisDOT incorporating the introduction of two interchanges into the scope of the study and environmental document.

The following table summarizes our comments for the DEIS.

Item	Comment
Bicycle/Pedestrian Facilities	Madison appreciates the inclusion of the proposed bicycle pedestrian routing through the US 151 interchange in the Preferred Alternative. The DEIS states that the build alternatives would not preclude future pedestrian-bicycle crossings previously identified by Madison, as shown in Figure 3-12. Madison disagrees with this conclusion for the Rattman NDP crossing of I-39/90/94. The adjacent topography and land uses indicate that providing a crossing under the I-39/90/94 freeway is the most efficient and cost effective. Retrofitting a future pedestrian-bicycle bridge over I-39/90/94 would be challenging to the point where it is cost-prohibitive and not feasible. I-39/90/94 is a barrier to developed properties on both sides of the interstate. This barrier should not remain for the additional 60+ year life span of the proposed freeway improvements. Madison requests that the Rattman NDP crossing under the freeway be incorporated into the Preferred Alternative. When bicycle facilities are recommended in the DEIS proposed crossings, the facility is typically "on-street" bike lanes. The City's Complete Green Streets policy requires that "All Ages and Abilities" facilities be provided for bicycle facilities. For low-volume, low-speed streets this can mean on-street bike lanes. However, for higher volume and speed streets, an "All Ages and Abilities" facility typically requires protection or separation. Madison requests that "All Ages and Abilities" facilities be incorporated in the Preferred Alternative for all crossings of the Interstate.
Noise	Madison acknowledges the thorough noise analysis conducted and appreciates the noise walls proposed with the Preferred Alternative. Just as the DEIS acknowledges the freeway design could change, warranting further analysis- so could adjacent land uses. WisDOT noise policy currently does not allow re-analysis based on changes in land use. This is reasonable when the span between NEPA, Project Development, and Construction is generally within 10 years. The I-39/90/94 project however, is likely to span decades. It is unreasonable to withhold noise mitigation for future residents based on a NEPA document that could be decades old at time of construction. Madison requests that WisDOT commit to reanalyzing noise mitigation 10 years after the ROD for relevant newly developed areas.

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Air Quality	Madison disagrees with the statement that there would be "no substantial difference between the GHG emissions from the build and No Build Alternatives" in that the document states the emissions would be 4.7% higher with the Build Alternatives. Madison appreciates the proposed mitigation for GHG emissions through the TDM and TSMO measures anticipated as part of the Build Alternatives. The TSMO alternatives being considered include Madison's Bus Rapid Transit (Figure 2-2). The DEIS further states *"WisDOT will . . . . support transit service implementation. . . ."* Madison requests that mitigation for GHG emissions be specifically included in the Commitments to Mitigation incorporated in the ROD. • As the BRT is mentioned as a possible TSMO alternative that *may* be incorporated in the Preferred Alternative. We ask that it *will* be incorporated as a mitigation measure. We ask that WisDOT specifically approve key elements of the N-S BRT on Fish Hatchery Road, Park St, and Packers Ave. • We ask that WisDOT financially participate in BRT costs at levels that offset the cost of reconstructing Park Street, whose reconstruction as Connecting Highway is a WisDOT responsibility.
Landscaping	The DEIS does not specifically mention landscaping. The reconstruction of the US 151 and Badger interchanges appears to provide ample amounts of right of way not used for pavement or structures. The City of Madison requests that WisDOT install an appropriate amount of landscaping consistent with local preferences.
East Washington Basic Number of Lanes	The DEIS exhibits show a 4 basic lane typical section in both directions through the US 151 interchange. East Washington Ave just west of the interchange has 3 basic lanes in both directions, which is unlikely to be expanded soon. The City has found that excess capacity leads to greater speeds. Consequently, the City of Madison requests that a 3 basic lane typical section in each direction be constructed initially until conditions warrant expansion.
Cost Sharing	Madison believes a local cost share for new crossings and facilities is appropriate as it illustrates our commitment to bringing connectivity to and across the interstate. However, Madison seeks to participate in 50 percent of the non-federal share associated with a specific improvement. Requesting a full 50 percent local cost share from Madison is withholding federal funds for federally eligible project items. This places a 50% match burden on Madison while the state's local match burden is only 20%. For some of the crossings, the withholding of federal funding participation could have a disproportionate and adverse effect on those without access to a motor vehicle and who would benefit from those crossings.

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While not part of the DEIS document, conceptual construction staging was mentioned in during the I-39/90/94 hearings. It was suggested that the Milwaukee St interchange would be constructed between 2040-2050. Madison requests that consideration be given to moving construction of the Milwaukee St interchange to 2030-2040 time frame to enable the implementation of planned land uses in the immediate area. We believe an earlier construction of the Milwaukee interchange may also assist in traffic management during construction of the Badger Interchange.

7}

On a similar staging concern, the pedestrian/bicycle accommodations of the existing Milwaukee St bridge over I-39/90 are extremely poor, relying on temporary delineators. Maintaining these substandard, unprotected, pedestrian and bicycle accommodations for another 15 to 25 years is untenable. If the replacement of this bridge cannot be scheduled near the beginning of the project, we request WisDOT investigate and implement interim measures that would provide a level of protection for pedestrians.

8}

The $2.5 billion Preferred Alternative represents a considerable investment in one mode of transportation that benefits those able to afford a motor vehicle. We encourage WisDOT to complement this disparate allocation of resources with investments in other modes of transportation.

9}

August 9, 2024
City of Madison I-39/90/94 DEIS Comments

We thank the Wisconsin Department of Transportation for their partnership with the City of Madison. The communication and collaboration have been unprecedented in recent history and is greatly appreciated. We look forward to continued interaction.

Sincerely,

Thomas W. Lynch PE PTOE PTP AICP
Director of Transportation, City of Madison

cc:
Jenny Kobryn
Dan Schave
Mayor Satya Rhodes Conway
Madison Common Council

Response to City of Madison

1. Adding Rattman NDP crossing:

   During final design, WisDOT will coordinate with the city of Madison regarding the Rattman NDP crossing to identify the path location, including a future Interstate crossing, and complete an environmental document and permitting. If the path location is defined during final design for the Interstate project, WisDOT will include crossing construction and cost as part of the Interstate construction package. The path could be cost shared with the city if the path is environmentally cleared and desired by the city. Section 3.2.2 and 3.2.3 of the Final EIS are revised to include this commitment.

1. Adding "All Ages and Abilities" facilities for all Interstate crossings:

   WisDOT will add bicycle/pedestrian facilities consistent with design standards and in coordination with Madison during final design. Additional features, such as protected bicycle facilities, will be determined during final design coordination with local communities.

2. WisDOT will review the noise barrier analysis during final design to verify impacts. 23 CFR 772.11 (vii)(c) regulates noise mitigation and states, "If undeveloped land is not permitted for development by the date of public knowledge, the highway agency shall determine noise levels in accordance with 772.17(a) and document the results in the project's environmental clearance documents and noise analysis documents. Federal participation in noise abatement measures will not be considered for lands that are not permitted by the date of public knowledge." WisDOT's noise policy is FDM 23, which mirrors 23 CFR 772 and applies to state and federal actions. This limits the use state funds for barriers in place of federal funds. City ordinance (16.23(d)) also specifies where noise sensitive land uses can be permitted. "A developer must do a noise analysis for lands abutting a state or federal expressway or freeway and to provide noise abatement if the developer plans to include any noise sensitive land uses (habitable structures and recreation areas) in the 67 dBA contour." Therefore, WisDOT cannot commit to reanalyzing noise impacts.

3. WisDOT remains committed to reducing GHG emissions to the greatest extent practicable by incorporating TDM/TSMO measures described in the EIS and mitigation measures described in detail in EIS section 3.18.5. Accommodating additional BRT services outside the study corridor is beyond the scope of the I-39/90/94 Corridor Study; however, WisDOT remains committed to working with the city of Madison to support BRT implementation in a manner that maintains traffic operations and safety on roads under WisDOT jurisdiction.

4. WisDOT implemented an update to its policy related to funding source eligibility of community sensitive design (CSD) elements considered to be aesthetic treatments as it relates to Wis. Stat. Section 85.0205. The policy includes federal funds as an eligible funding source (1.5% of project construction costs, but not to exceed $3 million for the entire 67-mile corridor) for aesthetic elements as determined with community preferences. A 20% local match will be required for requested CSD items, with additional costs being the responsibility of the local municipality. During final design, WisDOT will coordinate with local communities to facilitate the funding of aesthetic treatments determined to be preferences of a community, within the WisDOT's allowed funding limit. WisDOT will complete a State Municipal Maintenance Agreement (SMMA) in local communities desiring to implement CSD measures. The SMMA is required for continued local

maintenance of aesthetic elements coming from CSD funding. The Final EIS Section 3.10.4 includes discussion of this updated policy. The Final EIS also states that WisDOT will plant stormwater trees to reduce runoff. Stormwater trees absorb stormwater during a rainfall event, absorb carbon dioxide, serve as an urban canopy to reduce urban heat zones and reduce erosion. WisDOT will determine the location of the stormwater trees during final design. Stormwater mitigation is funded as part of the project construction cost.

5. WisDOT evaluated the 6-lane East Washington Avenue alternative (3 lanes in each direction). The modeling indicates that a 6-lane East Washington Avenue will experience LOS E or LOS F operations at the ramp terminals between 2037 and 2039. With the anticipated construction year in the late 2030's, it is likely the ramp terminals would experience these failing operations when construction is finished, or shortly thereafter. The modeling indicates that the 8-lane East Washington Avenue (east of East Springs Drive) is needed upon completion of the interchange project.
6. WisDOT's cost share policy for new interchanges is generally 50 percent funded by local municipalities, but subject to negotiation. Federal funds could be used for this reconstruction; however, it is not guaranteed that there will be any federal funds since they are capped every year.
7. There are many construction priorities along the Interstate corridor. WisDOT will continue to review the priorities based on safety issues, pavement condition, bridge condition, and funding. The Department will continue to look at ways to move this project up in design.
8. WisDOT will explore splitting the Milwaukee Street overpass from the larger I-94/WIS 30 interchange project to allow for earlier construction. If it cannot be advanced, to enhance pedestrian safety in the interim, WisDOT will evaluate the addition of a 4-inch to 6-inch raised sidewalk within the existing shoulder on the Milwaukee Street bridge to accommodate pedestrians until the bridge is replaced.
9. WisDOT supports multimodal transportation, including sidewalks, bike lanes, multiuse paths, and TDM/TSMO measures. WisDOT also funds other transportation modes such as rail, harbor, and aeronautics.

Department of Transportation

Thomas Lynch, PE, PTOE, PTP, AICP, Director of Transportation

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Phone: (608) 266-4761
Fax: (608) 267-1158

October 24, 2024

David Schmidt, PE

Wisconsin Department of Transportation (DTSD)
Southwest Region Madison Office
2101 Wright Street
Madison WI, 53704

Subject: Comments on I-39/90/94 FEIS Responses and Commitments

Again, we appreciate the collaborative approach WisDOT has taken on this study, and the opportunity to interact on proposed responses and commitments that will be incorporated in the FEIS/ROD. We also appreciate WisDOT incorporating the introduction of two interchanges into the scope of the study and environmental document.

The following table summarizes proposed WisDOT responses to Madison comments, and our subsequent comments on those responses.

1. Bicycle/Pedestrian Facilities
WisDOT Response: *WisDOT will add bicycle/pedestrian facilities consistent with design standards and in coordination with Madison during final design. Additional features, such as protected bicycle facilities, will be determined during final design coordination with local communities. During final design, WisDOT will coordinate with the city of Madison regarding the Rattman NDP crossing to identify the path location, including a future Interstate crossing, and complete an environmental document and permitting. If the path location is defined during final design for the Interstate project, WisDOT will include crossing construction and cost as part of the Interstate construction package. The path could be cost shared with the city if the path is environmentally cleared and desired by the city.*
Madison comment: *We appreciate the commitment to coordination in incorporating pedestrian and bicycle facilities in fulfilling federal law and US DOT policy. We also appreciate WisDOT acknowledging the importance of the Rattman NDP crossing and willingness to incorporate it in the I-39/90/94 project. We look forward to working with WisDOT to complete NEPA documentation, permitting, and other coordination issues.*
2. Noise
WisDOT Response: *WisDOT will review the noise barrier analysis during final design to verify impacts. 23 CFR 772.11 (vii)(c) regulates noise mitigation and states, "If undeveloped land is not permitted for development by the date of public knowledge, the highway agency shall determine noise levels in accordance with 772.17(a) and document the results in the project's environmental clearance documents and noise analysis documents. Federal participation in noise abatement measures will not be considered for lands that are not permitted by the date of public knowledge." WisDOT's noise policy is FDM 23, which mirrors 23 CFR 772 and applies to state and federal actions. This limits the use state funds for barriers in place of federal funds. City ordinance (16.23(d)) also specifies where noise sensitive land uses can be permitted. "A developer must do a noise analysis for lands abutting a state or federal expressway or freeway and to provide noise abatement if the developer plans to include any noise sensitive land uses (habitable structures and recreation areas) in the 67 dBA contour." Therefore, WisDOT cannot commit to reanalyzing noise impacts.*
Madison comment: *Madison recognizes the constraint posed by the federal regulation. It is uncommon for a NEPA approval to span decades without changes that prompt a re-evaluation consistent with 23 CFR 771.129 and WisDOT's policy FDM 20-40. At that time Madison*

requests additional noise analysis if warranted in light of design, condition, and/or impact changes.
3. Air Quality
WisDOT Response: *WisDOT remains committed to reducing GHG emissions through TDM/TSMO measures. BRT services outside the study corridor are beyond the scope of the I39/90/94 project. WisDOT will support BRT implementation while maintaining safety and traffic operations.*
Madison Comment: *Madison understands WisDOT's desire to constrain GHG mitigation to the corridor, and the ambiguity of where impacts fall within a study corridor. Madison continues to note that the cumulative effect of National and Wisconsin Highway policy has contributed to the climate effects being experienced today and their impact should be considered at the project level basis.*
4. Landscaping
WisDOT Response: *WisDOT implemented an update to its policy related to funding source eligibility of community sensitive design (CSD) elements considered to be aesthetic treatments as it relates to Wis. Stat. Section 85.0205. The policy includes federal funds as an eligible funding source (1.5% of project construction costs, but not to exceed $3 million for the entire 67-mile corridor) for aesthetic elements as determined with community preferences. A 20% local match will be required for requested CSD items, with additional costs being the responsibility of the local municipality. During final design, WisDOT will coordinate with local communities to facilitate the funding of aesthetic treatments determined to be preferences of a community, within the WisDOT's allowed funding limit. WisDOT will complete a State Municipal Maintenance Agreement (SMMA) in local communities desiring to implement CSD measures. The SMMA is required for continued local maintenance of aesthetic elements coming from CSD funding. The Final EIS Section 3.10.4 includes discussion of this updated policy. The Final EIS also states that WisDOT will plant stormwater trees to reduce runoff. Stormwater trees absorb stormwater during a rainfall event, absorb carbon dioxide, serve as an urban canopy to reduce urban heat zones and reduce erosion. WisDOT will determine the location of the stormwater trees during final design. Stormwater mitigation is funded as part of the project construction cost.*
Madison Comment: *Madison supports the inclusion of landscaping and trees as part of the CSD policy and notes that some landscaping could also be considered part of the base project. Madison believes a significant number of trees would soften the impact of this wide highway facility. For clarification, Madison believes trees within WisDOT freeway right of way are best maintained by WisDOT forces.*
5. East Washington Basic Number of Lanes
WisDOT Response: *WisDOT evaluated the 6-lane East Washington Avenue alternative (3 lanes in each direction). The modeling indicates that a 6-lane East Washington Avenue will experience LOS E or LOS F operations at the ramp terminals between 2037 and 2039. With the anticipated construction year in the late 2030's, it is likely the ramp terminals would experience these failing operations when construction is finished, or shortly thereafter. The modeling indicates that the 8-lane East Washington Avenue (east of East Springs Drive) is needed upon completion of the interchange project.*
Madison Comment: *Response acknowledged*
6. Cost Sharing
WisDOT Response: *WisDOT's cost share policy for new interchanges is generally 50 percent funded by local municipalities, but subject to negotiation. Federal funds could be used for this reconstruction; however, it is not guaranteed that there will be any federal funds since they are capped every year.*
Madison Comment: *Madison understands that federal funding varies project by project as WisDOT manages its program, and appreciates WisDOT's willingness to negotiate. Madison believes that just as federal funds are used for features that benefit inter and intra-state users, they also can be used on features that benefit Dane County users who experience the impacts of the project.*
7. Staging of the Milwaukee St Interchange
WisDOT Response: *There are many construction priorities along the Interstate corridor. WisDOT will continue to review the priorities based on safety issues, pavement condition, bridge condition, and funding. The Department will continue to look at ways to move this project up in design.*
Madison Comment: *Madison acknowledges the construction staging and traffic control of the adjacent Badger interchange is complicated and appreciates WisDOT looking into ways to move the interchange construction up in the overall project. Early construction of the Milwaukee St interchange may provide traffic control/traffic diversion benefits to the overall project.*

8. Milwaukee St Overpass
WisDOT Response: *WisDOT will explore splitting the overpass from the larger interchange project to allow for earlier construction. If it cannot be advanced, to enhance pedestrian safety in the interim WisDOT will evaluate the addition of a 4 to 6" raised sidewalk within the existing shoulder on Milwaukee Street bridge to accommodate pedestrians until the bridge is replaced.*
Madison Comment: *Madison appreciates WisDOT understanding the pedestrian challenges associated with this bridge and committing to measures to address them. In absence of early reconstruction of the bridge, the raised sidewalk will go a long way towards protecting pedestrians.*
9. Use of resources focused on motor vehicle mobility
WisDOT Response: *WisDOT supports multimodal transportation, including sidewalks, bike lanes, multiuse paths, and TDM/TSMO measures. WisDOT also funds other transportation modes such as rail, harbor, and aeronautics.*
Madison Comment: *Response acknowledged with the understanding that the project continues to be a considerable allocation of resources towards motor vehicle travel.*

We thank the Wisconsin Department of Transportation for their partnership with the City of Madison. We look forward to continued interaction.

Sincerely,

Thomas W. Lynch PE PTOE PTP AICP
Director of Transportation, City of Madison

cc:
Jenny Kobryn
Dan Schave
Mayor Satya Rhodes Conway
Alders Madison, Field, Currie, and Cole

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8-12-24

David Schmidt
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Via email: David2.Schmidt@dot.wi.gov

Subject: DNR Draft EIS Comments
Project I.D. 1012-05-00/01/02
Interstate Corridor 39/90/94
(US 12/18 to Wis 60)
(Wis 60 to Levee Road)
(US 16/Wis 12 to I-39)
Dane, Columbia, Sauk and Juneau Counties, Wisconsin

Dear Mr. Schmidt,

This letter provides Department of Natural Resources (DNR or Department) comments for the Interstate 39/90/94 Draft Environmental Impact Study (DEIS) project. The DEIS study area extends 67 miles from US 12/18 to US 12/WIS 16 and includes I-39 from its split with I-90/94 to Levee Road. The DNR is a Participating Agency for this study.

The stated purpose of the project is to address the Interstate's existing and future operational, safety and condition needs. The document states that the need for the transportation improvements in the study corridor is demonstrated through a combination of factors including traffic demand, safety needs, pavement and bridge condition, corridor resiliency and other considerations.

The Wisconsin Department of Transportation (WisDOT) and Federal Highway Administration (FHWA) developed and investigated several build alternatives in addition to the no build alternative during the EIS study and planning process. The DNR and other governmental agencies and the public were allowed several opportunities to comment on the alternatives and on project impacts. Three alternatives were carried forward for further study and included in this DEIS: Modernization Plus Added General-Purpose Lane, Modernization Hybrid and No Build. A detailed description of these alternatives is included in the DEIS. The Modernization Plus Added General Purpose Lane is stated as the preferred alternative in the document.

We have reviewed the DEIS and Appendices and have the following comments on the document, the alternatives carried forward in the study, and on the natural resources in the project corridor. These comments are in addition to the comments that we provided in correspondence during the development of this study.

Cross-Sections
The document provides some details and comparisons of proposed cross-sections that include lane,

shoulder, and median width, but does not clarify how these cross-sections were selected, or if there are alternatives to these proposals. Width of these features will be a main factor in the overall impacts of
1} the project. We believe that a description and rationale of how typical cross-sections were selected should be included. For example, were minimum, typical or other cross-section standards reviewed in the analysis? What are the considerations used in selecting the preferred cross-sections (operations, safety, impact)?

DNR supports and strongly encourages the proposal to include the widening of the interstate into the median where possible to reduce impacts along the corridor. Resources are typically more sensitive or unimpacted outside of the existing facility. However, in similar previous studies we understand there have been goals to maintain minimum median width for safety and drainage considerations (ex. 84 feet). Is this minimum width achievable with the additional expansion in the median, is it not a goal, or is there some other factor that was determined to be important in that decision, such as environmental resources, cost, or other features?

Land Use Impacts

The DEIS correctly describes that a construction contractor would be responsible for selecting material
2} source sites for gravel and soil. The document also states that material would most likely be obtained from local quarry sites. Did the EIS development include a review of commercial quarries or other sources throughout the corridor to make this determination? In our experience, private, non-commercial sites often provide a substantial amount of material for large construction projects requiring large quantities of additional fill material. A significant factor is often close proximity to the project, as transportation costs for these materials are considerable. The preferred alternative would likely require a very high amount of these borrow and waste material and sites, especially where the highway will be widened, elevated, or where interchanges will be reconfigured. These private sites are negotiated between the contractor and the landowner, and do not have typical local government zoning review. WisDOT has responsibility for oversight of erosion control and restoration of these sites during construction. These sites are required to comply with wetland and waterway, archeological/historical, endangered resources and other applicable state and federal regulations. However, borrow and waste sites can result in significant changes in the local landscape and result in visual, land cover, elevation, contour and other impacts.

Fragmentation of Habitat

3} Due to the length of the project, the Interstate corridor bisects many natural wildlife corridors, both terrestrial and aquatic. We believe that reconstructing the facility on the existing alignment minimizes additional impacts to important environmental corridors compared to off-alignment alternatives. However, any potential reconstruction project provides an opportunity to evaluate reconnecting significant features severed by the highway. The study should discuss the importance of aquatic organism and wildlife passage and potential opportunities to review and address fragmentation of these features, especially in significant corridors or where rare and/or sensitive communities, species or habitat may occur. General areas to consider include, but are not limited to, the Yahara River, Rowan Creek, Wisconsin and Baraboo River floodplains and the adjacent Pine Island Wildlife Area.

Stormwater

The DEIS includes discussion of surface water and storm water in several areas of the document and
4} attachments. The document proposes that “to minimize impacts and support total maximum daily load (TMDL) limits, WisDOT will implement best management practices.” This includes the development of a storm water management plan for each construction site to address pollution causes by storm water discharges in accordance with ss. NR 151.24 and NR 216.47, Wis. Adm, Code. In accordance with the Transportation Construction General Permit (TCGP), WisDOT would be required to determine whether any part of its construction or post-construction site storm water will discharge to an impaired water

body or TMDL. If so, WisDOT would need to assess whether the TMDL waste load allocation for the facility's discharge will be met through the existing erosion control and storm water management plans in compliance with the applicable performance standards, or whether changes to the plans would be necessary.

5} **Wetlands**
Wetland delineations and habitat reviews were conducted for this study by consultants on the project team. DNR agreed that it was appropriate to use the results of those investigations in evaluating the corridor in the EIS. However, concurrence has not been provided for the boundaries and results of those investigations. Additional wetland and habitat reviews may be required during future project planning and design. Projects should be prepared and willing to modify the design or make minor shifts to the alignment to avoid and minimize wetland and other environmental impacts.

6} The EIS should account for the anticipated mitigation needs resulting from the proposed project. WisDOT should evaluate the current wetland mitigation banking system capacity and begin planning and preparing for the project needs. Consideration should be given to wetland type, function, and watershed needs when planning for future investments to the WisDOT Wetland Mitigation Bank system.

We recommend that the EIS include a discussion of likely temporary wetland impacts. This could include a discussion of potential construction impacts and possible restoration and mitigation for these disturbances. For example, will projects commit to utilizing crane mats, conducting work on frozen ground where possible and/or restoring areas with native seed mixes in consultation with DNR?

7} **Navigation**
Appendix C "Summary of Mitigation Measures" states that "WisDOT will coordinate with WDNR during design to evaluate opportunities for improved access under the Interstate for canoeists and other users of the Yahara River (page C-9)." We request that there be a similar discussion for Token Creek.

8} **Floodplains and Flood Minimization Study**
Per and email request sent to DNR floodplain staff on 8-6-24, the Department will provide comments on the I-39 flood minimization study separately. Thos comments will be provided by September 6th as requested.

9} **Native seeding**
The department strongly encourages the use of native seeding and living fences where possible. The diversity found in established native plantings not only provides habitat for many species such as the Monarch butterfly and Rusty Patched Bumble Bee, it also provides a buffer zone and native seed source to help protect the off right away landscape. Particular consideration should be given to areas adjacent to natural communities and state lands.

The above comments represent the DNR's review of the Draft Environmental Impact statement for the I-39/90/94 interstate corridor from Madison to Wisconsin Dells. While many of the above comments are addressed in the DEIS, the department feels it is important to reiterate areas of particular resource concerns and priorities. If any of the comments or information provided in this letter requires further clarification, please contact this office at the contact information below for the specific project area. We look forward to continued collaboration and coordination on this project into the design phase. The Wisconsin Department of Natural Resource is pleased to have been a participating partner in development of this DEIS and look forward to working cooperatively with WisDOT to develop and maintain a safe and reliable transportation system while preserving our diverse natural resources for all who travel Wisconsin's roadways.

Sincerely,

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DOT SWR Interstate Study

Response to Wisconsin Department of Natural Resources

1. Section 2.2 of the Draft EIS notes that the interstate is modernized to design standards. The cross sections are based on WisDOT standards to maintain safe traffic operations throughout the corridor. The standard median width is 60 feet where speeds are over 50 miles an hour. A narrower median can be constructed if barriers are installed. Throughout much of the Interstate, widening will occur to the inside in the median, reducing the median width below 60 feet. For this reason, barriers will be added to maintain safe traffic operations. Section 1.4.1 of the Final EIS notes trucks make up at least 23% of all daily traffic I-39/90/94. And traffic counts show truck traffic on the Interstate has not declined since the 2020 pandemic. The standard lane width is 12 feet. Considering a narrower lane width of 11 feet presents a higher risk to safety and operations in this 67-mile corridor with high levels of truck traffic. WisDOT utilizes the Interactive Highway Safety Design Model (IHSDM) to predict safety benefits for various roadway elements including lane width. IHSDM is based on nationwide crash research. The reduction in lane width from the WisDOT standard of 12 feet to 11 feet would be expected to increase total crashes by 3.8%. Fatal crashes are expected to increase at even higher rates. During final design, WisDOT will coordinate with WDNR to identify areas for additional impact minimization.
2. Fill sources are determined based on contractor means and methods and WisDOT must approve and review proposed source sites. WisDOT acknowledges that, depending on location and amount of source fill used from a site, changes could result in changes to land cover and topography that impact views and long term uses of sites. Local jurisdictions would control such uses to the extent allowed under local zoning and other land use ordinances. The selected sites are subject to WisDOT requirements to avoid sensitive resources. If private, non-commercial sites are used, WisDOT will be responsible for oversight of erosion control and restoration of these sites during construction. These sites are required to comply with wetland and waterway, archeological/historical, endangered resources and other applicable state and federal regulations.
3. Section 3.13.2 of the Final EIS notes the benefits of a widened Baraboo River crossing under I-39, which will help restore riparian connectivity. Section 3.11.3 also notes the project design will include road-stream crossings with consideration for the recommended accommodations per WisDOT's Agreement on Aquatic Connectivity at Road-Stream Crossing with WDNR. Several examples of maintaining connectivity are noted in the Final EIS. Section 3.11.3 of the Final EIS is revised to include a commitment for aquatic and wildlife passage at stream crossings, including the Yahara River, Rowan Creek and Baraboo River during final design.
4. As part of the WisDOT/WDNR Cooperative Agreement, WisDOT will adhere to minimizing water quality impacts through best management practices in coordination with WDNR. Table S-3 in the Final EIS Summary lists the TCGP as a required approval and Section 3.11.3 discusses the need to support TMDL water quality targets as well as other WDNR stormwater requirements using best management practices.
5. Section 3.12.3 of the Final EIS includes a commitment to continue coordination with WDNR to identify additional avoidance and minimization measures as design progresses. Section 3.15.3 of the Final EIS is updated to include additional coordination with WDNR during final design to reassess the potential for state listed threatened or endangered species.

6. Section 3.12.3 of the Final EIS includes additional information about WisDOT's mitigation banking system capacity. WisDOT will continue developing its wetland mitigation banking system in accordance with state and federal requirements in consultation with WDNR and USACE per signed interagency coordination agreements and the regulations for compensatory wetland mitigation issued jointly by the USACE and USEPA in May 2008 (33 CFR Part 325, 33 CFR Part 332, and 40 CFR Part 230 [April 10, 2008]).

   Temporary construction impacts are discussed in Section 3.24.4 of the Final EIS (see *Construction Impacts and Mitigation, Build Alternatives, Water Quality/Erosion)*.

7. Section 3.11.3 of the Final EIS includes a commitment to evaluate opportunities for canoeists and other users at Token Creek.

8. See WDNR letter dated September 9, 2024 and responses in Appendix P.

9. WisDOT will use native plantings as part of restoration activities after construction where possible. Section 3.10.4 of the Final EIS includes added language noting the installation of a living snow fence along the study corridor. Other sections noting commitments to native plantings are discussed in Section 3.15.3 and Section 3.16.3 as part of mitigation measures for threatened and endangered species and other natural resources.

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9-09-24

David Schmidt
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Subject: DNR Draft EIS Comments: Flood Mitigation Study
Project I.D. 1012-05-00/01/02
Interstate Corridor 39/90/94
(US 12/18 to Wis 60)
(Wis 60 to Levee Road)
(US 16/Wis 12 to I-39)
Dane, Columbia, Sauk and Juneau Counties, Wisconsin

Dear Mr. Schmidt,

This letter provides Department of Natural Resources (DNR or Department) comments for the Interstate 39/90/94 Draft Environmental Impact Study (DEIS) project. The DEIS study area extends 67 miles from US 12/18 to US 12/WIS 16 and includes I-39 from its split with I-90/94 to Levee Road. The DNR is a Participating Agency for this study. This comment letter is intended only to address the flood mitigation study and impacts resulting from raising I-39 in the Wisconsin and Baraboo River floodplain.

1} **Insurable Structure Clarification**
The Residences and Businesses section on page 14 and the info in Table 4-4 appear to use the terms “insurable structures” and “residences and businesses” somewhat interchangeably. It’s worth clarifying that, in regard to FEMA regulation, a structure doesn’t necessarily need to be a business or residence to be insurable.

2} **Structures Within Regulatory Floodway Boundary**
The narrative indicates that the listings in Table 4-4 include “structures within FEMA’s regulatory floodway boundary.” To clarify, even structures located in the floodfringe should be included in this tally. While fill in floodfringe areas won’t impact the model results or the BFE, the BFE in these floodfringe areas can still be impacted by work taking place in the floodway. It is unclear to us if the DEIS already included floodfringe structures in the count, and just used the term “floodway” in the narrative where “floodplain” may have been intended, or if the DEIS excluded potentially impacted structures located in the Floodfringe boundary. Clarification would be helpful.

3} **Flood Mitigation**
The DEIS indicates that insurable structures impacted in the 1D regulatory model would need to be either relocated or floodproofed, or that purchase of flooding easements may be necessary. It has been our experience and understanding FEMA will deny a CLOMR application outright if it results in a BFE increase on insurable structures. Purchasing flooding easements may still be a necessary step to

satisfy local requirements, but may not change FEMA's stance, since they're concerned with the increased risk to the structure, and not just the question of landowner permission. We recommend seeking clarification from FEMA on this issue.

The above represent the Wisconsin Department of Natural Resources comments on the Interstate Corridor DEIS as it relates to potential floodplain impacts resulting from potential WisDOT projects. We appreciate the opportunity to review and comment the DEIS and look forward to continued coordination as these projects progress. Please don't hesitate to contact DNR staff listed below with any questions.

Sincerely,

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Caron Kloser -HNTB
Lisa Hemesath -FHWA
DOT SWR Interstate Study

Response to Wisconsin Department of Natural Resources Comments on Flood Mitigation Study

1. **Insurable Structure Clarification.** There are more insurable structures than just "residences and businesses" and Table 4-4 of Appendix E: Flood Minimization Study, describes a broader definition of structure types. The narrative and Table 4-4 in Appendix E are revised to replace "residences and businesses" with "insurable structures" as appropriate. Section 3.13.2, *Flood Minimization Option Impacts,* of the Final EIS is similarly revised.
2. **Structures Within Regulatory Floodway Boundary**. Table 4-4 of Appendix E (and Table 3-49 of the Final EIS) includes all buildings within the floodplain (floodway and flood fringe). The Appendix E narrative is corrected to refer to impacts within the floodplain. No additional revisions in the Final EIS are required.
3. **Flood Mitigation**. The Draft and Final EIS intentionally do not attempt to provide a flood mitigation plan for each impacted property. The Final EIS recognizes that close coordination with WDNR and FEMA will be required in the future and that a variety of outcomes from FEMA are possible based on that coordination. The potential outcomes range from floodproofing to acquisition/relocation and removal of the insurable structure. For impacted properties in the 2D non-regulatory model, WisDOT will continue coordination with property owners to determine the best mitigation, which could include purchasing a flood easement, as allowable under Wisconsin Statute section 86.255.

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October 1, 2024

WDNR Transportation Liaison
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RE: Section 4(f) *de minimis* and Temporary Occupancy Determinations

WisDOT Project: 1012-05-03 – I-39/90/94 Corridor Study – Glacial Drumlin Trail (Dane County), Pine Island Wildlife Area (Columbia County), Mirror Lake State Park and Hulbert Creek Fishery Area (Sauk County), and Rocky Arbor State Park (Sauk and Juneau Counties)

WisDOT is writing to request formal concurrence from Wisconsin Department of Natural Resources (WDNR) for the I-39/90/94 Corridor Study Section 4(f) *de minimis* impact determinations for the Glacial Drumlin State Trail and Pine Island Wildlife Area and temporary occupancy exception determinations for Hulburt Creek Fishery Area, Mirror Lake State Park and Rocky Arbor State Park. **We ask that you coordinate with appropriate WDNR staff to provide concurrence by Friday August 30, 2024.** See attached signature sheets for your use in providing your concurrence.

The Federal Highway Administration is the lead federal agency for the I-39/90/94 Corridor Study. As such, the Glacial Drumlin State Trail, Pine Island State Wildlife Area, Hulbert Creek Fishery Area, Mirror Lake State Park and Rocky Arbor State Park are eligible for protection under 23 Code of Federal Regulations (CFR) 774, commonly referred to as “Section 4(f)”. Section 4(f) is the federal act that protects publicly owned parks, recreation areas, and wildlife and waterfowl refuges. On August 30, 2023 and January 18, 2024, WisDOT met with WDNR staff to discuss proposed work, impact on the properties; including temporary occupancies, the intent to propose a *de minimis* impact and commitment of continued coordination as design progresses. WDNR properties with anticipated *de minimis* impacts and temporary occupancy impacts are discussed below.

De Minimis

Under Section 4(f), impacts that do not adversely affect the activities, features, or attributes qualifying the property for protection under Section 4(f) qualify as *de minimis* impacts (23 CFR 774.17). To make a *de minimis* impact determination, the owner with jurisdiction over the Section 4(f) property (in this case, WDNR) must provide written concurrence that the impact to Section 4(f) properties (in this case, the Glacial Drumlin State Trail and Pine Island Wildlife Area) does not adversely affect the activities, features, or attributes qualifying the properties for protection under Section 4(f) (23 CFR 774.5(b)(2)(i)).

Glacial Drumlin State Trail: In the vicinity of the Glacial Drumlin State Trail, WisDOT would widen the Interstate to allow for an additional general-purpose lane and an outside auxiliary lane, where needed. Construction would require temporarily closing the trail for potentially up to 9 months, see Figure 1. No right of way or temporary easement would be needed. WisDOT will coordinate with WDNR to install temporary (e.g., for closures during construction) and permanent guiding signage on WisDOT highways. As part of the I-39/90 corridor design and construction, the trail will be reconstructed by WisDOT outside and immediately next to the railroad right of way, see Figure 1. WisDOT will provide WDNR land rights to maintain the trail.

Currently, the east-west extension of the Glacial Drumlin Trail does not extend into WisDOT railroad or interstate right of way within the vicinity of the I-39/90/94 study corridor. However, WDNR and its local partners will construct the east-west trail connection at the location illustrated in Figure 1 (see dashed green line) beginning in 2025 via written permits with WisDOT (public infrastructure permit L-8087 and provisional DT-1812 permit for construction). The permits were issued and accepted with the understanding that following the widening of the I-39/90/94 bridge structure to accommodate the general-purpose and auxiliary lanes, WisDOT

would re-construct the trail outside and immediately next to the railroad right of way (see dashed pink line in Figure 1). Reconstruction will be consistent with state and federal (AASHTO) requirements (standards). WisDOT will provide WDNR land rights to maintain the trail.(see pink dashed line in Figure 1).

Figure 1: Impacts to Glacial Drumlin State Trail

Source: Wisconsin Department of Natural Resources

Pine Island Wildlife Area: In the vicinity of Pine Island Wildlife Area, WisDOT would widen I-90/94 from 4 lanes to 6 lanes by adding a general-purpose lane in each direction in the median. I-90/94 would be raised about 3 feet in the vicinity of the WIS 33 Interchange to minimize flooding that has caused road closures. I-39 would remain 4 lanes but would also be raised about 4 feet to minimize flooding that has caused road closures. The WIS 33/I-39 Interchange would be reconfigured from a partial cloverleaf interchange to a diamond interchange.

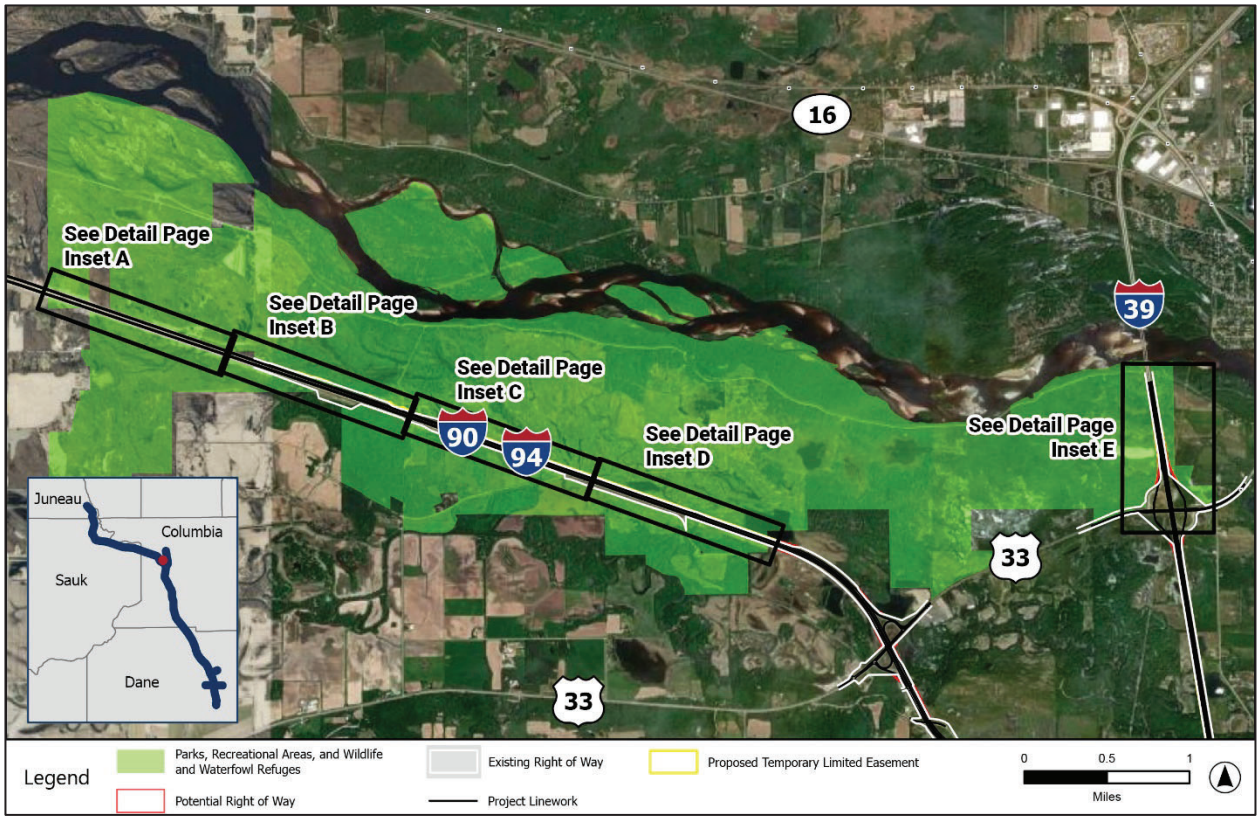
The proposed improvements to I-90/94 and I-39 are along the existing road alignment to minimize encroachment onto the Section 4(f) properties. While the two new general-purpose lanes would be added to the median, construction activities would require approximately 6.4 acres of temporary easement on the Pine Island State Wildlife Area property next to I-90/94, see Figure 2 and insets A through D in Figure 3. Some of these areas are within the dog trial and training area, and while they would be temporarily unavailable for dog trial and training, they are small and not expected to preclude regular dog trial and training operations. Raising the elevation of I-90/94 would increase water surface elevation up to 0.25 feet in the vicinity of the property office and in the dog trial and training area during a 100-year flood event.

Along I-39, construction activities would require approximately 0.9 acres of temporary easement, and 2.5 acres of new right of way to accommodate the reconfigured northbound entrance ramp from WIS 33 to I-39 and southbound exit ramp from I-39 to WIS 33, see Inset E in Figure 3. Raising the elevation of I-90/94 and I-39 and lengthening the existing I-39 bridge over the Baraboo River by 500 feet would change the water surface elevation on the east side of the property during a 100-year flood event. On the west side of I-39, the water surface elevation would rise up to 1.0 foot and on the east side of I-39 it would decrease up to 0.5 feet. The increased surface water elevation within the existing 100-year floodplain could affect three buildings on the property. Refer to Section 3.13 (Existing Conditions, Impacts and Mitigation) and Appendix E of the Environmental Impact Statement (EIS) detailing the hydrological impacts.

In coordination with WDNR, WisDOT will develop measures to mitigate the increased surface water elevation on WDNR lands. Mitigation measures would include relocation, floodproofing by constructing berms to protect the buildings from the 100-year flood event or raising the buildings out of the 100-year floodplain. WisDOT will review anticipated hydrological impacts with WDNR during final design and FEMA coordination. No long term negative impacts are anticipated to lands encumbered with federal or state funding requirements; however, if a design change causes a long term impact to occur (e.g., for use of or access to lands for the purposes for which they were acquired or developed), the impact will be discussed with WDNR and may need to be mitigated by WisDOT.

To mitigate temporary construction impacts, WisDOT will restore disturbed areas to a condition which is at least as good as that which existed prior to construction. In consultation with WDNR, WisDOT will restore habitat with seed mixes and vegetation that WDNR specifies. WisDOT will also coordinate with WDNR to install temporary (e.g., for closures during construction) signage on WisDOT highways.

Figure 2: Impacts to Pine Island State Wildlife Area Overview Map



Source: Wisconsin Department of Natural Resources

Figure 3: Impacts to Pine Island State Wildlife Area Detail Maps

Source: Wisconsin Department of Natural Resources

Temporary Occupancy Exception

Under the provisions of Section 4(f), FHWA can approve temporary occupancies of Section 4(f) protected properties (in this case, Mirror Lake State Park and Rocky Arbor State Park) if the following provisions in 23 CFR 774.13(d) are met and the property owner (in this case, WDNR) agrees in writing:

(i) Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land.

(ii) Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) resource are minimal.

(iii) There are no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purpose of the resource, on either a temporary or permanent basis.

(iv) The land being used must be fully restored, i.e., the resource must be returned to a condition that is at least as good as it was prior to the project.

(v) There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.

Mirror Lake State Park: In the vicinity of Mirror Lake State Park, WisDOT would widen I-90/94 from 4 lanes to 6 lanes by adding a general-purpose lane in each direction. While the two new general-purpose lanes would be added to the median, construction activities require approximately 1.0 acre of temporary easement in Mirror Lake State Park property next to I-90/94, see Figure 4. No WDNR land would be permanently impacted.

The bridges carrying I-90/94 over Mirror Lake would be replaced and would accommodate the two additional general-purpose lanes. WisDOT anticipates constructing the bridge from within the existing Interstate right of way, avoiding the need to use Mirror Lake State Park property for bridge construction activities. Mirror Lake within the existing Interstate right of way will be kept open to watercraft traffic to the greatest extent practicable but may need to be closed to watercraft traffic at certain times during construction, for example for bridge removal and girder setting. Temporary pier supports or barges may also be needed in the water within the Interstate right of way during construction but flow will be maintained.

To mitigate temporary construction impacts, WisDOT will restore disturbed areas to a condition which is at least as good as that which existed prior to construction. In consultation with WDNR, WisDOT will restore habitat with seed mixes and vegetation that WDNR specifies. WisDOT will also coordinate with WDNR to install temporary (e.g., for closures during construction) and permanent guiding signage on WisDOT highways.

Figure 4: Impacts to Mirror Lake State Park

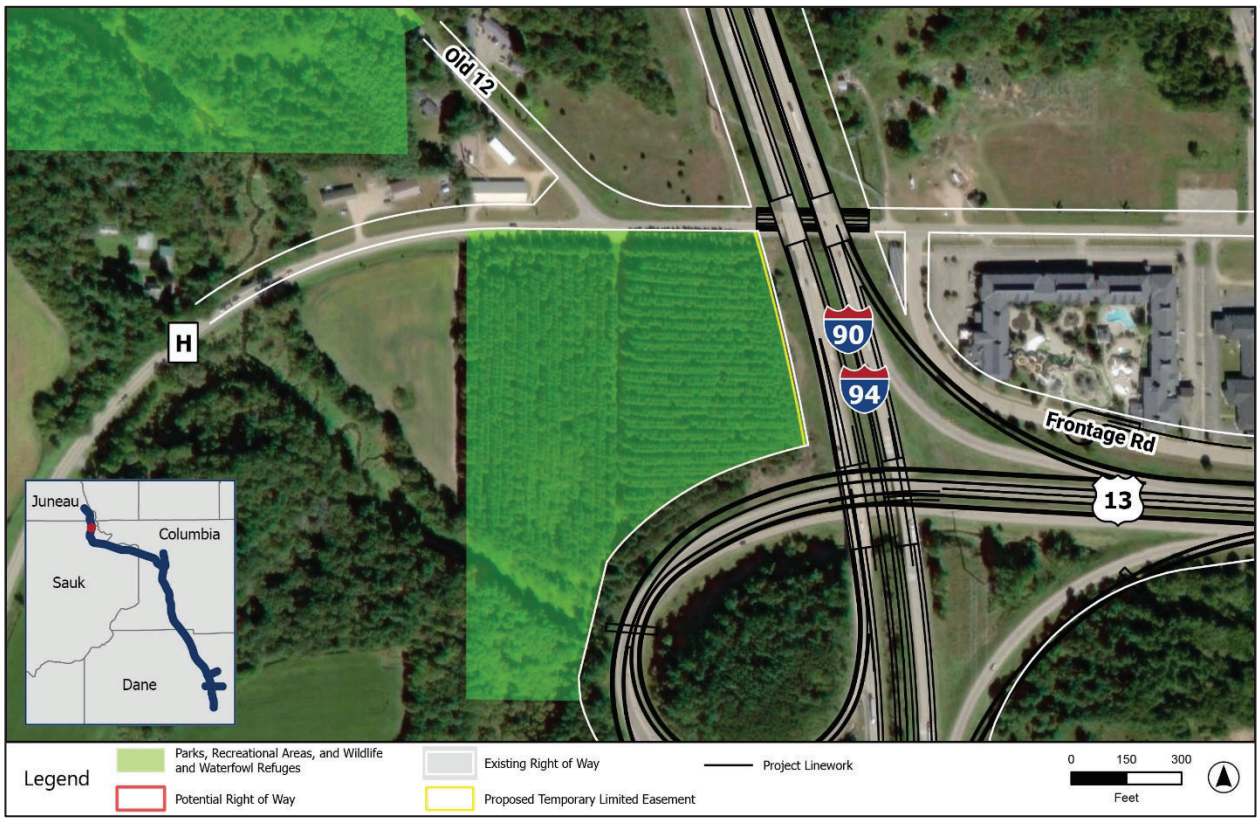
Source: Wisconsin Department of Natural Resources

Hulburt Creek Fishery Area: In the vicinity of Hulburt Creek Fishery Area, WisDOT would widen I-90/94 from 4 lanes to 6 lanes by adding a general-purpose lane in each direction. WisDOT would reconstruct the WIS 13 interchange similar to its existing trumpet configuration, but the ramps would be rebuilt to modern design standards.

The Trumpet interchange alternative would acquire about 0.1 acre of temporary easement along the eastern edge of Hulburt Creek Fishery Area. There are no recreational features where property would be acquired for this alternative, see Figure 5 on the next page. The culvert conveying Hulburt Creek under the ramps would be replaced, but work would be within existing WisDOT right of way and not encroach into the fishery.

The proposed improvements to I-90/94 are along the existing road alignment thereby minimizing encroachment onto the Hulburt Creek Fishery Area property. To mitigate temporary construction impacts, WisDOT will restore disturbed areas to a condition which is at least as good as that which existed prior to construction. In consultation with WDNR, WisDOT will restore habitat with seed mixes and vegetation that WDNR specifies. WisDOT will also coordinate with WDNR to install temporary (e.g., for closures during construction) signage on WisDOT highways.

Figure 5: Trumpet Interchange Alternative Impacts to Hulburt Creek Fishery Area

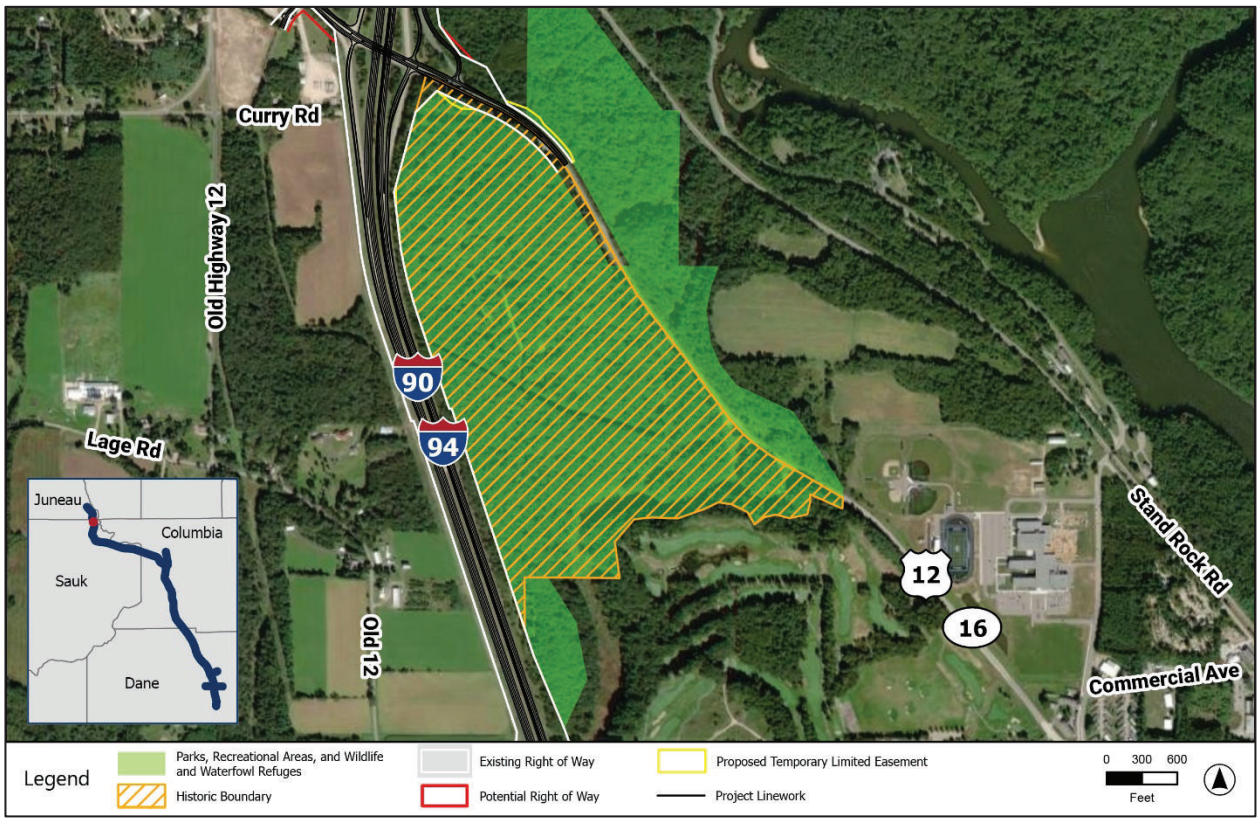


Source: Wisconsin Department of Natural Resources

Rocky Arbor State Park: In the vicinity of Rocky Arbor State Park, WisDOT would widen I-90/94 from 4 lanes to 6 lanes by adding a general-purpose lane in each direction. The Diamond Interchange alternative for US 12/WIS 16 would retain the existing diamond configuration but would increase the lengths of the entrance and exit ramps and improve ramp alignments to provide better sight distance. US 12/WIS 16 would be reconstructed to include a divided median for protected left turns. Construction activities would require about 0.8 acre of temporary construction easement from the park, see Figure 6. No WDNR lands would be permanently impacted.

To mitigate temporary construction impacts, WisDOT will restore disturbed areas to a condition which is at least as good as that which existed prior to construction. In consultation with WDNR, WisDOT will restore habitat with seed mixes and vegetation that WDNR specifies. WisDOT will also coordinate with WDNR to install temporary (e.g., for closures during construction) signage on WisDOT highways.

Figure 6: Impacts to Rocky Arbor State Park



WisDOT requests WDNR's concurrence that the project's temporary impacts to Hulburt Creek Fishery Area, Mirror Lake State Park and Rocky Arbor State Park meet the temporary occupancy exception based on the following:

(i) Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land.

Finding: Temporary easements would be obtained for construction of the proposed improvements, and WDNR would retain ownership of the parks throughout construction and upon completion. The easements would not be needed longer than it would take to construct the proposed improvements.

(ii) Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) resource are minimal.

Finding: The scope of work would be minor; some grading may occur, however, no activities, features or attributes that qualify the parks for protection under Section 4(f) would be affected.

(iii) There are no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purpose of the resource, on either a temporary or permanent basis.

Finding: There would be no permanent adverse physical impacts to the properties and no temporary or permanent interference with amenities on the properties. In the case of Rocky Arbor State Park, which is also eligible for listing on the National Register of Historic Places, none of the park's known historic resources are in the temporary easement. SHPO concurred with the Determination of No Adverse Effect on February 13, 2024.

(iv) The land being used must be fully restored, i.e., the resource must be returned to a condition that is at least as good as it was prior to the project.

Finding: The property temporarily used during construction would be restored to at least as good a condition as it is prior to construction. In consultation with WDNR, WisDOT will restore habitat with seed mixes and vegetation that WDNR specifies. WisDOT will also coordinate with WDNR to install temporary (e.g., for closures during construction) signage on WisDOT highways.

(v) There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.

Finding: The attached signature sheets, once signed and returned to WisDOT, will serve as documentation of WDNR's agreement regarding conditions (i) through (iv) described above.

The public was afforded the opportunity by WisDOT to review and comment on the project's impacts to the properties as well as ask questions at the January 30-31 and February 1, 2024, public involvement meetings and public hearings on the draft Environmental Impact Statement on July 30-31 and August 1, 2024. Comments were accepted until August 12, 2024. No public comments regarding the properties were received.

WisDOT requests that WDNR sign, date, and return the enclosed signature sheets indicating concurrence with the *de minimis* impact determinations and temporary occupancy exemption findings as described in this letter. If WDNR concurs, FHWA may make *de minimis* impact determinations for Glacial Drumlin State Trail and Pine Island State Wildlife Area, and temporary occupancy exception findings for Mirror Lake State Park, Hulburt Creek Fishery Area and Rocky Arbor State Park and may utilize WDNR's written concurrence in making these determinations. FHWA will include the determinations in the Final Environmental Impact Statement that WisDOT and FHWA are preparing to complete the National Environmental Policy Act (NEPA) process for the study.

Your response is respectfully requested by Friday August 30, 2024. If you have any questions regarding this letter, please reach out to me at David2.Schmidt@dot.wi.gov or 608-516-9041.

Thank you.
David Schmidt, P.E., Project Manager

Enclosures

The Wisconsin Department of Natural Resources concurs with the following:

A) I concur with the determination that the impacts to **Glacial Drumlin State Trail** described in this letter would not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f). I have also been informed that, based on my concurrence, the FHWA may make a *de minimis* finding regarding impacts to the property, thus satisfying the requirements of Section 4(f). If the impacts described herein should change, the WDNR reserves the right to revisit this determination.

B) I concur with the determination that the impacts to **Pine Island State Wildlife Area** described in this letter would not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f). I have also been informed that, based on my concurrence, the FHWA may make a *de minimis* finding regarding impacts to the property, thus satisfying the requirements of Section 4(f). If the impacts described herein should change, the WDNR reserves the right to revisit this determination.

C) I concur with the determination that use of **Hulbert Creek Fishery Area** during construction as described in this letter meets the temporary occupancy exception in 23 CFR 774.13(d). I have also been informed that, based on my concurrence, the FHWA may make a temporary occupancy exception finding regarding impacts to the property, thus satisfying the requirements of Section 4(f). If the impacts described herein should change, the WDNR reserves the right to revisit this determination.

D) I concur with the determination that use of **Mirror Lake State Park** during construction as described in this letter meets the temporary occupancy exception in 23 CFR 774.13(d). I have also been informed that, based on my concurrence, the FHWA may make a temporary occupancy exception finding regarding impacts to the property, thus satisfying the requirements of Section 4(f). If the impacts described herein should change, the WDNR reserves the right to revisit this determination.

E) I concur with the determination that use of **Rocky Arbor State Park** during construction as described in this letter meets the temporary occupancy exception in 23 CFR 774.13(d). I have also been informed that, based on my concurrence, the FHWA may make a temporary occupancy exception finding regarding impacts to the property, thus satisfying the requirements of Section 4(f). If the impacts described herein should change, the WDNR reserves the right to revisit this determination.

Name (print): Steven Little

Signature: Signed by: 7A5DFE3497144B5... Date: 10/14/2024 | 2:28 PM CDT

Please keep a copy for your records and return a signed and dated original to my attention to the following address:

David Schmidt, P.E., Project Manager
David2.Schmidt@dot.wi.gov
WisDOT
2101 Wright Street
Madison, WI 53704

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

August 12, 2024

4112.1
ER24/0301

Glenn Fulkerson
Federal Highway Administration
525 Junction Road, Suite 8000 S
Madison, WI 53717

RE: Draft Section 4(f) and 6(f) Evaluation for the Interstate (I)-39/90/94 Corridor Study between US Highway (US) 12/18 in Madison and US 12/Wisconsin State Highway (WIS) 16 in Wisconsin Dells, Wisconsin

Dear Glenn Fulkerson,

The U.S. Department of the Interior (Department) has reviewed the Draft Section 4(f) and 6(f) Evaluation for the Interstate (I)-39/90/94 Corridor Study between US Highway (US) 12/18 in Madison and US 12/Wisconsin State Highway (WIS) 16 in Wisconsin Dells, Wisconsin. The purpose of the I-39/90/94 Corridor Study is to address existing and future traffic demands, safety issues, aging and outdated infrastructure, and corridor resiliency.

The project sponsors are the Wisconsin Department of Transportation (WisDOT) and the Federal Highway Administration (FHWA), as the lead federal agency. The Draft Section 4(f) evaluation considers the effects under Section 4(f) of the Department of Transportation Act of 1966 (codified at 49 U.S.C. 303) associated with the project. Section 4(f) applies to publicly owned parks, recreation areas, wildlife and waterfowl refuges, or significant historic resources.

The Draft Environmental Impact Statement (DEIS) evaluates a No-Build Alternative and two Build Alternatives, Freeway Modernization and Interchanges. Multiple conceptual designs are assessed under each Build Alternative.

Section 4(f) Preliminary Determinations
Based on the current level of design and analysis, the FWHA has made the following preliminary Section 4(f) determinations as described in Section 4.4.1 Historic Sites, Parks, Recreational Areas, and Wildlife and Waterfowl Refuges in Section 4: Section 4(f) and Section 6(f) Evaluation of the DEIS. All final determinations will be provided in the final EIS. To minimize harm, areas would be restored to existing or better condition following construction. If a build

alternative is selected, additional efforts would be made in the engineering design phase to minimize encroachment on Section 4(f) properties. Additional design and consultation will continue to minimize and mitigate potential impacts.

Glacial Drumlin State Trail

Under both freeway modernization alternatives (Modernization Plus Added General-Purpose Lane and Modernization Hybrid), construction would require temporary closure of the trail. No right of way or temporary easement would be needed. The FHWA has made a preliminary finding of *de minimis* impact to Glacial Drumlin State Trail.

Baraboo River Waterfowl Production Area (WPA) and Baraboo River Floodplain Forest (No. 212) State Natural Area (SNA)

1 } Under both freeway modernization alternatives, the proposed improvements would require about 1.1 acres of temporary easement and acquire approximately 0.3 acres of new right of way. These improvements would be along the existing road alignment thereby minimizing encroachment. FHWA has made a preliminary *de minimis* impact determination.

Pine Island State Wildlife Area

Under both freeway modernization alternatives, construction would require approximately 6.4 acres of temporary easement on the wildlife area next to I-90/94. Along I-39, construction activities would require approximately 0.9 acres of temporary easement and 2.5 acres of new right of way. A small portion of dog trial and training areas would be temporarily unavailable during construction. Improvements would be along the existing road alignment thereby minimizing encroachment. FHWA has made a preliminary *de minimis* impact determination.

Mirror Lake State Park

Both freeway modernization alternatives, would require approximately 1.0 acre of temporary easement in Mirror Lake State Park property during construction. Improvements would be along the existing road alignment thereby minimizing encroachment. The FHWA has made a preliminary determination that the temporary easement in Mirror Lake State Park property during construction of the proposed improvements meets the temporary occupancy criteria under 23 CFR 774.13(d) and is therefore not considered a use of Section 4(f) property.

Hulburt Creek Fishery Area

Under both freeway modernization alternatives, the WisDOT would reconfigure the WIS 13 interchange as either a split diamond or a trumpet configuration. The Split Diamond interchange

2 } alternative would require about 0.4 acres of temporary easement and about 0.8 acres of new right of way. No impacts to the nearby snowmobile trail would occur. The Trumpet interchange alternative would acquire about 0.1 acres of temporary easement, and there are no recreational features near where this interchange would be constructed. The FHWA has made a preliminary finding of *de minimis* impact to the area under the Split Diamond alternative. The FHWA has made a preliminary determination that the temporary easement needed during construction under the Trumpet interchange alternative meets the temporary occupancy criteria under 23 CFR 774.13(d) and is therefore not considered a use of Section 4(f) property.

Rocky Arbor State Park

The Diamond interchange alternative would require about 0.8 acres of temporary easement from the park, some within the historic boundary, during construction. No built recreational features or any of the park's historic resources are in the temporary easement. The FHWA has made a preliminary determination that the temporary easement in park property during construction meets the temporary occupancy criteria under 23 CFR 774.13(d) and is therefore not considered a use of Section 4(f) property. The State Historic Preservation Officer (SHPO) concurred with the Determination of No Adverse Effect on February 13, 2024.

Section 4(f) Comments

The Ice Age Trail Scenic Trail, a National Scenic Trail of the National Park Service (NPS), is located in the area of potential effect (APE). There are four instances where the trail crosses the APE. However, Section 4(f) does not apply to these on-road, unmarked connecting routes that cross the study corridor. The applicability of Section 4(f) to trails is exempted when they occupy a transportation right of way without limitation to any specific location within that right of way, so long as the continuity of the trail, path, bikeway, or sidewalk is maintained (23 CFR 774.13(f)(3)). In all four of these locations, the trail is routed on the roadway with no designated location within the roadway's right of way, and continuity of the trail would be maintained temporarily during construction by either avoiding the crossings or with a temporary reroute. Additionally, per Question 15B of FHWA's Policy Paper which speaks to Section 4(f) applicability to the trails designated under the National Trails System Act, National Scenic Trails must be on publicly owned recreation land to be subject to Section 4(f).44. As the Ice Age National Scenic Trail is located along roadways in the study area, and not on recreation land, and the build alternatives would maintain trail continuity, Section 4(f) does not apply.

The Aldo Leopold Shack and Foundation property (Foundation) is a National Historic Landmark which may be potentially impacted by the project. The NHL boundary and National Register boundaries are outside the APE. The edge of the listed boundaries are approximately 5,000 feet from the edge of the APE. That is considered far enough out of the APE so as not to have an indirect effect. The Foundation property is approximately 1,000 feet from the edge of the APE. However, it is not listed as historic. Since the Foundation is a private recreation property, it is not a Section 4(f) property for the purpose of this review.

Rocky Arbor State Park is National Register for Historic Places (NRHP) eligible and will be impacted. The park has received funds from the Land and Water Conservation Fund (LWCF), and it may lose an acre of land to interchange ramp relocations. However, it is not near any of the park resources. The Department concurs with the SHPO's determination of No Adverse Effect.

In summary, the Department concurs that there are no direct adverse effects to Section 4(f) properties. While there are Section 4(f) properties close to the APE, none of them are close enough to result in an indirect adverse effect. This conclusion agrees with the preliminary Section 4(f) report and the SHPO's findings.

The Department's review also concurs with the preliminary determinations of actions that constitute a use under Section 4(f) properties. The Department recommends that the WisDOT

and FWHA continue coordination with all consulting parties and that planning continues to assess all possible options to minimize harm to Section 4(f) properties from such use.

Section 6(f) Preliminary Determination

Hulburt Creek Fishery Area

Land and Water Conservation Act (act) funds were used at Hulburt Creek Fishery Area qualifying the property for protections under Section 6(f) of the act. If WisDOT selects the Split Diamond alternative as the preferred alternative, approximately 11.5 acres previously within the trumpet interchange, which has similar habitat and includes a segment of Hulburt Creek, would be available for WisDOT to transfer to WDNR as proposed mitigation (replacement land).

Section 6(f) Comments

The Department has reviewed the study outlined above and the following sites were identified in the Section 4(f) and Section 6(f) evaluation: Mirror Lake State Park, Hulbert Creek Fishery Area, and Rocky Arbor State Park. These sites continue to be encumbered under Section 6(f)(3) of the LWCF Act (now codified at 54 U.S.C. § 200305(f)(3)). The Department recommends continued consultation with the WDNR including the State LWCF Program contact, Ms. Pamela Rood, who administers the LWCF Program on behalf of the State of Wisconsin, for any potential impacts to the parks. Pamela may be reached via email at pamelaa.rood@wisconsin.gov or at 608-264-9215.

The Department recommends that coordination continue with all consulting parties to determine the impacts to Section 6(f) properties.

The Department has a continuing interest in working with the WisDOT and FWHA to ensure impacts to resources of concern are adequately addressed. For matters related to these comments, please coordinate with Hanna Daly, Regional Environmental, National Park Service, serving Department of Interior Regions 3, 4, and 5, hanna_daly@nps.gov. We appreciate the opportunity to provide these comments.

Sincerely,

John Nelson
Regional Environmental Officer

cc: Hanna Daly, NPS

Response to US Department of the Interior

1. WisDOT has revised design to reduce impacts at the Baraboo Waterfowl Production Area. The revised impacts will result in about 0.3 acres of temporary easement during construction and no purchase of new right of way is needed.
2. WisDOT selected the WIS 13 Trumpet alternative. The temporary easement meets the temporary occupancy criteria under 23 CFR 774.13(d) and is therefore not considered a use of Section 4(f) property.

REGION 5
CHICAGO, IL 60604

August 12, 2024

VIA ELECTRONIC MAIL ONLY

Lisa Hemesath
Environmental Protection Specialist
Federal Highway Administration, Wisconsin Division
525 Junction Road
Madison, Wisconsin 53717

David Schmidt, Project Manager
Wisconsin Department of Transportation
Southwest Region Madison Office
2101 Wright Street
Madison, Wisconsin 53704

Re: Draft Environmental Impact Study: I-39/90/94 Corridor Study, Dane, Columbia, Sauk, and Juneau Counties, Wisconsin – CEQ No. 20140113

Dear Ms. Hemesath and Mr. Schmidt:

The U.S. Environmental Protection Agency (EPA) has reviewed the Federal Highway Administration's (FHWA) Draft Environmental Impact Statement (DEIS) dated June 2024, concerning the above-mentioned project. FHWA, the lead Federal agency, and the Wisconsin Department of Transportation (WisDOT), prepared the DEIS for the proposed Interstate 39/90/94 (I-39/90/94) Corridor Study (Project). This letter provides EPA's comments in accordance with our responsibilities as a Cooperating Agency in the National Environmental Policy Act (NEPA) process (40 CFR Part 1501.8), our authorities under NEPA, the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

The Project area extends 67-miles from US 12/18 in Madison to US 12/WIS 16 in Wisconsin Dells, including I-39 from its split with I-90/94 to Levee Road near Portage. The influence of the US 151/High Crossing Boulevard Interchanges extends the Project area along US 151 to American Parkway/Nelson Road. A proposed interchange on I-94 at Milwaukee Street extends the Project area east along I-94. The DEIS addresses the history of traffic congestion in the Project area, existing and future traffic demands, design and operational deficiencies, safety issues, aging and outdated pavement and bridge infrastructure, and corridor resiliency.[1] Evaluating improvements

[1] By 2030, over 20 percent of the pavement will be in poor or worse condition. Nearly 75 percent of 113 bridges in the study corridor will be over 50 years old by 2030; nearly 40 bridges do not meet current height and width clearance standards. I-39 and I-90/94 are located in the Baraboo and Wisconsin River floodplains where historic flooding has closed both interstates, making the Interstate less resilient to climate change.

along the 67-mile corridor in a single study rather than multiple smaller projects leads to a more comprehensive understanding of the potential impacts and benefits of proposed improvements. The DEIS evaluates anticipated effects from three alternatives:

- No Build Alternative: assumes no improvements along the existing Project area;
- Build alternatives – freeway modernization:
  - Modernization plus added general-purpose lane: reconstruct the Interstate with 12-foot shoulders, with a general-purpose lane in each direction along the present freeway alignment throughout a majority of the study corridor. I-39 from the I-39 I-90/94 Split to Levee Road would maintain the same number of lanes as the existing condition. Where operationally prudent, this alternative includes collector-distributor (C-D) and auxiliary lanes.[2] This is the preferred alternative primarily because the predicted crash reduction compared to the No Build alternative (30 percent reduction) is greater than the Modernization Hybrid alternative (1-3 percent reduction). This alternative is expected to perform better operationally when incidents, such as large snow events or other events limit access to managed lanes under the Modernization Hybrid alternative.
  - Modernization Hybrid: reconstruct the Interstate with a combination of a general-purpose lane or a managed lane, depending on location. Where operationally prudent, this alternative includes C-D and auxiliary lanes to further manage traffic. The managed lanes under this alternative would be unavailable at times. By the year 2050, WisDOT predicts the managed lanes would be open for about 40 percent of daylight hours on weekdays and for all daylight hours on weekends. From US 12/18 to WIS 19, the Interstate would feature the same number of general-purpose lanes as are currently present with an 18-foot inside shoulder that would be used as a managed lane. A general-purpose lane would be added to the Interstate from WIS 19 to the I-39 I-90/94 Split and to I-90/94 from the I-39 I-90/94 Split to the US 12/WIS 16 interchange. I-39 from the I-39 I-90/94 Split Interchange to Levee Road would maintain the same number of lanes as the existing condition. The predicted reduction in crashes for this alternative is low (1-3 percent) when compared to the No Build alternative. This alternative is retained due to the high level of local interest.
- Build alternatives – interchanges:
  - I-94/WIS 30 interchange: reconstruct these interchanges to address weaving issues and remove left hand entrances and exits.
  - Milwaukee Street interchange at I-94: construct a new interchange as a Partial Cloverleaf by extending existing Milwaukee Street in an area of planned neighborhood development east of the I-94/WIS 30 Interchange. The Partial Cloverleaf maximizes the weave distance between Milwaukee Street and the I-94/WIS 30 Interchange. The Milwaukee Street interchange is dependent upon a funding agreement with the city of Madison.
    US 151/High Crossing Boulevard interchanges: the existing US 151 interchange is located approximately 0.25 miles north of the High Crossing Boulevard interchange. The US 151 interchange is constructed as a Directional alternative providing freeway-to-freeway movements between US 51 and I-39/90/94 as well as local access. This alternative maintains a half interchange at High Crossing Boulevard, but better separates ramps

[2] Collector-distributor lanes are barrier separated from the mainline freeway to collect traffic from entrance ramps and distribute traffic to exit ramps on lanes dedicated for merging traffic. Auxiliary lanes are not barrier separated lanes and are used for traffic weaving as it enters and exits a freeway.

to/from the south to address congestion and safety.

- Hoepker Road interchange: construct a new interchange as a Shifted Diamond where Hoepker Road crosses I-39/90/94. The Shifted Diamond is the most familiar interchange type for motorists and the ramps are easiest for freight vehicles to navigate. The Hoepker Road interchange would be dependent on a funding agreement with the city of Madison.
- US 51 interchange: construct a Partial Cloverleaf interchange because it reconstructs the existing interchange in a similar footprint, increases the entrance and exit ramp lengths, and adds an extended northbound ramp which will increase safety by reducing merging and lane changes.
- WIS 19 interchange: construct a U-Ramp interchange. This alternative maintains WIS 19 under the Interstate with the U-ramp crossing under extended Interstate bridges over the railroad. The U-ramp would accommodate heavy northbound to westbound movement from the Interstate during evening peak travel times and increase capacity along WIS 19 from four lanes to six lanes between Tierney Crossing and Pepsi Way.
- County V interchange: the Village of DeForest approved a large gas station/convenience store development at the interchange. The substantial traffic demand generated by the proposed development would require improvements to the County V interchange. A developer would privately fund interchange reconstruction. If the development does not occur, a Diamond interchange is the preferred alternative because it can accommodate traffic demands suggested by regional travel models.
- County CS interchange: construct a Diamond interchange which would provide improved sight distances and driver reaction times as well as improved deceleration lanes for trucks with the expanded Interstate footprint. The longer southbound acceleration lane is designed to help traffic operations during heavy travel times (e.g., Sunday afternoons).
- I-39 I-90/94 Split interchange: reconstruct the existing interchange as a 3-level interchange in a similar footprint, reconstruct the WIS 78 interchange as a Diamond interchange, and relocate Cascade Mountain Road access to the Interstate via the WIS 78 Interchange. These configurations incorporate recommendations from WisDOT's flood minimization study for this area.
- WIS 33 Interchange at I-39: construct a Diamond alternative because it would reconfigure ramp alignments to improve sight distances and prevent wrong-way drivers. This interchange incorporates recommendations from WisDOT's flood minimization study in this area that would raise the Interstate by about 4 feet to reduce flood risk.[3]
- WIS 33 interchange at I-90/94: construct a Partial Cloverleaf interchange in a similar footprint. With the Partial Cloverleaf, ramp curves would be realigned to improve river comfort entering and exiting the Interstate, acceleration and deceleration lanes would be lengthened, and the design minimizes impacts to surrounding wetlands and floodplains compared to a standard diamond configuration.
- WIS 12 interchange: construct a Diverging Diamond interchange because it best addresses safety[4] by providing free flow left turns to entrance ramps, ramp alignments improve sight distances, and reduces the number of conflict points at intersections compared to a standard diamond interchange configuration.

[3] This interchange is located in a floodplain where past floods have closed all or parts of I-39 and WIS 33.

[4] The WIS 12 interchange has some of the worst safety statistics in the study corridor due to complex ramp configuration.

- WIS 23 interchange: construct a Diamond interchange because it reconfigures the interchange in a similar but slightly smaller footprint and improves sight distances.
- WIS 13 interchange: construct a Trumpet interchange because it reconstructs the interchange to current design standards. Due to local interest, WisDOT also recommends the Split Diamond alternative for further study. The Split Diamond alternative allows for ramps to and from WIS 13 and County H, providing Interstate access to both roads while connecting them with one-way frontage roads on either side of I90/94. The Trumpet alternative is expected to perform better than the Split Diamond alternative for safety because it has fewer conflict points and would also avoid permanent right-of-way (ROW) impacts to the Hulburt Creek Fishery.
- US 12/WI 16 interchange: construct a Diamond interchange because it reconstructs the existing interchange in a similar footprint with improved ramp design.

The proposed Project would be constructed in phases over the next 10 to 15 years, with each construction phase lasting 1.5 to 3 years, to minimize disruptions to the entire corridor. For each construction phase, WisDOT would develop a transportation management plan to coordinate and manage impacts associated with construction.

As a Cooperating Agency, EPA has participated in numerous inter-agency meetings, including a field visit during April 2024. On February 29, 2024, EPA provided concurrence regarding the Alternatives to be Carried Forward for Detailed Study. As a result of visiting the project corridor in April, EPA provided concurrence regarding the recommended preferred alternative to be carried forward for detailed study in a DEIS.

EPA's detailed comments on the DEIS are enclosed with this letter. We recommend the forthcoming Final EIS address these comments and our recommendations regarding environmental justice; relocations; aquatic resources; air impacts and mitigation; corridor resiliency; agricultural resources; noise impacts; construction effects; energy efficiency and environmental best practices; electric vehicle infrastructure; mitigation; and interagency coordination.

Thank you for the opportunity to review and provide comments on this project. When the Final EIS is available for public comment, please notify our office electronically at R5NEPA@epa.gov. If you have any questions about this letter, please contact the lead NEPA Reviewer, Kathy Kowal, via email at kowal.kathleen@epa.gov.

Sincerely,

KRYSTLE MCCLAIN

Digitally signed by KRYSTLE MCCLAIN
Date: 2024.08.12 09:02:01 -05'00'

Krystle Z. McClain, P.E.
NEPA Program Supervisor
Environmental Justice, Community Health, and Environmental Review Division

Enclosures:
EPA's Detailed Comments; Construction Emission Control Checklist

CC: Bethaney Bacher-Gresock, FHWA

EPA's Detailed Comments

I-39/90/94 Corridor Study
Dane, Columbia, Sauk, and Juneau Counties, Wisconsin
August 12, 2024

1. ENVIRONMENTAL JUSTICE (EJ)

A. Executive Order (EO) 14096: *Revitalizing Our Nation's Commitment to Environmental* Justice for All supplements EO 12898: Federal Actions to Address Environmental Justice in Minority and Low-Income. EO 14096 directs Federal agencies, as appropriate and consistent with applicable law, to identify, analyze, and address disproportionate and adverse human health and environmental effects (including risks) and hazards of Federal activities, including those related to climate change and cumulative effects of environmental and other burdens on communities with EJ concerns.

Section 3(b)(i) of EO 14096 also directs EPA to assess whether each agency analyzes and avoids or mitigates disproportionate human health and environmental effects on communities with environmental justice concerns when carrying out responsibilities under Section 309 of the Clean Air Act.[5] EPA's recommendations below suggest opportunities to further reduce effects to communities with EJ concerns.[6]

Because outreach and meaningful engagement are underlying pillars of EJ, EPA expects mitigation measures to address disproportionate effects that are unavoidable.[7] It is imperative that FHWA develops mitigation for unavoidable effects to underserved communities with input from the impacted communities.

Recommendations for the Final EIS:

1 } 1. Mitigation for proposed effects will likely require efforts past the construction phase. To help ensure that community members are informed and have an equal opportunity to be informed of mitigation commitments, discuss the method(s) FHWA and WisDOT will use to continually engage the community along the project area in meaningful ways past the construction phase.

2 } 2. Discuss efforts designed to help local businesses survive during the construction period. Consider and explain ways WisDOT and FHWA can help small businesses, including:

   a) replicating the Los Angeles County Metropolitan Transportation Authority's small business mitigation programs: the Business Interruption Fund[8] and Eat Shop Play program,[9,10] which provided financial assistance to small "mom and pop" shops and free marketing assistances, respectively; and

[5] 42 U.S.C. 7609
[6] For purposes of NEPA review, EPA considers a project to be in an area of potential EJ concern when the area shows one or more of the thirteen EJ indices at or above 80th percentile in the nation/state on EJScreen. However, scores under the 80th percentile should not be interpreted to mean there are definitively no EJ concerns present.
[7] 40 CFR § 1505.3(b)
[8] https://www.metro.net/about/business-interruption-fund/
[9] https://www.metro.net/about/eat-shop-play/
[10] https://thesource.metro.net/2022/03/30/metro-celebrates-closing-of-successful-construction-mitigation-programs-for-crenshaw-lax-line-first-two-segments-of-rail-line-are-substantially-complete/

b) inform and assist small businesses seek Small Business Administration loans – 7(a) loans[11] and 504 loans.[12]

B. Gentrification can be a result of highway projects in areas that experience greater economic investment following project implementation. As property values and rent prices steadily rise, community members are often pushed out of their neighborhoods and unable to access the new economic, health, education, and environmental benefits brought about by the transit project. WisDOT and FHWA have an opportunity to explore mitigation measures to reduce the possibility of gentrification.

Recommendations for the Final EIS:

3 } 1. Identify members of the community most at risk from gentrification (e.g., renters, senior citizens, those who cannot receive benefits due to their immigration status, etc.).

4 } 2. Establish partnerships (e.g., community organizations) that can produce a framework to identify investments that align with a community-based vision. The framework can:
   a) identify displacement drivers;
   b) address the supply of housing to ensure it meets current demand, anticipates future demand, and remains of good quality and reliance;
   c) foster inclusive development, including access to high-quality job opportunities and training for existing residents;
   d) identify, recommend, and encourage adoption of new development incentives without displacement;
   e) engage developers to encourage development without displacement;
   f) identify areas with the community for protection and enhancement; and
   g) establish a comprehensive list of strategies that will engage the city and the community to work together to implement new incentives that avoid displacement.

2. RELOCATIONS

A. Table 3-12, Residential Relocations and Parcel Acquisitions by Alternative, indicates that 2 residential parcels will be fully acquired. The DEIS also indicates a Conceptual Stage Relocation Plan was completed to determined that suitable replacement housing is available within a 25-mile radius of impacted properties.

Recommendations for the Final EIS:

1. On May 3, 2024, FHWA published final revisions to U.S. Department of Transportation's implementing rule on the Uniform Relocation Assistance and Real Property Acquisition Policies Act[13] (Uniform Relocation Act). To comply with the final rule, real property acquisition phases begun on or after June 3, 2024, should ensure

[11] https://www.sba.gov/funding-programs/loans/7a-loan
[12] https://www.sba.gov/funding-programs/loans/504-loans#id-am-i-eligible-
[13] https://www.transit.dot.gov/funding/grants/grant-programs/capital-investments/dear-colleague-letter-uniform-relocation#:~:text=On%20May%203%2C%202024%2C%20the,be%20effective%20June%203%2C%202024

that planning documents and recipient policies and procedures related to the acquisition of real property, or the displacement of persons are updated to reflect
5 } the provisions found in the final rule. Indicate that the proposed Project will follow the most recent update of this Act.
6 } 2. Describe the planned communication strategy for engaging with residents subject to relocation. Ensure residents are notified as soon as possible to ensure a fair and adequate transition into the relocation process.
7 } 3. Explain the process for engaging linguistically-isolated individuals, if applicable, subject to relocation to ensure residents and business owners are aware of the relocation process and available resources.
8 } 4. Consider appointing one individual with whom relocated residents and business owners can maintain a line of communication to resolve any potential problems that may arise during the relocation process.
9 } 5. Commit to working with community leaders to ensure linguistically-isolated residents and drivers are aware of construction phases, detours, hours of construction, etc.

B. Table 3-15, Availability of Single-Family Rentals, summarizes availability of single-family rental properties. The Table indicates prices ranges and locations for 3-4 bedroom units only.

Recommendations for the Final EIS:

10 } 1. Amend the Table to include homes at the lower end of the value spectrum (e.g., under $350,000).
11 } 2. Amend the Table to include availability of one- and two-bedroom units if smaller single-family rentals will be relocated.
12 } 3. Present similar details for the residences that will be acquired and relocated (e.g. size, estimated price, estimated monthly rent), and ensure that replacement housing is both attainable and comparable for displaced residents.

C. Section 3.4.4, Measures to Minimize and Mitigate Adverse Commercial and Industrial Impacts, indicates that, in addition to providing just compensation for property acquired, additional benefits are available to eligible displaced businesses, including relocation advisory services, reimbursement of moving expenses, and down-payment assistance.

Recommendations for the Final EIS:

13 } 1. Describe what constitutes an "eligible displaced business."
14 } 2. Discuss whether the same benefits will be available for displaced residences. If not, explain why commercial and industrial businesses only would be eligible.
15 } 3. Amend the DEIS to indicate displaced residences can expect these relocation benefits.

3. AQUATIC RESOURCES

A. Section 3.12, Wetlands indicates the proposed project would result in approximately 170 acres of wetland impacts, approximately 700 linear feet of perennial stream impacts, and

approximately 9,400 linear feet of intermittent stream impacts. EPA requests the Final EIS include additional details regarding impacts to aquatic resources.

Recommendations for the Final EIS:

16 } 1. As the project design develops, we expect the disclosure of stream impacts by impact severity tier per the U.S. Army Corps of Engineers' (USACE) St. Paul Stream Mitigation Procedures. Where possible, the wetland impact analysis should be modified to include any expected wetland community type conversion as well as impact duration (temporary or permanent) and type (dredge or fill material) based on planned project activities.

17 } 2. Consider developing a plan for monitoring aquatic resources post construction as part of the Final EIS. While Appendix H includes potential minimization measures of indirect effects to wetlands and surface waters, these resources should be monitored to confirm if appropriate remediation or further compensatory mitigation are be required.

18 } 3. The expected aquatic resource impacts would likely qualify this project for an Individual Clean Water Act (CWA) Section 404 permit. If a CWA Section 404 permit is required, an appropriate mitigation plan would be developed and coordinated with the USACE, EPA, and U.S. Fish and Wildlife Service. Any available information on the proposed mitigation method (e.g., bank by service area) and credit ratio should be provided in the Final EIS.

4. AIR IMPACTS AND MITIGATION

A. The DEIS indicates WisDOT will follow its Standard Specifications for Highway and Structure Construction. Emissions from construction and operation have the potential to impact human health, especially in sensitive populations (e.g., the elderly, children, and those with impaired respiratory systems). In 2002, EPA classified diesel emissions as a likely human carcinogen, and in 2012 the International Agency for Research on Cancer concluded that diesel exhaust is carcinogenic to humans. Diesel exhaust can also worsen heart and lung disease, especially in vulnerable populations, such as children and elderly people.

Recommendations for the Final EIS:

19 } 1. Acknowledging the mitigation measures found in Appendix C, Summary of Mitigation Measures, commit to applicable measures from the enclosed Construction Emission Control Checklist.

20 } 2. Per Executive Order 13045 on Children's Health,[14] EPA recommends FHWA pay particular attention to worksite proximity to places where children live, learn, and play, such as homes, schools, and playgrounds. Construction emission reduction measures should be strictly implemented near these locations to be protective of children's health.

[14] Children may be more highly exposed to contaminants because they generally eat more food, drink more water, and have higher inhalation rates relative to their size. Also, children's normal activities, such as putting their hands in their mouths or playing on the ground, can result in higher exposures to contaminants as compared with adults. Children may be more vulnerable to the toxic effects of contaminants because their bodies and systems are not fully developed, and their growing organs are more easily harmed.

21 } 3. Recommend WisDOT and FHWA assess the use of vegetative barriers to reduce the movement of roadway air pollution into adjacent neighborhoods.[15] EPA research has demonstrated that well-planned vegetative barriers can reduce exposure to roadway air pollution by up to 50 percent, and the combination of a solid fence with vegetation can result in the greatest protection.[16] EPA understands the need for consistency with FHWA and WisDOT requirements, including safety and line-of-sight requirements, which could be addressed during barrier design. EPA would appreciate the opportunity to discuss use of vegetation to reduce pollution exposures. Please contact Kathy Kowal to connect with EPA scientists specializing in vegetative barriers for air quality benefits.

22 } 4. Ensure traffic management plan routes construction truck traffic away from schools, daycare facilities, and parks, if applicable, and use crossing guards when such areas cannot be avoided. In addition to air quality benefits, careful routing may protect children from vehicle-pedestrian accidents.

5. CORRIDOR RESILIENCY

A. The Preferred Alternative includes flood minimization measures that would result in increased 100-year flood elevations at one residence in the regulatory floodplain along WIS 33. Increased flood elevations at the residence would require relocation or other measures to mitigate the impact. The recommended flood minimization option would result in increased flood elevations at up to 9 residential properties outside the regulatory floodplain. Similarly, the recommended flood minimization option would result in increased flood elevations at up to 3 businesses and 3 vacant businesses outside the regulatory floodplain. WisDOT is evaluating purchasing flood easements on these properties.[17]

Recommendations for the Final EIS:

23 } 1. In light of more frequent storm events in the Midwest, discuss whether flood mitigation, including relocation, would be available to any of the nine residential properties outside the regulatory floodplain if any of these properties experience increased 100-year flood elevations and wish to be relocated. Even though these properties are located outside the regulatory floodplain, effects would be an indirect result of the proposed project and, therefore, should be analyzed in the EIS.

24 } 2. Even though the 3 businesses and 3 vacant business properties are located outside the regulatory floodplain, effects would be an indirect result of the proposed project and, therefore, and should be analyzed in the EIS.

B. The DEIS indicates WisDOT will continue coordination with impacted property owners within the regulatory floodplain to determine acquisition or other mitigation measures.

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[15] Vegetative barriers are strategically-sited trees and shrubs, with rows preferably 3 meters tall and 4 meters thick, without any gaps in foliage between trees, running parallel to the roadway. Use of coniferous tree species is critical because they keep their needles year-round.

[16] Expressways generally influence air quality within 500-600 feet; it is therefore most important to assess sites for barriers where there are residences, schools, playgrounds, and other places people gather within 500-600 feet of a roadway. See EPA's Near Roadway Air Pollution and Health: Frequently Asked Questions https://www.epa.gov/sites/default/files/2015-11/documents/420f14044_0.pdf

[17] A flood easement restricts development on the property to land uses allowed in a floodplain. The easement is considered an acquisition, but the property owner retains ownership of the property. WisDOT would compensate the property owner for the restricted use.

Mitigation for flood elevation rises through the buying of easements will be done to the limits allowable under Wis. Stat. s. 86.255.

Recommendations for the Final EIS:

25 } 1. Explain what "continued coordination" means (e.g., length of time after construction commences).

26 } 2. Commit to continued coordination with the nine residential properties and businesses outside the regulatory floodplain.

6. AGRICULTURAL RESOURCES

A. Table 3-21, Summary of Potential Agricultural Land Acquisition by County, indicates approximately 178 acres of agricultural land will be acquired for the Preferred Alternative and flood minimization measures will result in increased 100-year flood elevations on approximately 190 acres of agricultural land near the U.S. Fish and Wildlife Service's Baraboo River Waterfowl Production Area and the Pine Island State Wildlife Area. WisDOT met with affected property owners in January 2024 to discuss potential flood elevation changes. WisDOT also met with Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture Farm Service Agency (FSA), and Department of Agriculture, Trade and Consumer Protection (DATCP) to review potential effects from ROW acquisition and increased 100-year flood elevations. These programs register agricultural landowners for fixed length contracts or perpetual easements.

Recommendations for the Final EIS:

27 } 1. Confirm WisDOT has met with affected property owners to discuss agricultural land acquisitions and/or the need for new access points to agricultural parcels. Include a summary of coordination with NRCS, FSA, DATCP, and affected agricultural landowners as an appendix to the Final EIS.

28 } 2. Analyze and discuss financial effect to agricultural landowners from lost participation in fixed length contracts, perpetual easements, and/or voluntary conservation programs.[18]

29 } 3. The DEIS indicated coordination will continue to develop measures to mitigate property impacts resulting from flood elevation changes. Additionally, agricultural landowners may require assistance navigating revised contracts or new easements. These activities will likely require coordination past the construction phase. The Agricultural Impact Statement[19] (AI Statement) Recommendations to WisDOT recommends hiring or appointing an individual to serve as agricultural inspector or agricultural liaison (Liaison). To help ensure that agricultural landowners are adequately informed of construction effects, financial incentives, etc., EPA

[18] Conservation Reserve Program (CRP), Conservation Reserve Enhancement Program (CREP), and Wetland Reserve Program (WRP) are financial incentive programs to help agricultural landowners meet conservation goals or restore wetlands. These programs register agricultural landowners for fixed length contracts or perpetual easements. Farmland preservation agreements offer preservation tax credits.

[19] The Wisconsin Department of Agriculture, Trade and Consumer Protection prepared Agricultural Impact Statement #4472 for the proposed project dated June 2024.

recommends WisDOT appoint a Liaison. This designee could be responsible for the following:

a) inform impacted agricultural landowners of the extent and timing of construction or flood elevation mitigation;

b) work with landowners to assist them in pursuing available conservation programs;[20] and

c) maintain a line of communication between landowners, agricultural agencies, and WisDOT.

30 } 4. Discuss temporary effects to agricultural resources from construction staging (e.g., construction easements).

B. The DEIS indicates increased 100-year flood elevations are anticipated on approximately 190 acres of agricultural land near the U.S. Fish and Wildlife Service's Baraboo River Waterfowl Production Area and the Pine Island State Wildlife Area.

Recommendations for the Final EIS:

31 } 1. Discuss availability of assistance for agricultural landowners if increased flood elevations resulting from the proposed project result in the loss of a season's yield.

7. NOISE IMPACTS

A. Section 3.2., Field Measurement of Existing Noise Levels, indicates existing noise level measurements were conducted during 2022 at 24 locations. The DEIS does not indicate what time of day these measurements were taken.

Recommendations for the Final EIS:

32 } 1. Indicate what time of day noise measurements were taken. If measurements were not gathered during peak travel times (e.g., morning and evening rush hour), explain why a different time of day was selected.

8. CONSTRUCTION EFFECTS

A. The DEIS indicates build alternatives will require temporary closures at three of four Ice Age Trail connecting route crossings.[21] Detour routes have been identified.

Recommendations for the Final EIS:

33 } 1. Identify how potential users will be advised of Ice Age Trail closures and detours in advance of planned construction. Consider notifications for out-of-town visitors.

[20] Loss of forestland within Managed Forest Law (MFL) agreements may cause some parcels to lose their eligibility to stay enrolled within the MFL program. Impacted landowners should discuss the implications of the proposed project to their MFL-enrolled lands with their local Wisconsin Department of Natural Resources Tax Law Forestry Specialist.

[21] Schepp Road, Old Highway 12/County H, and 60th Street

34 } 2. Describe the potential extent of nighttime construction in residential areas as well as noise and visual mitigation that will be employed to reduce overnight effects to the greatest extent practicable.

35 } 3. Describe the planned communication strategy for notifying residents and businesses about noise and disruption from the proposed action.

4. Describe the potential extent of nighttime construction in residential areas as well as noise and visual mitigation that will be employed to reduce overnight effects to the greatest extent practicable.

36 } 5. Commit to establishing material hauling routes away from places where children live, learn, and play, to the extent feasible. Consider homes, schools, daycares, and playgrounds. In addition to air quality benefits, careful routing may protect children from vehicle-pedestrian accidents. Identify potential material hauling routes in the Final EIS.

B. The Preferred Alternative includes recommendations from WisDOT's Baraboo River flood minimization study. The analysis recommends raising portions of I-39 and I-90/94 by approximately 3 to 4 feet and widening the existing I-39 Baraboo River bridge to reduce flood risk on the Interstate. The DEIS does not analyze the impact from raising the roadway.

Recommendations for the Final EIS:

37 } 1. Analyze the impacts of obtaining and transporting sufficient quantities of fill to raise the roadbed.

C. The Summary of Mitigation Measures (Appendix C) indicates WisDOT will survey all buildings to be demolished to determine whether asbestos or lead paint is present. All appropriate and applicable engineering and regulatory controls will be followed during the handling and disposal of asbestos-containing material and lead-based paint.

Recommendations for the Final EIS:

38 } 1. Include surveying the bridge over Mirror Lake to determine whether lead paint is present before demolition begins.

9. ENERGY EFFICIENCY AND ENVIRONMENTAL BEST PRACTICES

A. Energy efficient design and material selection could reduce construction and operations costs and promote a high-quality work environment, while also better protecting the environment. Recycling construction debris also preserves valuable landfill space and makes use of materials that have high embodied energy. With a project of this magnitude, multiple opportunities exist to reduce environmental effects.

Recommendations for the Final EIS:

39 } 1. Consider committing to the following:
   a) Constructing proposed bicycle/pedestrian bridges using permeable pavement or porous pavers to reduce runoff.

b) Identifying and implementing of opportunities for additional green stormwater management practices. Opportunities include, but are not limited to, green roofs, bioswales, and rain gardens.
c) Discussing to what extent WisDOT and FHWA will require energy efficiency measures, greenhouse gas reductions, and other sustainability measures, per Executive Order 13834.[22]
d) Replacing raw materials with recycled materials for infrastructure components. Options include, but are not limited to:

- Using recycled materials to replace carbon-intensive Portland Cement in concrete as "supplementary cementitious material."[23]

10. ELECTRIC VEHICLE INFRASTRUCTURE

A. Per an Electric Vehicle Infrastructure Plan (Plan) in 2022, the study corridor is part of Wisconsin's designated Alternative Fuel Corridors based on its importance to serving traditionally underserved and rural portions of the state, as well as connecting tourism and recreation destinations. The Plan's charging station location site criteria consider the number and types of available amenities such as fueling stations, restaurants, retail locations and big box stores. The US 12/18 and the WIS 60 interchanges meet these criteria.

Recommendations for the Final EIS:

40 } 1. Clarify whether electric vehicle charging stations at the US 12/18 and WIS 60 interchanges will be included in the proposed project.

11. MITIGATION

A. The Agricultural Impact Statement includes a recommendation to monitor for and identify a remedy for damage to drainage tiles during construction.

Recommendations for the Final EIS:

41 } 1. Include an additional mitigation item for WisDOT to monitor for drainage tile damage during construction and identify a remedy with the landowner.

B. Acknowledging Appendix C, Summary of Mitigation Measures (Summary) compiles affected resource and mitigation commitments, including information residents can use to inform WisDOT and FHWA if mitigation commitments are not adhered to would be helpful for residents.

Recommendations for the Final EIS:

42 } 1. Amending the Summary to include contact information stakeholders can use if mitigation is not followed.

[22] https://www.fedcenter.gov/programs/eo13834/
[23] According to EPA's 2011-2020 Greenhouse Gas Reporting Program Sector Profile: Minerals, the largest greenhouse gas emitting subsector is cement production; https://www.epa.gov/system/files/documents/2021-11/minerals_sector_profile_2020.pdf

43 } 2. Commit to providing the Summary in languages other than English to residents within the one-half mile analysis buffer identified in Appendix M, Environmental Justice Plan.

44 } 3. Explain the method WisDOT and FHWA will use to monitor and ensure compliance with mitigation measures described in the Final EIS and Record of Decision.

C. The DEIS indicates WisDOT will restore temporary construction disturbance to vegetation in the project corridor. For example, the DEIS indicates vegetation will be restored "to a condition which is at least as good as that which existed prior to construction" using seed mixes and vegetation specified by the Wisconsin Department of Natural Resources. Similarly, the DEIS indicates WisDOT will revegetate agricultural lands removed from a conservation program.

Recommendations for the Final EIS:

45 } 1. Consider establishing a cover crop[24] (e.g., alfalfa, cover, switch grass) to control invasive plants before revegetation occurs.

46 } 2. Explain restoration goals (e.g., percentage non-native invasive plant species per acre). The expected duration and frequency of monitoring, and the responsible party(s) should be included.

12. INTERAGENCY COORDINATION

A. Implementation of NEPA requires interagency coordination with multiple stakeholders, including Federal and state resource agencies, Tribes, local governments, and affected landowners.

Recommendations for the Final EIS:

47 } 1. Include copies of all interagency coordination sent to and received from Federal and state resource agencies, Tribes, and local municipalities.

48 } 2. Include a list of all Federal, state, and local permits that would be required to undertake the Preferred Alternative.

49 } 3. Include results of impact determinations.[25]

13. OTHER COMMENTS

A. The DEIS does not indicate how comments received during the public comment period would be addressed in the Final EIS.

Recommendations for the Final EIS:

50 } 1. Create an appendix that include all comments received during the DEIS comment period, including any applicable transcripts of comments from the public.

51 } 2. Create an appendix that includes all correspondence sent to and received from government agencies regarding the proposed project.

[24] https://dnr.wisconsin.gov/topic/treeplanting/siteprep

[25] Final *de minimis* Section 4(f) impact determination.

52 }

3. Create a chart that lists the following:
   a) all comments received during the DEIS review period;
   b) FHWA's response with a reference to the section that was changed as a result of the comment, if applicable. Include section and page number for ease of reference; and
   c) associated mitigation efforts with responsible entity.

B. CEQ's Final Rule on NEPA Implementing Regulations[26] went into effect July 1, 2024.

Recommendations for the Final EIS:

53 }

1. EPA acknowledges that FHWA and WisDOT began evaluation of the proposed project before the regulation's effective date, however, Ensure FHWA uses the updated NEPA regulations for Project evaluation.

[26] National Environmental Policy Act Implementing Regulations Revisions Phase 2, 40 C.F.R. **§ 1500-1508 (2024)** https://www.federalregister.gov/d/2024-08792.

Response to US Environmental Protection Agency

1. WisDOT has numerous ways that it continues to reach out to residents in the state of Wisconsin before, during, and after construction. WisDOT's website shares projects in design and planning (wisconsindot.gov) and another website that is used for projects in construction (511). WisDOT also uses many social media accounts to update residents including YouTube, Facebook, Linkedin, Instagram, and X. During design and construction, WisDOT always encourages questions and comments, hosts public involvement activities for residents and businesses, which includes providing design project manager and construction supervisor contact information for any follow up.

2. WisDOT has a program called "In This Together" which provides information to businesses and how WisDOT can work with businesses to plan for construction impacts. Section 3.8.2 (see *"Construction Effects on Communities and Neighborhood*s") of the Final EIS describes this program. WisDOT also staffs a public involvement team to work with and be available to small businesses on any questions, concerns, and to help them start planning for upcoming work as stated in the "In This Together" program. Section 3.24.4 of the Final EIS (see *Construction Impacts and Mitigation, Build Alternatives, Traffic, Construction Staging, Transit, Bicycles and Pedestrians*) also describes public outreach activities during construction to minimize impacts to local communities. The Wisconsin Constitution, Article 8, section 2 states "The department's appropriations are set out at s. 20.395 and none of these appropriations allow direct payments to businesses to compensate for business losses arising during construction".

3. See response to comment 4, below.

4. The proposed improvements are within an existing transportation corridor, largely with established land uses that are regulated through local zoning and land use policies. Gentrification risks would be managed by local governments. Section 3.1.3 of the Final EIS discusses land use plans, including the planned growth areas that anticipate new interchanges at Milwaukee Street and Hoepker Road. The city of Madison's local plans for these areas call for a mix of residential housing types to mitigate potential gentrification. Existing and planned development at the Milwaukee Street interchange already include a wide range of housing types. New interchanges would facilitate higher intensity employment and a mixed-use land uses supporting a mix of housing types. The Madison Metro Transit agency also serves the extended Milwaukee Street area with its Route D1 bus service and the area has two existing income-restricted apartment communities.

   The city of Madison recognizes potential risk of gentrification and implements other strategies to minimize this risk. Strategies include providing an Affordable Housing Fund, land banking, impact fee waivers and economic development/commercial stabilization programs (https://www.cityofmadison.com/dpced/planning/documents/Equitable%20Development%20Report%20111919.pdf). The city's study, "*Equitable Development in Madison*" also notes growth can be positive for neighborhoods where new residents can diversify incomes in a neighborhood and can be a stabilizing force against concentrated poverty. The city also continues to implement initiatives to provide housing needs through its Housing Forward program (https://www.cityofmadison.com/mayor/documents/Housing%20Forward%20final.pdf).

5. WisDOT follows the most recent update of the Uniform relocation Assistance and Real Property Acquisition Policies Act (Uniform Relocation Act) as noted in Final EIS Section 3.3.3. The changes

concerning relocation have already been adopted by the WisDOT Relocation Coordinator and are part of policy.

6. Communication with residents subject to relocation began with and will continue through project public involvement meetings. Section 3.3.3 of the Final EIS describes the relocation process. WisDOT real estate staff conducts personal interviews with each relocatee as part of the relocation plan process and there will be communication and assistance throughout the relocation process by the relocation agent.

7. WisDOT makes every effort to provide language translators for those impacted by the project design either through the Department's public involvement meetings and or outreach to local communities. If someone is being relocated and in need of translation services, those services will be provided either by WisDOT staff or language consultants.

8. During the right of way acquisition phase, WisDOT will assign a real estate project manager for the project who will be the point of contact for residents and business owners concerning any questions/concerns they may have.

9. WisDOT will continue working with area communities during the final design and construction phases of the project through local official meetings, public involvement meetings, and email updates. All meetings are ADA compliant, and translators are available on request. WisDOT will also continue hosting meetings virtually for residents that cannot travel. Section 3.24.4 of the Final EIS (see *Construction Impacts and Mitigation, Build Alternatives, Traffic, Construction staging, Transit, Bicycles and Pedestrians*) describes outreach commitments during construction.

10. WisDOT prepares an initial Conceptual Stage Relocation Plan (CSRP) early in the project development process when relocations are anticipated on a project. The CSRP follows the guidance of Wisconsin Administrative Code Chapter Adm 92.24 – 92.30. The plan includes how a displaced person will have the opportunity to be treated fairly; be able to occupy a decent, safe and sanitary replacement; prompt and complete relocation payments; minimize hardship and the relocation advisory services that will be offered. The CSRP includes a relocation feasibility analysis that identifies and describes anticipated displaced persons, a description of the property occupied, and identification and assessment of available replacement resources, a correlation of replacement resources with a person's needs, financial means and an estimate of relocation payments.

    The CSRP provides information on what is available, what might be impacted by a project, if there is available housing and/or buildings available for the relocatees and an estimate of what it might cost per parcel. By law, the CSRP can provide relocation comparables up to 50 miles, but they must be financially feasible.

    After the CSRP and WisDOT selects an alternative, WisDOT will interview the actual parcel owners and tenants being relocated. The interview provides information on a relocatee's specific needs and preferences. WisDOT then completes the Conceptual Stage Relocation Plan Interview Addendum which explains interview outcomes. Once that is approved, WisDOT staff will put together a relocation package that will have comparables that are equal to or better and they will keep in mind what the relocatee actually wants and needs.

11. Based on the CSRP, both residences that would be relocated are 3 and 4 bedroom homes. The CSRP search of comparable replacement sites was limited to the size of the residential units that would be impacted.

12. The CSRP provides this information and Final EIS is revised to include the size of relocated residences and summarizes findings that replacement housing is attainable and comparable. A footnote is added to the Final EIS the CSRP is available upon request.

13. All relocated businesses are eligible - the term is removed in Final EIS Section 3.4.4.

14. All relocated residents and businesses are eligible for benefits as part of the Uniform Act. Similar language is inserted in Section 3.3.3 of the Final EIS.

15. See response to Comment 14, above.

16. The Summary in the Final EIS (Table S-3) identifies the list of permits required for the project, which includes a Section 404 permit and associated approvals. As part of the Section 404 permit process, WisDOT will identify stream and wetland impacts by community type. During the permit process, WisDOT will identify wetland and stream impact durations. Section 3.12.2 of the Final EIS identifies impacts by wetland type.

17. WisDOT would determine final mitigation and monitoring commitments as part of the Section 404 permit application process and the WisDOT/WDNR Cooperative Agreement on Compensatory Wetland Mitigation.

18. The Wisconsin Department of Transportation Wetland Mitigation Banking Technical Guideline provides guidance regarding development of a mitigation plan during final design. Mitigation ratios would be determined based on a range of factors including wetland type and watershed where mitigation occurs. Section 3.12.3 of the Final EIS includes an added table that identifies wetland mitigation credits availability at WisDOT mitigation banks. WisDOT will continue to develop mitigation bank sites in coordination with the Wisconsin Department of Natural Resources and the US Army Corps of Engineers and other regulatory agencies as part of its ongoing statewide efforts.

19. Special WisDOT provisions of construction contracts include many of the applicable measures in the Construction Emission Control Checklist provided by EPA. Final EIS Section 3.24.4 (*Construction Impacts and Mitigation, Build Alternatives, Air Quality (Emissions and Dust*) and Section 3.18.5 acknowledge and include measures from the Construction Emission Control Checklist, where practicable.

20. Special WisDOT provisions of construction contracts include many of the applicable measures in the Construction Emission Control Checklist provided by EPA. A contract's special provisions includes special directions or project-specific requirements that are not otherwise stated explicitly in WisDOT's current edition of the Standard Specifications for Highway and Structure Construction. Some specific emission control measures are identified in Final EIS Section 3.24.4 (*Construction Impacts and Mitigation, Build Alternatives, Air Quality (Emissions and Dust*)) and in Section 3.18.5. These emissions

control measures will be implemented near places where children live, learn, and play, where applicable.

21. Section 3.10.4 and Section 3.16.3 of the Final EIS describe efforts to restore vegetation, emphasizing a vegetation management system to foster sustainable, ecologically sound and visually pleasing roadside vegetation. Section 3.10.4 in the Final EIS has added text noting WisDOT will install a living snow fence, consisting of native trees, shrubs and grasses, where applicable, along the corridor.
22. Construction vehicle emission impacts are mitigated through implementation and maintenance of a comprehensive traffic control plan, enforcing emission standards for gasoline and diesel construction equipment, and stipulating that unnecessary idling and equipment operation is to be avoided. WisDOT will also work with applicable local units of government when identifying haul routes in the final construction plans and specifications to minimize construction traffic from using roadways near schools, daycare facilities and parks when possible. Section 3.24.4 of the Final EIS (*Construction Impacts and Mitigation, Build Alternatives, Traffic, Construction Staging, Transit, Bicycles and Pedestrians*) is updated to reflect this commitment.
23. All properties inside and outside the regulatory floodplain are mitigated in the proposed project and environmental document. Sections 3.3.2, 3.4.2, 3.8.2, 3.9.3 of the Final EIS includes revised language indicating WisDOT will work with owners of impacted properties to determine the appropriate mitigation, which could include purchasing a flood easement.
24. See response Comment 23, above.
25. Language in Section 3.13.2 and Section 3.13.4 in the Final EIS is clarified to indicate WisDOT will continue coordination through meetings, emails and phone calls with property owners affected by potential flood elevation changes and to finalize measures to mitigate property impacts, if needed.
26. See response Comment 25, above.
27. WisDOT sent letters to all property owners potentially affected by property acquisition, including farm owners. WisDOT has also spoken with several farm owners at public involvement meetings and individual meetings, including owners affected by potential new right of way acquisitions and owners affected by flood elevation changes. Appendix B includes documentation of coordination with FSA, NRCS and DATCP.
28. Section 3.6.3 of the Final EIS discusses that mitigation for properties removed from preservation and reserve programs includes compensation.
29. An agricultural liaison will be assigned to the project team to communicate with agricultural landowners. Section 3.6.3 of the Final EIS is updated to reflect this commitment.
30. Temporary impacts for construction staging are accounted for in the right of way impacts as shown in the EIS Appendix A. Additional potential construction impacts could include farmer

indirection to access fields. Section 3.6.3 notes that prior to construction, WisDOT will provide agricultural operations at least 30 days' notice prior to loss of access, when the loss would occur and duration. Should access be lost, WisDOT will fulfill its responsibilities under Wisconsin Statute section 86.05 to provide a suitable new entrance. Local traffic diversions are discussed in Section 3.24.4 of the Final EIS (*Construction Impacts and Mitigation, Build Alternatives, Traffic, Construction Staging, Transit, Bicycles and Pedestrians*).

31. Section 3.13.2 and 3.13.4 of the Final EIS discuss anticipated continued efforts to coordinate with property owners to identify appropriate compensation, which could include purchasing a flood easement. Section 3.6.3 of the Final EIS includes an added commitment to establish an agricultural liaison to keep property owners informed of design activities, coordinate between design and potential impacts. WisDOT also has a program called "In This Together" which provides information to businesses and how WisDOT can work with businesses to plan for construction impacts. The Wisconsin Constitution, Article 8, section 2 states "The department's appropriations are set out at s. 20.395 and none of these appropriations allow direct payments to businesses to compensate for business losses arising during construction".

32. Measurement locations were coordinated with WisDOT prior to the measurement being conducted. Measurements were taken with ANSI Type 1 integrating sound level meters for a duration of 20 minutes at each location between the hours of 8:00 a.m. and 6:00 p.m. Measurements were conducted when traffic was free-flowing (whether during a peak traffic hour or not) in order to gather noise level and traffic count data that could be used for the purposes of model validation. The revised Appendix G of the Final EIS identifies times of measurements.

33. WisDOT's standard transportation management plan addresses detours. Section 3.2.3 of the Final EIS describes mitigation for temporary trail detours that WisDOT would encourage NPS to post on their trail website. Section 3.2.3 of the Final EIS is updated to reflect WisDOT will coordinate both WDNR and NPS regarding temporary closures, communicate anticipate closures as part of public involvement activities conducted through construction.

34. Night work is anticipated. Additional language is added in Section 3.24.4 of the Final EIS (*Construction Impacts and Mitigation, Build Alternatives, Traffic, Construction Staging, Transit, Bicycles and Pedestrians*). To minimize impacts in residential areas, WisDOT maintains active public involvement during construction to keep local governments and surrounding neighborhoods aware of planned construction work, the nature of the work and duration. Where construction includes reasonable and feasible noise barriers, WisDOT would seek an opportunity to construct noise barriers first to minimize exposure to construction activities.

35. Section 3.24.4 of the Final EIS (*Construction Impacts and Mitigation, Build Alternatives, Traffic, Construction Staging, Transit, Bicycles and Pedestrians*) describes communication strategies. Strategies can include email communications, project website updates, news releases and social media posts.

36. Construction vehicle emission impacts are mitigated through implementation and maintenance of a comprehensive traffic control plan. WisDOT will also work with applicable local units of government when identifying haul routes in the final construction plans and specifications to minimize construction traffic from using roadways near schools, daycare facilities and parks when possible. Section 3.24.4 of the Final EIS (*Construction Impacts and Mitigation, Build Alternatives, Traffic, Construction Staging, Transit, Bicycles and Pedestrians*) is updated to reflect traffic management plans will review locations of schools, daycare facilities and parks to avoid approving routes at these locations.

37. Section 3.24.4 of the Final EIS (*Construction Impacts and Mitigation, Build Alternatives, Material Source and Disposal Sites*) notes WisDOT would verify no sensitive resources at borrow pits are adversely impacted. This section of the Final EIS is updated to note that WisDOT will require the contractor to identify the haul route from borrow and waste sites to the construction site. WisDOT includes a contract pay item for construction-related damage to local roads and the contractor would address damage to local routes.

38. Section 3.19 of the Final EIS is updated, describing planned work during final design and construction. WisDOT assumes all bridges contain lead paint and will be managed as such during construction. Section 3.24.4 (*Construction Impacts and Mitigation, Build Alternatives, Water Quality/Erosion*) is also updated.

39. A) There are no proposed bicycle/pedestrian bridges in the project. B) The build alternatives include stormwater best management practices and Section 3.11.3 of the Final EIS lists mitigation measures, including stormwater trees, to be evaluated during final design. WisDOT will also include a living snow fence added with the project (see update in Section 3.10.4 of the Final EIS). C) Section 3.18.5 of the Final EIS lists GHG mitigation measures that WisDOT will implement. Other efficiency and sustainability measures would be implemented to the extent practicable as part of construction activities described in Section 3.24 of the Final EIS. D) Section 3.24.4 of the Final EIS (*Construction Impacts and Mitigation, Build Alternatives, Material Source and Disposal Sites*) notes WisDOT will consider implementing USEPA's recommendation for opportunities to reuse and/or recycle existing pavement and other practices outlined in USEPA's Sustainable Management of Construction and Demolition Materials webpage.

40. The project will not include any electric vehicle charging stations at these locations. The US 12/18 and WIS 60 interchanges are not improved as part of the I-39/90/94 Corridor Study.

41. In areas where new right of way is acquired on farm property, WisDOT real estate staff work with farm owners to identify impacted active and legal drain tiles that will require restoration as part of final design and construction. During construction, WisDOT will provide an agricultural liaison to oversee contact with landowners to address unanticipated impacts to active and legal drain tiles in areas of newly acquired right of way. Section 3.6.3 of the Final EIS is updated to reflect this mitigation measure.

42. The projects resulting from the environmental document will be shared through WisDOT's website and through public involvement opportunities that will continue through construction. At any time a stakeholder can contact the WisDOT Southwest Region or project staff to report a mitigation not being followed. The projects will have an environmental specialist that will monitor all work ensuring environmental commitments are being followed.
43. All materials can be requested in other languages and translators can be hired to make sure that all residents understand the materials. The study offered these services for every public involvement meeting.
44. The projects resulting from the environmental document will have an environmental specialist that will monitor all work ensuring environmental commitments are being followed. The commitments summary in Appendix C will be incorporated into construction "Special Provisions", with which WisDOT and the contractor are required to comply.
45. It is standard practice to temporary seed all graded areas that are incomplete and not being worked for 14 days using the temporary bid item which specifies using annual oats, agricultural rye, or winter wheat dependent on time of year.
46. WisDOT monitors project restoration weekly and after any 0.5" rain event as well as after any phase changes in the project. The WisDOT Transportation Construction General Permit (TCGP) states final stabilization occurs when all land disturbing construction activities at the construction site have been completed, and a uniform perennial (long lasting) vegetative cover has been established with a density of at least 70%. This information is added to Section 3.24.4 of the Final EIS (*Construction Impacts and Mitigation, Build Alternatives, Water Quality/Erosion*).
47. Draft and Final EIS Appendix B and Appendix P include correspondence from government agencies.
48. The Final EIS Summary (Table S-3) includes a list of approvals needed.
49. Section 4.4.1 of the Final EIS is updated with final Section 4(f) determinations and approvals from owners with jurisdiction (OWJ).
50. The Final EIS includes a new Section 6 that discusses the public hearing and public review period for the Draft EIS. This section summarizes comments received and provides detailed discussion of agency comments. All agency comments and responses are included in Appendix P. WisDOT developed a public hearing record that includes all comments received during the Draft EIS public availability period. The record is not part of the Final EIS, but is available upon request.
51. Draft and Final EIS Appendix B and Appendix P include correspondence from government agencies.
52. A new Section 6 is added to the Final EIS that summarizes comments received and provides a section of substantive comments and responses.

53. Pursuant to 40 CFR 1506.12, these regulations apply to any NEPA process begun after July 1, 2024. The NOI for this project, initiating the NEPA process, was published July 18, 2023. Project analysis has been prepared consistent with applicable law, regulation, and guidance. The DEIS did include an analysis of climate and EJ impacts according to CEQ's 1/9/2023 interim guidance focusing on climate and Environmental Justice populations (88 FR 1196).

SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation
DT1635 8/2022

For instructions, see FDM Chapter 26. WHS Case # 23-1050

I. PROJECT INFORMATION

☒ Amended Submittal *(include new information only)*

Project ID	Highway – Street	County
1012-05-02 (original submittal also included IDs 1015-05-00 and 1015-05-01)	I-39	Dane, Columbia
Project Termini		**Region – Office**
US 12/18 to WIS 60		Southwest - Madison
Regional Project Engineer – Project Manager		**(Area Code) Telephone Number**
David Schmidt, P.E.		(608) 246-3867
Consultant Project Engineer – Project Manager		**(Area Code) Telephone Number**
Nick Bennett, P.E., HNTB Corporation		(608)-886-7931
Archaeological Consultant		**(Area Code) Telephone Number**
Rhiannon Jones, Commonwealth Heritage Group		(414) 446-4121
Architecture/History Consultant		**(Area Code) Telephone Number**
Kate Stanger, Commonwealth Heritage Group		(414) 446-4121

II. PROJECT DESCRIPTION

Project Length	Land to be Acquired: Fee Simple	Land to be Acquired: Easement
0.05 miles	0 acres	0 acres

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right of Way Width	160'-775'	160-775	Terrace Width n/a	n/a	n/a
Shoulder	10' - 12'	12’	Sidewalk Width n/a	n/a	n/a
Slope Intercept	varies	varies	Number of Lanes 4 to 6	4 to 6	up to 8
Edge of Pavement	varies	varies	Grade Separated Crossing	n/a	n/a
Back of Curb Line n/a	n/a	n/a	Vision Triangle n/a acres	n/a	n/a
Realignment	n/a	n/a	Temporary Bypass n/a acres	n/a	n/a
Other – List:			Stream Channel Change	☐ Yes	☒ No
Attach Map(s) that Depict “Maximum” Impacts.	☒ Yes	☐ No	Tree Topping and/or Grubbing	☐ Yes	☒ No

Brief Narrative Project Description: Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right of way, whichever is greater. Include all temporary, limited and permanent easements. For amendments (e.g. design refinements, scope changes, etc) description should only include new/added project actions and materials.

This amended Section 106 submittal is for the I-39/90/94 corridor study between Madison and Wisconsin Dells and specifically addresses a change in what is proposed in the vicinity of Hoepker Road and Portage Road in Dane County. The archaeological Area of Potential Effects (APE) has been enlarged at this location to accommodate the addition of a signal at the intersection. No roadway work is anticipated except adding signal equipment. All work will occur within the existing right-of-way. The APE for buildings/structures is unaffected by this change in scope (properties at this intersection were included in the original APE).

As noted in Section I, the proposed signal is associated with ID 1012-05-02. The original Section 106 submittal was for the entire corridor study, which also included IDs 1015-05-00 and 1015-05-01.

☐ Add continuation sheet, if needed.

SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION *(continued)*

Wisconsin Department of Transportation DT1635

III. CONSULTATION: How has notification of the project been provided to:

Property Owners – previously notified	Historical Societies/Organizations	Native American Tribes
☐ Public Information Meeting Notice	☐ Public Information Meeting Notice	☐ Public Info. Mtg. Notice
☐ Letter - Required for Archaeology	☐ Letter	☒ Letter
☐ Telephone Call	☐ Telephone Call	☐ Telephone Call
☐ Other:	☒ Email	☒ Email

Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS – APE

ARCHAEOLOGY: Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

HISTORY: Describe the area of potential effects for buildings/structures. Please work with your architecture/history consultation to complete this section.

Properties adjacent to Hoepker Road and Portage Road within the project limits. The entirety of this APE was previously surveyed as part of the initial investigations for the project. There are no historic properties in this area.

V. PHASE I – ARCHAEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

ARCHAEOLOGY	HISTORY
☒ Archaeological survey **is needed**	☐ Architecture/History survey **is needed**
☐ Archaeological survey **is not needed**	☒ Architecture/History survey **is not needed –** see Sections II and IV above, as well as the attached memo
☐ Screening list (date)	☐ Screening list (date)
☐ Non-Survey Archaeology Documentation attached	☐ Non-Survey History Documentation attached

VI. SURVEY COMPLETED

ARCHAEOLOGY	HISTORY
☒ Archaeological Survey Field Report (ASFR) attached	☐ Architecture/History Survey Report (AHSR) attached
☐ Cemetery/burial documentation attached	☐ Potentially eligible buildings/structures identified
☐ Phase I Report attached	☐ Avoided through redesign or outside the APE
☐ No Potentially eligible sites identified	☐ Determination of Eligibility (DOE) completed
☐ Potentially eligible site(s) identified	☐ Previously listed/eligible property identified
☐ Avoided through redesign or outside APE	☐ Avoided through redesign or outside the APE
☐ Phase II conducted.	

VII. FORMAL EVALUATION COMPLETED

☐ Phase II Report Attached	☐ Determination(s) of Eligibility attached
☐ No arch site(s) eligible for NRHP	☐ No buildings/structure(s) eligible for NRHP
☐ Arch site(s) eligible for NRHP	☐ Buildings/structure(s) eligible for NRHP
☐ Site(s) eligible for NRHP – DOE attached	

VIII. COMMITMENTS/SPECIAL PROVISIONS – must be included with special provisions language

☐ Per Wis. Stat. 157.70 obtain burial authorization from WHS one year prior to construction. Please include archaeology site number(s).

☐ Please attach continuation page if needed.

IX. PROJECT DECISION

☒ No historic properties (historical or archaeological) in the APE.

☐ No historic properties (historical or archaeological) affected.*

☐ Historic properties (historical and/or archaeological) may be affected by project;

☐ Documentation for Determination of No Adverse Effects is included with this form. WisDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.*

☐ Go to Step 4: Assess affects

* Per 23 CFR 774, WisDOT, on behalf of FHWA, hereby informs SHPO that concurrence with 'No historic properties affected' or 'No Adverse Effect on historic properties' may be used in considering whether a de minimis Section 4(f) finding or a temporary occupancy exception is appropriate. SHPO signature on this form serves as acknowledgement of this official notification.

X. SIGNATURES

X Jennifer Kobryn (WisDOT Regional Signature)	X DocuSigned by: Barry Paye 3F13953827A84D7... (WisDOT Historic Preservation Officer Signature)	X DocuSigned by: Kimberly Cook 2F3FB9178D084A4... (State Preservation Officer Signature)
Digitally signed by Jennifer Kobryn DN: C=US, E=jennifer.kobryn@dot.wi.gov, O=Wisconsin Department of Transportation, OU=SW Region, CN=Jennifer Kobryn Date: 2024.08.19 14:40:10-05'00'	August 19, 2024	August 29, 2024
(Date – m/d/yy)	(Date – m/d/yy)	(Date – m/d/yy)

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Ecological Services
Minnesota-Wisconsin Field Office
4101 American Boulevard East
Bloomington, Minnesota 55425-1665
Phone: (952) 252-0092 Fax: (952) 646-2873

September 3, 2024

In Reply refer to:
ESFO-IPaC Number: 2024-0020692

Lisa Hemesath
Environmental Protection Specialist
FHWA-Wisconsin Division
525 Junction Road,
Suite 8000 Madison, WI 53717

Subject: Biological Opinion for the I-39/90/94 Wisconsin Dells to Madison Project

This document transmits the U.S. Fish and Wildlife Service's (Service) Biological Opinion (BO) and is based on our review of the Wisconsin Department of Transportation (WisDOT), as the non-federal representative of the Federal Highway Administration (FHWA), proposed I-39/90/94 Wisconsin dells to Madison Project (Project) in Dane, Sauk, Columbia, and Juneau Counties, Wisconsin (WisDOT Project ID: 1050-05-00) with potential effects to whooping crane (*Grus americana*), gray wolf (*Canis lupus*), Karner blue butterfly (*Lycaeides melissa samuelis*; KBB), rusty patched bumble bee (*Bombus affinis* RPBB), northern long-eared bat (*Myotis septentrionalis;* NLEB), Higgins' eye pearlymussel (*Lampsilis higginsii*), sheepnose mussel (*Plethobasus cyphyus*), eastern massasauga rattlesnake (*Sistrurus catenatus*; EMR), eastern prairie fringed orchid (*Platanthera leucophaea*; EPFO), eastern prairie bush-clover (*Lespedeza leptostachya*; EPBC). FHWA also requested conference on species proposed for listing including tri-colored bat (*Perimyotis subflavus*; TCB), monarch butterfly (*Danaus plexippus*), and salamander mussel (*Simpsonaias ambigua*). A request for consultation and conferencing with supporting documentation was received May 1, 2024. A Biological Assessment (BA) dated April 30, 2024, and letter requesting formal consultation were received in our office on May 1, 2024.

This BO is based on the best available scientific and commercial data including meetings, electronic mail and telephone correspondence with the FHWA, Wisconsin Department of Natural Resources, and WisDOT as well as from Service files, pertinent scientific

literature, discussions with recognized species authorities, and other scientific sources. A complete administrative record is on file at the Minnesota-Wisconsin Ecological Services Field Office.

We concur with FHWA's determination that the project May Affect but is Not Likely to Adversely Affect (NLAA) gray wolf, Higgins' eye pearlymussel, sheepnose mussel, EPFO, EPBC, monarch butterfly, and salamander mussel. The project will have No Effect (NE) on whooping crane and monarch butterfly. The FHWA has made a determination that the Project May Affect and is Likely to Adversely Affect (LAA) the KBB, RPBB, NLEB, TCB, and EMR. After reviewing the status and environmental baseline of the species and conducting an analysis of the potential effects of the proposed project to the species, the Service concludes that project activities are not likely to jeopardize the continued existence of any species reviewed for this project. The enclosed BO analyzes effects and provides a statement of anticipated incidental take resulting from the project for the species FHWA determined the project is likely to adversely affect (KBB, RPBB, NLEB, TCB, and EMR).

Please contact the Service if the project changes or new information reveals effects of the proposed action to proposed or listed species or critical habitat to an extent not covered in your biological assessment. If you have any questions or comments on this biological opinion, pleasecontact Darin Simpkins, Fish and Wildlife Biologist, at (920)866-1739, or via email at *darin_simpkins@fws.gov.*

Sincerely,

Betsy Galbraith
Acting Field Supervisor

Enclosure

BIOLOGICAL OPINION

Effects to Higgins eye, Sheepnose, and Salamander Mussels Northern Long-Eared and Tri-Colored Bats, Whooping Crane, Gray wolf, Karner Blue Butterfly, Rusty Patched Bumble Bee, Eastern Massasauga Rattlesnake, Eastern Prairie Fringed Orchid, Eastern Prairie Bush-Clover, and Monarch Butterfly from the I-39/90/94 Wisconsin Dells to Madison Project in Dane, Sauk, Columbia and Juneau Counties, WI

FWS IPaC Consultation Code: 2024-0020692

Prepared by:
U.S. Fish and Wildlife Service
Minnesota-Wisconsin Field Office

September 3, 2024

Table of Contents

INTRODUCTION

This biological opinion was issued to the Federal Highway Administration (FHWA) by the U.S. Fish and Wildlife Service (Service) and analyzed the effects to federally listed species described by the *I-39/90/94 Wisconsin Dells to Madison Biological Assessment* (hereafter referred to as the BA) (GEI Consultants of Michigan, P.C. 2024) which is located in Dane, Sauk, Columbia, and Juneau Counties, Wisconsin. The BA was received at the Service's Minnesota-Wisconsin Ecological Services Field Office on May 1, 2024 with a letter requesting us to initiate formal consultation on potential adverse effects to the whooping crane (*Grus americana*), gray wolf (*Canis lupus*), Karner blue butterfly (*Lycaeides melissa samuelis*; KBB), rusty patched bumble bee (*Bombus affinis* RPBB), northern long-eared bat (*Myotis septentrionalis;* NLEB), Higgins' eye pearlymussel (*Lampsilis higginsii*), sheepnose mussel (*Plethobasus cyphyus*), eastern massasauga rattlesnake (*Sistrurus catenatus*; EMR), eastern prairie fringed orchid (*Platanthera leucophaea*; EPFO), eastern prairie bush-clover (*Lespedeza leptostachya*; EPBC). FHWA also requested conference on species proposed for listing including tri-colored bat (*Perimyotis subflavus*; TCB), monarch butterfly (*Danaus plexippus*), and salamander mussel (*Simpsonaias ambigua*). The individual site-specific consultation under Section 7of the Endangered Species Act was used to address one proposed project. This consultation analyzed the direct, indirect, and cumulative impacts from the project on whooping crane, gray wolf, KBB, RPBB, NLEB, Higgins' eye pearlymussel, sheepnose mussel, EMR, EPFO, EPBC, TCB, monarch butterfly, and salamander mussel. The Service concluded that the effects of the Project are not likely to jeopardize the whooping crane, gray wolf, KBB, RPBB, NLEB, Higgins' eye pearlymussel, sheepnose mussel, EMR, EPFO, EPBC, TCB, monarch butterfly, and salamander mussel.

This biological opinion was prepared in accordance with Section 7(a)(2) of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et seq.) and is the culmination of formal Section 7 consultation under the Act. The purpose of formal Section 7 consultation is to insure that any action authorized, funded, or carried out by the Federal government is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any officially designated critical habitat of such species. This biological opinion satisfies the Section 7(a)(2) consultation requirement for federal agencies. A complete administrative record is available at the Minnesota-Wisconsin Field Office.

CONSULTATION HISTORY

Date	To	From	Type of Correspondence	Summary of Correspondence
8/30/2023	WisDOT, Service	GEI	Email	Official Species List generated in Service's Information for Planning and Consultation (IPaC).
12/5/2023	Service, WisDOT	GEI	Email	NLEB determination key completed in IPaC.
2/29/2024	WisDOT, Service	GEI	Email	Updated Official Species List generated in Service's Information for Planning and Consultation (IPaC).

2/29/2024	Service, WisDOT	WisDOT	Email	MN-WI determination key completed in IPaC.
3/28/2024	WisDOT, FHWA, HNTB	GEI	Virtual Meeting	Discuss proposed project impacts and timeline. listed species, avoidance and minimization measures, and compensatory mitigation.
5/1/2024	WisDOT, Service	FHWA	Email	Transmission of Biological Assessment and request for formal consultation.
8/19/2024	WisDOT, FHWA	Service	Virtual Meeting	Coordination to discuss bat AMMs
8/22/2024	Service	FHWA	Virtual Meeting	Coordination to discuss bat AMMs and take estimates
8/27/2024	WisDOT, Service	FHWA	Email	Transmission of Biological Assessment Amendment and reinitation formal consultation.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The Federal action evaluated in this biological opinion (BO) is funding provided by the Federal Highway Administration (FHWA) for the reconstruction of Interstate 39/90/94 (I-39/90/94) between United States Highway (US) 12/18 in Madison and Dees Road in Wisconsin Dells. The Project corridor is 67 miles long and travels through Dane, Columbia, Sauk, and Juneau counties. The purpose of the I-39/90/94 Corridor Study is to address existing and future traffic demands, safety issues, aging and outdated infrastructure and corridor resiliency.

The I-39/90/94 corridor is a multi-lane interstate with 15 interchanges and over 100 bridges. The southern portion of the Project corridor includes the largely urban/suburban Madison metropolitan area, while the northern portion is characterized by rural and natural resource land uses and the City of Wisconsin Dells, a popular tourist destination. A short portion of the I-39/90/94 corridor involves the Wisconsin River Bridges Project (WRBP) area, which has been studied separately for reconstruction between 2024 and 2027. For the purposes of this biological assessment, the Project area does not include the WRBP.

The Service is issuing this BO pursuant to Section 7 of the Endangered Species Act of 1973. Direct and indirect effects of Federal actions and their interrelated or interdependent activities are analyzed to ensure they are not likely to jeopardize the continued existence of federally listed or proposed endangered or threatened species. Indirect effects of the Federal actions include, "…effects that are caused by or result from the action, are later in time but are reasonably certain to occur…" Interdependent actions have no independent utility apart from the proposed action, and interrelated actions are part of a larger action and depend on the larger action for their justification (50 CFR §402.02).

Project Description

The following is a summary of the proposed action (Project) and a detailed description can be found in the BA submitted by the FHWA.

The proposed transportation Project consists of reconstructing a portion of I-39/90/94 between US 12/18 in Madison and Dees Road in Wisconsin Dells. The reconstruction serves to improve the safety and reliability of travel infrastructure within the Project corridor. The Project corridor is 67 miles long and travels through Dane, Columbia, Sauk, and Juneau Counties. The purpose of the Project is to address existing and future traffic demands, safety issues, aging and outdated corridor infrastructure, and corridor resiliency.

There are over 100 bridges in the I-39/90/94 Project corridor. Eighty-four of these structures will be over 50 years old by 2030. For example, the I-90/94 bridges over Mirror Lake, constructed in 1961, are "fracture critical" meaning that failure of a steel girder could cause the bridge to collapse (WisDOT, 2023). In addition to aging structures, many bridges do not meet current vertical and lateral design standards.

Sections of the I-39/90/94 Project corridor are operating unacceptably, and many additional sections are expected to operate unacceptably by 2050 without improvements. Heavy recreational, commuter, and freight traffic uniquely affect traffic operations in the study corridor.

Recreational traffic occurs predominantly during the summer, and typically on Fridays and Sundays,

reflecting tourism's importance to Wisconsin's economy. Commuter traffic typically occurs during weekday morning and evening peak hours throughout the year. Heavy freight traffic occurs throughout the week (WisDOT, 2023).

Crash rates along portions of the Project corridor, particularly at interchanges, exceed the statewide average crash rate. Congestion and geometric/design deficiencies contribute to the number of crashes (WisDOT, 2023). Flood events causing partial or full interstate closures since 2008 have impacted corridor resilience. Closures disrupt vital connections for commerce and emergency services. Both I-39 and I-90/94 road elevations are low as they cross the Baraboo River. The Baraboo River near the I-39 and I-90/94 split flooded in 2008, closing both I-39 and I-90/94 for several days. The Baraboo River flooded again in 2018, resulting in partial closure of I-90/94. Baraboo River flooding is especially problematic because it affects both I-90/94 and I-39, potentially closing both interstates and causing substantial impacts to both state and national commerce (WisDOT, 2023).

Without this Project, pavement maintenance activities are anticipated in 24 of the next 30 years, which would result in ongoing travel delays and congestion for daily commercial, freight, and recreational traffic. Although repair work can be performed to extend the life of deteriorated pavement, full pavement replacement is more cost effective than repeated repairs (WisDOT, 2023).

Proposed construction activities for the I-39/90/94 corridor will include removal of existing structures and roadways, bridge construction and widening, earthwork, utility relocations, drainage improvements, traffic control, traffic signals, barrier installation, lighting, and paving. Lane expansions are proposed for the entire length of the corridor. Modification to and/or expansion of 13 existing interchanges, as well as construction of two new interchanges will address a range of design deficiencies.

Project Setting

The I-39/90/94 Project corridor extends 67 miles between US 12/18 in Madison and Dees Road in Wisconsin Dells. The I-39/90/94 corridor is a six-lane, divided interstate with a posted speed limit of 70 mph. All three interstates are included in the National Highway System and in the National System of Interstate and Defense Highways. The I-39/90/94 corridor is also identified as a backbone route in WisDOT's Connections 2030 Long Range Transportation Plan, and as the Badger State Corridor, a System Level Priority Corridor.

The northern portion of the Project corridor extends from Dees Road to Wisconsin State Trunk Highway (WIS) 60 through Juneau, Sauk, and Columbia Counties. I-39 was originally constructed as a 4-lane freeway and designated as WIS 78 in the early 1960s. It was redesignated as I-39 in 1992 and signed in the mid-1990s after the reconstruction of the I-39 and I-90/94 interchange. Early aerial imagery indicates that adjacent land consisted of agricultural fields, forestland, wetlands, and rural roads. The existing I-90/94 freeway between WIS 60 and Dees Road was originally constructed as a four-lane freeway beginning in the late 1950s through the mid-1960s. The portion of I-90/94 between WIS 60 and the I-39 I-90/94 split was converted to a six-lane freeway in the mid-1980s.

The northern Project area is adjacent to or within the Dells of the Wisconsin River, Baraboo Mountains, Mirror Lake State Park, Rock Arbor State Park, and Pine Island State Wildlife Area. The northern project area has remained active as agricultural fields, forested land, and wetlands over the last 20 years.

The southern portion of the Project area follows United States Highway (US) 151 and I-94 to the east of Madison. The section along US 151 consists mostly of commercial and residential development, while the section along I-94 consists of mostly residential development and agricultural fields.

The Cities of Madison, Portage, and Wisconsin Dells, and the Village of DeForest are evident in the 1937 aerial imagery and exhibit significant expansion in subsequent years.

Construction

The project includes a complete replacement of the existing Wisconsin River bridge. The existing bridge will be replaced by two new bridges. The first bridge will be constructed just to the east of the existing bridge and the second bridge will be constructed where the existing bridge is located. The new bridges will be constructed in stages that allow for three lanes of traffic to remain open in both the northbound and southbound directions during construction.

Proposed construction activities include removal of existing structures and roadways, bridge construction and widening, earthwork, utility relocation, drainage improvements, traffic control, traffic signals, barrier installation, lighting, and paving.

Freeway reconstruction will modernize the interstate and add a general-purpose lane in each direction on I-39/90/94 from US 12/18 in Dane County to the I-39 I-90/94 Split Interchange, and on I-90/94 from the split interchange to US 12/WIS 16 in Juneau County. Freeway reconstruction will also modernize I-39 from the split interchange to Levee Road but retain the existing 4-lane configuration. The general-purpose lanes will primarily be installed in the interior of the existing corridor utilizing the existing median. This will require the use of a concrete barrier in the median to separate directional traffic. Lane expansions outside of the existing mainline footprint will be limited. Interchanges may be expanded to increase safety.

Freeway reconstruction would also implement recommendations from WisDOT's Baraboo River flood minimization study completed as part of this study. The analysis recommends raising portions of I-39 and I-90/94 and lengthening the I-39 Baraboo River bridge to reduce flood risks on the interstate. The recommendation would on average, raise I-39 about 4 feet between the I-39 I-90/94 Split Interchange and Levee Road and widen the I-39 bridge over the Baraboo River to 500 feet. The recommendation would also raise about 3.5 miles of I-90/94 about 3 feet around the WIS 33 Interchange.

In addition to the aging mainline, many bridges do not meet current vertical and lateral design standards. New bridges will replace existing outdated infrastructure, including those at the following stream crossings:

- I-90/94 over Spring Brook between WIS 23 and Trout Road
- I-90/94 over Mirror Lake
- I-90/94 over the Baraboo River just south of WIS 33 at I-90/94
- I-39 over the Baraboo River south of WIS 33 at I-39
- I-90/94 over Hulburt Creek between Trout Road and WIS 13
- Passes under existing WIS 13 interchange ramps
- I-39 over Rowan Creek between County Trunk Highway (County) CS and Kent Road
- I-39 over Wheeler Wilcox Creek north of WIS 19
- I-39 over Yahara River north of WIS 19
- I-39 over Token Creek north of the US 51 interchange
- Door Creek
- West Branch Starkweather Creek

Thirteen existing interchanges will be modernized and reconstructed. Most of the reconstructed interchanges will maintain a similar footprint. Two new interchanges will be constructed at the City of Madison's request to provide new interstate access for planned developments.

Project Timeline and Sequencing

Preliminary project design and real estate acquisition are ongoing and will likely follow a phased completion throughout the Project corridor. Project construction is expected to begin in 2028. Depending on design and acquisition progress, construction may continue through the winter
months, with ultimate completion in 2035.

Site Preparation, Soil Erosion, and Sediment Control

Appropriate erosion control measures will be used to minimize environmental impacts per WisDOT, Wisconsin Department of Natural Resources (WDNR), and Trans 401 of Wisconsin's Administrative Code. Erosion control measures must adhere to the Wisconsin Pollutant Discharge Elimination System (WPDES) Transportation Corridor General Permit (TCGP). An Erosion Control Implementation Plan (ECIP) must be implemented before, during, and after construction. An ECIP will be prepared and approved by WisDOT prior to construction. The erosion control plan review process will include soliciting and incorporating WDNR erosion control comments pertaining to the plan for the Clean Water Act Section 401 Water Quality Certification process during design, and to the contractor's ECIP, which will be reviewed by WDNR prior to the start of construction. Implementation of erosion control measures and best management practices (BMPs) will be monitored during construction by the WisDOT Construction Engineer.

Overall erosion control strategies that may be used to minimize adverse effects include upslope tracking on all slopes longer than 40 feet, application of soil stabilizer for temporary conditions, erosion mat placement, appropriately sized riprap for steeper slopes, ditches, and completion of restoration/revegetation in a timely manner.

Any erosion control matting used along stream banks will be biodegradable thread and netting with "leno" or "gauze" weave.

Trees greater than three inches in diameter at breast height (DBH) are likely to be cleared across 85.2 acres of the 67-mile corridor. Tree clearing will occur during specific times to minimize impacts to species. Additional details about avoidance and minimization measures (AMMs) are provided in the BA.

Construction in and near waterways will be performed in accordance with Section 404 and Section 401 of the Clean Water Act and WisDOT's Standard Specifications for Highway and Structure Construction, WI Administrative Code Chapter TRANS 401-Construction Site Erosion Control and Stormwater Management Procedures and the WisDOT/WDNR Cooperative Agreement. Appropriate techniques and BMPs, as described in the WisDOT Facilities Development Manual, will be employed to prevent erosion and to minimize siltation to environmentally sensitive resources in the Project area. Erosion control devices will be installed before erosion-prone construction activities begin.

If in-stream or river sediment traps and/or turbidity curtains are determined to be necessary to control erosion and sedimentation within the river or other watercourses, authorization (permits) from the appropriate regulatory authorities will be obtained.

Additional impact mitigation techniques during construction may include the following, as applicable for specific locations:

- If dewatering is required, dirty water will be pumped into a stilling basin, allowing particulate matter to settle out before the water is allowed to re-enter a stream.
- Trenched-in erosion bales will be installed in areas of moderate velocity runoff; clean aggregate ditch checks will be installed in ditches with moderate to high velocity runoff during and after construction; and ditches would be protected with erosion bales and matting in conjunction with seeding.

Construction Access and Staging

During construction, I-39/90/94 will be open to traffic. However, some traffic will be diverted away from the corridor as drivers avoid construction, increasing traffic volumes and congestion on local roads.

Construction staging plans will be developed to ease disruptions to the extent possible. WisDOT will analyze these plans, assess the amount of traffic estimated to be diverted, and develop a Transportation Management Plan (TMP) to minimize delay of and/or disruption to normal traffic flow. Other potential mitigation factors include:

- Holding workshops to determine methods to reduce the effects of construction on local communities.
- Encouraging the use of transit and other modes of transportation.
- Encouraging local businesses to modify work schedules to avoid peak-hour traffic.
- Improving detour routes to accommodate diverted traffic resulting from construction.

Exact locations of construction access and staging areas are unknown at this phase of design. Locations will be determined with consideration to impacts on sensitive resources. This may include avoidance periods for tree cutting, setbacks to the ordinary high-water mark (OHWM) of waterways, proximity to wetlands, topography, and potentially suitable habitat for listed species. Staging and access will be in upland areas, whenever possible.

Best management practices will be implemented for the duration of construction to minimize the potential for oil, fuel, or other substances to enter a watercourse. Wherever possible, storage, stockpiling, and screening of materials will occur within the construction footprint to minimize disturbance footprints.

Additionally, erosion control measures will be established between areas planned for disturbance during construction, including staging areas and access routes, and wetlands, waterways and other areas sensitive to erosion and sedimentation as best management practices to minimize impacts.

Additional impact mitigation techniques during construction may include the following, as applicable for specific locations:

- Storing of fuels and fueling of construction equipment will be done in upland areas, away from environmentally sensitive locations. Accidental spills during refueling at construction sites or resulting from accidents involving hazardous material haulers will be handled in accordance with local government response procedures. First response will be through local fire departments and emergency service personnel to ensure public safety and to contain immediate threats to the environment. Depending on the nature and/or size of the spill, WDNR may be notified to provide additional instructions regarding cleanup procedures and restoration of any affected resources. The cost of cleanup operations is the responsibility of the contractor or carrier involved in the spill.

Furthermore, WisDOT's Standard Specifications state that public safety and environmental protection measures shall be enforced by the construction contractor.

- Contractors will be required to follow WDNR guidelines for ensuring that construction equipment used in or near waterways is adequately decontaminated for zebra mussels and plant exotics, including purple loosestrife and Eurasian milfoil.

In-Water Work

Depending on the location, in-water work may involve cofferdams, barges, piers, and causeways. Utilization of causeways and cofferdams will be coordinated with WDNR prior to construction. Removal of any existing structures will comply with WisDOT Standardized Special Provision 203-020 "Removing Old Structure Over Waterway with Minimal Debris". WisDOT will remove existing structures conforming to the department-approved structure removal and clean-up plan. Work will also conform to requirements under a Clean Water Act Section 404 Permit. The removal plan will include:

- Methods and schedule to remove the structure
- Methods to control potentially harmful environmental impacts
- Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies require
- Methods to control dust and contain slurry
- Methods for clearing debris from the waterway or wetland
- Location of spoil material stockpiles

Cofferdams are typically installed by a crane operator who arranges and drives sheet piling sequentially until the desired space is fully enclosed. Once enclosed, the inner area is dewatered to allow for pier and footing removal and/or pier column and footing construction. With new piers, rip rap may be added inside the cofferdams above the pier footings.

Temporary causeways may be constructed within waterways to complete the proposed work. An opening in the temporary causeway will be provided as a navigational channel for water travel during construction. Signage will be posted to assist river recreationists with safely navigating construction activities. Causeways and cofferdams utilized for construction will be clearly marked and lit for navigational safety. River navigation plans will be developed during final design. Coordination will occur with local municipalities, prior to construction, to request approval for a local waterway ordinance that allows for placement of navigational aids.

New piers may be constructed within the river and/or 100-year floodplain. Any new bridge decks will be constructed on top of piers and above the calculated 100-year high water elevation plus any applicable freeboard requirements. New approaches will be constructed and include the placement of fill in the adjacent floodplain and wetlands. If fill is placed below the freeboard elevation,
appropriate permits will be obtained prior to the commencement of construction activities.

During final design, a floodplain evaluation will be completed to model the effects of cofferdam and causeway use on the special flood hazard area. Coordination with WDNR will be completed to discuss temporary floodplain impacts, determine size restrictions for a temporary causeway and/or cofferdams, and obtain necessary permits.

Although the I-39/90/94 corridor crosses Mirror Lake (Dell Creek), there are currently no plans for in-water work at this location. Reconstruction activities for this bridge structure are planned to occur only above the

OHWM. This BA evaluated impacts to listed species based on construction activities associated with the preferred alternative. If proposed construction activities change, this location may need to be re-assessed for impacts to species occurring below the OHWM. Based on the preferred alternative, in-water work is proposed to occur at the following locations:

Baraboo River
The existing I-39 bridge, which contains piers below the OHWM of the Baraboo River, will be reconstructed and expanded from 174 feet to 500 feet. The bridge approaches and deck of the bridge may be raised to address existing issues with flooding. The I-90/94 bridge, which also has piers in the Baraboo River below the OHWM, just south of WIS 33 will be removed and reconstructed.

Hurlburt Creek and Spring Brook
The I-90/94–WIS 23 to County H (2.6 miles) section of the existing freeway has a median that varies in width from 60 feet to 150 feet. The mainline crosses Spring Brook between WIS 23 and Trout Road and Hulburt Creek between Trout Road and WIS 13. The existing roadway is cut into sandstone up to 15 feet deep, with outcroppings present in the median just south of Hulburt Creek.

The preferred alternative is to reconstruct this section of freeway with a 60-foot wide median. This would allow for Maintenance of Traffic (MOT)/constructability at the Spring Brook and Hulburt Creek crossings, minimize the need for additional storm water management, and reduce construction costs. The existing 3-span flat-slab bridge, with piers below the OHWM, on I-90/94 that crosses over Spring Brook will be removed and reconstructed. The existing bridge on I-90/94 that crosses over Hulburt Creek will be reconstructed. The two existing box culverts under the existing WIS 13 interchange ramps will be replaced with new culverts.

Rowan Creek
The I-39/90/94–County CS to Black Road (1.6 miles) section of the existing freeway has a median that varies in width from 36 to 144 feet. The mainline crosses Rowan Creek between County CS and Kent Road. Rowan Creek has an associated special flood hazard area. The preferred alternative is to reconstruct this section of freeway with a 60-foot wide median. This would allow for MOT/constructability at the Rowan Creek crossing, minimize the impacts to flood hazard areas, and reduce the need for additional storm water management. The existing 3- span flat-slab bridge, with piers below the OHWM, that crosses over Rowan Creek will be removed and reconstructed.

West Branch Starkweather Creek
Where I-39/90/94 crosses over the West Branch Starkweather Creek, an existing 96-inch by 120- inch horizontal elliptical pipe will be lengthened. In-water work is anticipated at this waterway crossing.

Wheeler Wilcox Creek
A box culvert where I-39 crosses over Wheeler Wilcox Creek just north of WIS 19 will be replaced with a bridge.

Yahara River
A box culvert where I-39 crosses over the Yahara River just north of WIS 19 will be replaced with a bridge.

Token Creek
A box culvert where I-39 crosses over the Token Creek north of the US 51 interchange will be replaced with a bridge.

Door Creek
Twin 84-inch concrete round pipes may need to be replaced where I-39/90/94 crosses over Door Creek.

West Branch Starkweather Creek
Where I-39/90/94 crosses over the West Branch Starkweather Creek, an existing 96-inch by 120-inch horizontal elliptical pipe will be lengthened.

Post Construction Stormwater and Water Quality BMPs

Stormwater management will comply with Chapter Trans 401 of Wisconsin's Administrative Code and address the requirements for the Wisconsin River total maximum daily load (TMDL). This will be done by using appropriate stormwater quality control practices such as embankment filter strips, grass swales, and riprap pads placed below bridge drains located above the island and banks of the river to prevent scour. Plan, Specification and Estimate (PS&E) documents will specify requirements to be met during construction. The WisDOT design engineer will ensure fulfillment of this commitment.

Stormwater management will comply with WI Administrative Code Chapter Trans 401 and address the requirements for any relevant total maximum daily loads (TMDLs). This will be done by using appropriate stormwater quality control practices such as embankment filter strips, grass swales, and riprap pads. Plan, Specification and Estimate (PS&E) documents will specify requirements to be met during construction.

Under revisions to the WisDOT/WDNR Cooperative Agreement, Memorandum of Understanding on Erosion Control and Stormwater Management, following construction, disturbed land will be re-seeded with a mix of fast-growing grasses. Drainage systems will be maintained, restored, or re-established in a manner that would not impound water.

Project area characteristics that require additional stormwater consideration include long or steep cut or fill slopes, an impaired waterway, and large quantity flows. Overall, stormwater management strategies used to minimize adverse effects to federally listed species vary depending on site conditions. Stormwater management strategies may include diverting runoff from the ROW, and employing practicable treatment methods, such as treating all runoff that can be diverted upstream of the river edges with embankment filter strips and grass swales. Widening grass swales within the available ROW will occur wherever practical. Subsurface soils within the grass swales will be modified to improve infiltration, as necessary. Timber and riprap pads will also be installed, as needed, to limit ground disturbance and prevent bank scour due to construction activities.

Impacts to wetlands in the Project area will be minimized to the extent possible and mitigated by the WisDOT Wetland Mitigation Banking Program, as agreed upon by WDNR, WisDOT, and USACE. The current project design will directly impact an estimated 172 acres of wetlands located on or adjacent to the existing I-39/90/94 ROW. This estimate will continue to be refined as design progresses. WisDOT will also continue to evaluate opportunities for additional avoidance and minimization throughout design. Potential impacts from increased stormwater runoff will be addressed through stormwater management features, including added stormwater detention ponds and grassed swales.

Post-Project Site Restoration

If ground is disturbed adjacent to state or federal natural areas, the topsoil will be stripped and reused where applicable and the area will be seeded with WisDOT standard seed mix #70 and #70a, which consists of

native grass and forb species (or other native mix deemed suitable for these sites). This commitment will be included in the special provisions. Based on preliminary design plans, it is estimated that approximately 96 acres of land will be temporarily disturbed adjacent to state or federal natural areas and require post-project site restoration with native vegetation. Mulch, consisting of shredded bark, wood chips, peat moss, or other suitable material, may be used for native seeding restoration. Mulch will be substantially free of noxious weed seeds and objectionable foreign material.

Appropriate seed mixtures for final stabilization of disturbed areas will be determined during the final design phase. It is anticipated that seeding would occur throughout disturbed areas within the final ROW. Care will be taken to minimize re-establishment of invasive and non-native species to a practicable extent.

Following in-water work, cofferdams will be removed. Riverbeds will be restored to their existing condition to the greatest extent as required by permit conditions and deemed practicable by the Project team.

Operations

Long-term operational impacts of this transportation Project, including traffic, barriers to terrestrial species, stormwater runoff, snowplowing, and ice removal will remain largely unchanged from baseline conditions since the current interstate and bridge is operational and the preferred alternative is proposed to primarily be built within the existing footprint. Therefore, post-construction impacts to the adjacent natural resources because of the Project are expected to be negligible.

Maintenance

Maintenance impacts of this transportation Project including mowing, herbicide application, cleaning, painting, and ditch maintenance will remain largely unchanged since the current interstate is operational. Similar to the existing infrastructure, the reconstructed corridor will require routine inspection and maintenance. This is consistent with similar structures throughout Wisconsin and is being implemented under current bridge maintenance activities.

Action Area

The action area for the proposed Project consists of all areas (directly or indirectly) affected by the project elements (construction and operation) on land and in the water.

The Project involves reconstruction of Interstate 39/90/94 (I-39/90/94) between United States Highway (US) 12/18 in Madison and Dees Road in Wisconsin Dells. The Project impact area was determined by the slope intercept calculations of the final road grade elevations.

The action area for the Project includes the interstate and rights-of-way along the 67- mile corridor that travels through Dane, Columbia, Sauk, and Juneau counties (Figure 1). The action area was defined based on areas of direct and indirect impacts, such as noise, lighting, and water quality, from anticipated reconstruction activities.

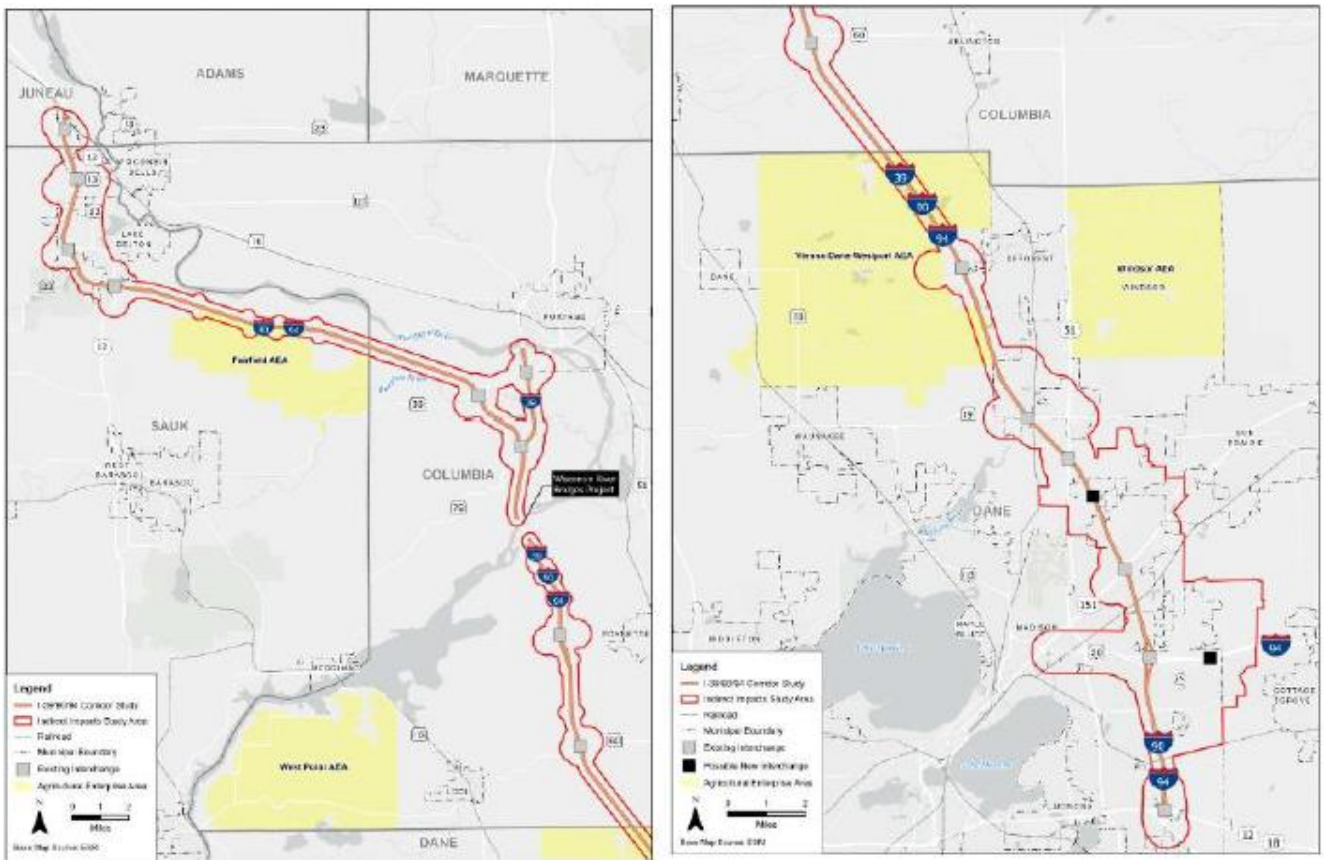

Figure 1. Location of the I-39/90/94 Wisconsin Dells to Madison Project action area in Dane, Columbia, Sauk, and Juneau Counties.

Occurrence of Federally Listed Species and Critical Habitat in the Action Area

Federally listed species were identified using data obtained from the Service's Information for Planning and Conservation (IPaC) database. The primary information used to generate the IPaC list is the known or expected range of each species. The IPaC database was reviewed on February 29, 2024. The list of federally endangered and threatened species that are known or expected to be present on or near the project area is provided in Table 1.

No critical habitats were identified in the proposed action area.

Table 1: Federally Listed Species.

Taxa Group	Species	Federal Status
Bird	Whooping Crane (*Grus americana*)	Experimental Population, Non-Essential
Insect	Karner blue butterfly (*Lycaeides melissa samuelis*)	Endangered
Insect	Monarch butterfly (*Danaus plexippus*)	Candidate
Insect	Rusty patched bumble bee (*Bombus affinis*)	Endangered
Mammal	Gray wolf (*Canis lupus*)	Endangered
Mammal	Northern long-eared bat (*Myotis septentrionalis*)	Endangered
Mammal	Tricolored bat (*Perimyotis subflavus*)	Proposed Endangered
Mussel	Higgins eye (*Lampsilis higginsi*)	Endangered
Mussel	Sheepnose (*Plethobasus cyphyus*)	Endangered
Mussel	Salamander mussel *(Simpsonaias ambigua)*	Proposed Endangered
Reptile	Eastern massasauga rattlesnake (*Sistrurus catenatus*)	Threatened
Plant	Eastern prairie fringed orchid (*Platanthera leucophaea*)	Threatened
Plant	Prairie bush-clover (*Lespedeza leptostachya*)	Threatened

STATUS OF THE SPECIES

Whooping Crane (*Grus americana*)

The whooping crane was listed as endangered in 1967. Population declines were caused primarily by excessive hunting and the destruction of wetland habitat in the prairies resulting from agricultural development (USFWS, 2021). There is only one self-sustaining wild population, the Aransas-Wood Buffalo National Park population, which nests in Wood Buffalo National Park and adjacent areas in Canada and winters in coastal marshes in Texas and Aransas. In addition, there is a small migratory population of individuals introduced beginning in 2001 that migrate between Wisconsin and Florida in an eastern migratory population.

The current status is endangered wherever found, except where listed as an experimental population. In Wisconsin, the listing status is Experimental Population, Non-Essential. An Experimental Population, Non-Essential is a population that has been established within its historical range under section 10(j) of the ESA to aid recovery of the species. The Service has determined a non-essential population is not necessary for the continued existence of the species. For the purposes of consultation, non-essential experimental populations are treated as threatened species on National Wildlife Refuge and National Park land and as a proposed species on private land (no section 7(a)(2) requirements), but Federal agencies must not jeopardize their existence (section 7(a)(4))) (USFWS, 2023).

Whooping cranes use a variety of wetland and other habitats, including marshes, lakes, ponds, rivers, wet meadows, and agricultural lands (Howe 1987, 1989, Lingle 1987, Lingle et al. 1991, Johns et al. 1997, Baasch et al. 2019). While whooping cranes use a variety of habitats during migration, wetland mosaics appear to be the most suitable. For feeding, whooping cranes primarily use shallow, seasonally and semi

permanently flooded palustrine wetlands for roosting as well as various cropland and emergent wetlands (USFWS, 2021).

No whooping crane critical habitat was identified in the proposed action area.

Karner Blue Butterfly (*Lycaeides melissa samuelis*)

The Karner blue butterfly (KBB) was listed as an endangered species in 1992 wherever it is found in the Midwest region (57 FR 59236). At the time of the KBB listing, the largest threats leading to population decline were the loss of suitable habitat due to development for commercial/residential use, land clearing for farming, and wildfire suppression. To this day habitat loss and isolation of existing small populations continues to put this sensitive species at risk, along with direct and indirect effects of climate change (USFWS, n.d.). The KBB has two brood flight periods each year: one beginning in late May and the second in mid-July (WDNR, n.d.). The KBB needs disturbance such as grazing and wildfires to prevent woody vegetation encroachment that would otherwise shade out wild blue lupine (*Lupinus perennis*); the only plant that the KBB larvae can eat. Adults feed on the nectar of flowering lupine plants, in addition to other flowering plants.

Wild blue lupine is widespread in Wisconsin's central and northwest sands (WDNR, n.d.). Since wild lupine primarily grows in the sandy soils of oak savannas, sand and brush prairies, lakeshore dunes, oak barrens and pine barrens, the KBB lives primarily in these ecosystems (USFWS, n.d.) (Savignano, n.d.). KBB can also be found in other habitats, including roadsides, utility rights-of-way or other areas that are maintained in an open early successional stage. These corridors can provide an important link between larger habitat areas and encourage dispersal and genetic diversity (WDNR, n.d.).

Sauk and Juneau Counties are listed as counties within the species' range in Wisconsin. There is no critical habitat identified for the KBB located within the proposed action area.

Monarch Butterfly (*Danaus plexippus*)

The monarch butterfly was identified as a candidate for addition to the federal endangered species list in December 2022. Consultation with the Service under section 7 of the ESA is not required for candidate species, like the monarch. The Service does encourage agencies to take advantage of any opportunity they may have to conserve the species. The monarch is a candidate species due to population declines resulting from changes in breeding, migratory, and overwintering habitat, continued exposure to insecticides, and effects of climate change.

Adult monarch butterflies are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily *Asclepias* spp.), and larvae emerge after two to five days. Larvae develop through five larval instars (intervals between molts) over a period of 9 to 18 days, feeding on milkweed and sequestering toxic chemicals (cardenolides) as a defense against predators. The larva then pupates into a chrysalis before emerging 6 to 14 days later as an adult butterfly. There are multiple generations of monarchs produced during the breeding season, with most adult butterflies living approximately two to five weeks. Overwintering adults enter reproductive diapause (suspended reproduction) and live six to nine months (USFWS, 2022).

During the spring and summer, the monarch butterfly requires habitat that can support a diversity of blooming nectar resources and abundant milkweed for larval consumption and adult feeding. In the midwestern United States, such resources can typically be found in open fields, meadows, transportation right-of-ways, and field edges. Overwintering typically takes place in Mexico following migration. Habitat requirements include microclimates that prevent freezing conditions, while remaining cool enough to prevent lipid depletion. Forest environments dominated by oyamel fir (*Abies religiosa*) with abundant nectar resources and water are necessary to support required microclimates.

The monarch is currently not listed as a Federally Threatened or Endangered species and no critical habitat is proposed to be designated at present time.

Rusty Patched Bumble Bee (*Bombus affinis*)

The rusty patched bumble bee was federally listed as an endangered species in 2017. The rusty patched bumble bee was listed due to widespread and steep population declines from changes unknown causes. Current research suggests that the population decline is due to a synergistic interaction between an introduced pathogen and exposure to pesticides.

All rusty patch bumble bees have a mostly yellow upper thorax, with a black bottom. The upper thorax has a black spot or band between the wings that extend toward the back in a V-shape. In workers and male bees, the first abdominal segment (T1) is yellow, and the second segment (T2) has a patch of rusty hairs on the front portion of the segment, with yellow hairs on the back and sides. Queen bees are entirely yellow on the first two abdominal segments and the rest of the abdominal segments are black.

Rusty patched bumble bees have an annual life cycle and live in colonies that consist of workers (non-reproductive females), males, and queen (reproductive females) bees. In spring, queens emerge from their overwintering habitat to initiate a new colony. After establishing the nest, the queen lays eggs, which hatch into larva in approximately four days. The larvae go through four instars before pupating and eventually hatching as full-sized adults.

Development takes approximately five weeks. Workers protect the colony, forage for nectar and pollen, and care for the young. Before winter, the foundress queen, workers, and males die, leaving the new queens to overwinter and initiate new colonies in the spring. (USFWS, 2017).

During the spring and summer, the rusty patched bumble bee requires habitat that can support a diversity of blooming nectar resources and undisturbed nesting sites that are near food resources. In the midwestern United States, such resources can typically be found in prairies, woodlands, marshes, agricultural landscapes and residential parks and gardens. It is assumed that rusty patched bumble bee nest in upland grasslands and shrublands that contain sufficient forage during the summer and fall. Nests are typically one to four feet underground and located in abandoned rodent nests or mammal burrows. In the midwestern United States, such resources can typically be found in prairies, woodland edges, agricultural landscapes and residential parks and gardens. Preferred flowers include sunflowers (*Helanthus spp*.), goldenrod (*Solidago spp*.), and bee balm (*Mondara spp*.).

Queens emerge from hibernation in late spring (April 10) and the colony remains active through October 10, on average (USFWS, 2021). Peak worker numbers typically occur in July and August in Wisconsin with new queens and drones present from July to September (UW-Madison, n.d.).

The queen will search for non-compacted soils, leaf litter, and upland forests and woodlands. Overwintering habitat is unknown but assumed to be in upland forest and woodlands. Other species of genus *Bombus* typically form a chamber in loose, soft soil, a few centimeters deep in bare earth, moss, under tree litter or in bare patches within short grass and may avoid areas with dense vegetation (USFWS, n.d.).

Rusty patched bumble bees will not nest or overwinter in wetlands, but they may use wetlands to forage. Portions of the Project corridor are located within a USFWS designated High Potential Zone (HPZ) for the rusty patched bumble bee.

There is no critical habitat designated for the rusty patched bumble bee.

Gray Wolf (*Canis lupus*)

During the early 1900s, predator-control programs resulted in the elimination of wolves throughout most of the conterminous United States. The gray wolf was federally listed as an endangered species on March 9, 1978 across all contiguous U.S. states, except for Minnesota, where it was classified as threatened (43 FR 9607). Due to recovery, gray wolves were delisted on November 3, 2020 (85 FR 69778). Following a February 10, 2022, court decision, gray wolves in the contiguous 48 states and Mexico, with the exception of the Northern Rocky Mountain population, are once again protected under the ESA as threatened in Minnesota and endangered in the remaining states as of November 3, 2023 (88 FR 75506). This includes the reinstatement of critical habitat for gray wolves in Minnesota and Michigan (88 FR 75506).

According to the WDNR, Wisconsin's wolf population remains healthy and secure in the state. Currently, gray wolf populations are threatened by habitat destruction and depredation. The gray wolf displays adaptability and can occupy a wide range of habitats. They are not dependent on wilderness for their survival; however, they are primarily found inhabiting temperate forests, grasslands, mountains, and tundra (USFWS, n.d.) (Smithsonian's National Zoo, n.d.). The gray wolf is a territorial species that travels in packs, with territory for a pack ranging upwards of 1,500 square miles. In Wisconsin, a wolf pack's territory generally covers 20-120 square miles with an average of 60 square miles (WDNR, n.d.). As a keystone predator, the gray wolf plays a significant role in North America's ecosystem, preying on both large and small mammals (USFWS, n.d.).

Den and rendezvous sites are specific locations used for breeding and other pack activities located within a pack's territory. Wolves begin moving their young pups from dens to rendezvous sites from mid-March to mid-May. Rendezvous sites are actively used from mid-May to mid-October (WDNR, n.d).

Gray wolves are primarily carnivorous. In Wisconsin, wolves' diet is comprised of approximately 55% white-tailed deer, 16% beavers, 10% snowshoe hares and 19% other small game (mice, squirrels, muskrats, etc.) (WDNR, n.d.). While deer comprise over 80% of a wolf's diet throughout the year, beavers become more important during the spring and fall when beavers are dispersing and spend more time on land. This makes the beaver more vulnerable and easier to catch. In winter, when beavers are in lodges or moving safely beneath the ice, wolves rely more on deer and hares. In summer, gray wolf diets are more diverse, including a variety of small mammals and berries (WDNR, n.d.).

Wolves are generally shy of people and avoid contact with humans. However, wolves may occasionally get close to human dwellings or worksites in search of prey. Wolves can also be attracted to discarded food and become habituated (loss of fear of humans) to receiving food from humans at outdoor work sites. Habituation can lead to increased human-wolf conflict which poses a risk to wolves as predators as well as

humans and livestock. Worksites along the construction corridor should be kept clear of food and food scraps.

The northern section of the Project area extends a short distance into the known range of the gray wolf in Wisconsin. Gray wolves have been sighted in Sauk and Juneau County (WDNR, 2023b).

There is final critical habitat for this species, however, there is no critical habitat identified for the gray wolf in the proposed action area.

Northern Long-Eared Bat (*Myotis septentrionalis*)

The northern long-eared bat was federally listed as a threatened species in 2015 and the effective date of the final rule to reclassify the northern long-eared bat from threatened to endangered occurred on March 31, 2023. The bat is facing extinction due to the range-wide impact of white-nose syndrome, a deadly disease affecting bats across North America, in addition to habitat loss, wind farms, and climate change (USFWS, 2023)

The northern long-eared bat hibernates in caves, mines and buildings and hibernacula may be found statewide in Wisconsin (WDNR, 2013). Summer roosting locations include caves, mines, buildings and under tree bark. Suitable summer habitat is defined by the Service as that which consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields, and pastures (USFWS 2022). This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches dbh that have exfoliating bark, cracks, crevices, and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. The northern long-eared bat has also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. They typically occupy their summer habitat from early-May through late-August each year and the species may arrive or leave some time before or after this period. (USFWS 2022).

There is no critical habitat designated for the northern long-eared bat.

Tricolored Bat (*Perimyotis subflavus*)

On September 13, 2022, the Service announced a proposal to list the tricolored bat as endangered under the ESA. The bat is facing extinction due to the range-wide impact of white-nose syndrome, a deadly disease affecting bats across North America in addition to habitat loss, wind farms, and climate change (USFWS, 2023). Tricolored bats are primarily found in the southern half of Wisconsin.

During the spring, summer, and fall, tricolored bats primarily roost among live and dead leaf clusters of live or recently dead deciduous hardwood trees. They have also been observed roosting during summer among pine needles, eastern red cedar, within artificial roosts (e.g., barns, beneath porch roofs, bridges, concrete bunkers), and rarely within caves. During the winter, tricolored bats hibernate in caves and mines, although in the southern U.S., where caves are sparse, they will use road-associated culverts, and sometimes tree cavities and abandoned water wells. (USFWS 2021).

There is no critical habitat designated for the tricolored bat.

Higgins eye (*Lampsilis higginsii*)

Higgins eye was federally listed as an endangered species in 1976 (41 FR 24064). Higgins eye is a medium-sized mussel, reaching lengths up to 10.2 centimeters (cm; 4 inches [in]; Cummings & Mayer, 1992). The shell is rounded or oval, solid, and moderately inflated. The species is sexually dimorphic; the posterior end of the shell is bluntly pointed in males and truncated in females. The beaks are turned forward and elevated above the hinge line, and beak sculpture, if visible, consists of a few double-looped ridges. The shell is smooth and yellowish green to brown, sometimes withgreen rays. The pseudocardinal teeth are thick and triangular, with two in the left valve and one in the right, and the lateral teeth are thick and straight to moderately curved. The beak cavity is deep.The nacre is white, may be tinged with pink near the beak cavity, and iridescent posteriorly (Baker,1928; Cummings & Mayer, 1992).

Higgins eye is bradytictic (long-term brooder). Individuals spawn in the summer and larvae, knownas glochidia, are held in the marsupia over the winter before being released the followingspring/summer. Once released, glochidia must attach to the gills or fins of a suitable host, typically a fish, to complete the transformation from the larval stage to a juvenile mussel. The edge of the female mussel's mantle is developed into a flap that resembles a small fish, presumably luring host fish to the mussel. Fish species identified as suitable hosts for Higgins eye include Sauger (*Sandercanadensis*), Walleye (*Sander vitreus*), Freshwater Drum (*Aplodinotus grunniens*), Largemouth Bass (*Micropterus salmoides*), Smallmouth Bass (*Micropterus dolomieu*), Yellow Perch (*Perca flavescens*), and Black Crappie (*Pomoxis nigromaculatus*; USFWS, 2004).

Higgins eye has generally been characterized as a large river species (USFWS, 2004). It has been found in a variety of substrate types, from sand and gravel to boulders. It typically does not occur where substrate is comprised of hard clay, flocculent silt, organic material, bedrock or concrete, or unstable shifting sand (USFWS, 2004). It is often found in mussel aggregations with relatively high density and species richness. Wilcox, Anderson, & Miller (1992) suggested several community metrics that could be used to estimate the probability of occurrence of Higgins eye, including total mussel density of $>10/m^2$ and species richness greater than 15 species when 250 individuals had been collected. Water velocity requirements are usually less than 1 m/second during periods of low flow.

No Higgins eye critical habitat was identified in the proposed action area.

Sheepnose (*Plethobasus cyphyus*)

The Sheepnose was federally listed as an endangered species in 2012 (77 FR 14914). It is a medium-sized mussel with a thick, heavy shell. The shell surface is smooth except for a row of knobs or tubercles running from the umbo to the ventral margin, and the periostracum is yellow or light brown in juveniles and chestnut or dark brown in adults (Cummings & Mayer, 1992). Like other unionid mussels, the Sheepnose releases glochidia that must attach to the gills or fins of a host fish to transform into juvenile mussels. Sheepnose glochidia are released in conglutinates, which resemble small pink worms, and glochidia infest the host fish when the fish attempts to eat the conglutinates. Laboratory studies have identified roughly 30 suitable host fish for Sheepnose, most of which are cyprinids (minnows and topminnows). Sauger has also been identified as a natural host for Sheepnose (USFWS, 2020b).

The Sheepnose is a larger-stream species occurring primarily in shallow shoal habitats with moderate to swift currents over coarse sand and gravel. Habitats with Sheepnose may also have mud, cobble, and

boulders. Sheepnose in larger rivers may occur in deep runs (77 FR 14914). Individuals can be found in waterways ranging from riffles just a few inches in-depth, to runs typical in large rivers. Sheepnose is sensitive to water quality, waterways with point and non-point source contaminants can have detrimental effects on habitat suitability. Water quality requirements for species is typical of most mussel species with water temperature needs below 86 degrees Fahrenheit, and dissolved oxygen concentrations greater than 5 milligrams per liter (mg\L). On a larger scale, suitable habitat for Sheepnose includes waterways where the wild host species, sauger, is present and there is connectivity between localized populations of both species for mussel dispersal. Habitat typical of sauger is large riverine systems, and some large lakes.

I-39/90/94 crosses the current range for this species between:

- Portage Rest Area and I-39 I-90/94 Split interchange
- 0.5 miles south of WIS 33 at I-39 interchange and Wisconsin River
- WIS 33 at I-90/94 interchange and Tritz Road
- Schepp Road and US 12 interchange
- 0.25 miles south of Trout Rd and 0.8 miles north of US 12/WIS 16 interchange

There is no critical habitat designated for the Sheepnose mussel.

Salamander mussel (*Simpsonaias ambigua*)

The salamander mussel was proposed for listing as endangered on August 22, 2023 (88 FR 57224). Threats to salamander mussel include habitat destruction and water pollution along with impacts from dredging, impoundments, sand and gravel mining and navigational channel improvements resulting in the decline of the species (WNDR, 2023).

Little is known of the biology of the salamander mussel. The sexes are separate, and fertilization is internal. Males broadcast sperm and females take in the sperm through their siphon. The eggs develop in the female into glochidia, the parasitic larval stage of mussels. In the spring or summer, these are released by the female, and attach to the gills of the mudpuppy. The salamander mussel is the only freshwater mussel with a non-fish host (Clarke 1981). After metamorphosis, the young mussels drop to the substrate, where they spend the remainder of their lives buried in the substrate (Carmen, 2002).

The salamander mussel generally occupies rivers, but can also occupy creeks, streams, and lakes (Cudmore et al. 2004). It is usually found in silt or sand under flat stones. Although this mussel is rare, it is usually abundant in patches. Its presence is usually linked to that of the mudpuppy (*Necturus maculosus*), its host (NatureServe, Cummings and Mayer 1992, Clarke 1981). The salamander mussel is currently not listed as a Federally Threatened or Endangered species and no critical habitat is proposed to be designated at present time. No salamander mussel critical habitat was identified in the proposed action area.

Salamander mussel Critical Habitat

Critical habitat for the salamander mussel is also included in the proposed federal listing for this species (Federal Register, 2023). The geographical extent of this critical habitat extends approximately 2,012 river miles (3,238 kilometers) across Indiana, Kentucky, Michigan, Minnesota, New York, Ohio, Pennsylvania, Tennessee, West Virginia, and Wisconsin, inclusive of the I-39/90/94 Wisconsin Bridges project area.

The USFWS describes critical habitat as being rivers, streams, and in some cases lakes with natural

flow regimes. Seasonal low flow is expected in some systems and can be tolerated by salamander mussel, though periodic drying or intermittent flow in lake and river habitats generally cannot support mussel assemblages. Appropriate flow and temperature are critical to delivering oxygen and nutrients for respiration and filtration, allowing glochidia to move to their host and encyst for reproduction, and removing silt and other fine sediments from within rock structures and crevices preventing mussel suffocation and degradation of mudpuppy shelter habitat. Salamander mussels prefer shelter habitat with space under slab rock/ bedrock crevice type structures that are dark, where they are in contact with a solid surface, and there is stability from swift current. Often these rock structures have small amounts of sediment and silt present but are swept fairly clean of excessive silt and fine sediments. The presence of this critical habitat, mudpuppy, and salamander mussels was confirmed during the 2023 field efforts.

Eastern Massasauga Rattlesnake (*Sistrurus catenatus*)

The eastern massasauga rattlesnake (EMR) was listed as a federally threatened species on October 31, 2016 (81 FR 67193). Threats to EMR include loss of habitat and habitat fragmentation due to development, conversion of habitat to agriculture, and changes of land cover due to succession by invasive species. Other threats include road mortality, collection, and hydraulic alteration such as artificial flooding and drought, post-emergent prescribed fire and mowing for habitat management (81 FR 67193). EMR are rare and typically found in the southwestern part of Wisconsin. This includes Juneau, Sauk, Columbia, and Dane counties. EMR are strongly associated with floodplain habitats along medium to large rivers, especially near river confluences, where they primarily occupy open canopy wetlands (i.e. sedge meadows, fresh wet meadows, marshes, fens, wet prairies, peatlands, shrub-carrs), adjacent upland prairies, floodplain forests, and old fields (WDNR, n.d.). Encroachment of invasive woody plant species poses a threat to EMR open canopy preferences for basking locations and the invasive woody plant species create dense canopies. The EMR requires habitat connectivity, with intact, high-quality microhabitats with intact hydraulic and ecological processes. They primarily rely on small prey such as rodents (i.e., mice and voles), but will sometimes eat frogs and other snakes (USFWS, n.d.).

EMR begin to emerge from overwintering habitats in spring (early April). This rattlesnake may be active from early April until mid-November, depending on air temperatures. EMR breeds in August and females give birth in late July or August the following year (WDNR, n.d.).

In winter months the massasauga will utilize hibernacula such as crayfish burrows and other ground fissures that have sufficient hydrology and groundwater sources necessary for winter hibernation survival, which will not freeze during the cold winter months. During spring, after hibernation, massasauga will move upland to forage and bask in drier upland fields, meadows, or prairies, breeding in early fall (81 FR 67193) (WPC, 2023). EMR require multiple, self-sustaining populations distributed across areas of genetic and ecological diversity to be sustainable over the long term (USFWS, 2016).

There is no critical habitat designated for EMR.

Eastern Prairie Fringed Orchid (*Platanthera leucophaea*)

The eastern prairie fringed orchid (EPFO) was listed as a threatened species on September 28, 1989, wherever found across the Midwest region (54 FR 39857). Threats to this species include competition from non-native and invasive plants (i.e., purple loosestrife, reed canary grass), habitat loss due to cropland and pasture creation, drainage, development, woody vegetation encroachment, fire suppression, and threats to their pollinator (hawkmoth) such as pesticides and habitat loss.

EPFO can inhabit a wide variety of habitats with full sun for optimal growth, grassy habitat, and little woody encroachment. These habitats include wetlands such as sedge meadows, bogs, marshes, as well as mesic prairies (USFWS, n.d.). Although typically limited to areas of sedge and grass communities, in areas of encroaching species such as dogwood and cattail, EPFO may be found within the edge community or in partially shaded areas, although not ideal.

In early summer this perennial species will flower, and flower clusters will bloom at a height just taller than the surrounding sedges and grasses. While this height allows for easy pollination by the hawkmoth, its primary pollinator, it also puts EPFO at risk of herbivory by deer and other grazing animals. Range of the EPFO is limited to the range of its primary pollinators, three species of hawkmoth: *Lintneria eremitus*, *Eumorpha pandorus*, and *Eumorpha achemon* (USFWS, n.d.).

Generally, the soil in which EPFO can be found ranges from muck, peat, lake plain deposits, and glacial soils (Bowles, Zettler, Bell, & Kelsey, 2005). For successful reproduction and for the orchid seed to germinate, mycorrhizae from the genus *Ceratorhiza* must be present in the soil. Through this a symbiotic relationship occurs and the mycorrhizae helps the seed assimilate nutrients. Without *Ceratorhiza* present EPFO is not able to successfully germinate (USFWS, n.d.). Columbia, Sauk, and Juneau Counties are listed as locations where this species is known or believed to occur.

There is no critical habitat designated for EPFO.

Prairie Bush-clover (*Lespedeza leptostachya*)

The prairie bush-clover (PBC) was listed as a threatened species on July 31, 1987, wherever found in the Midwest region (52 FR781). Major threats to PBC include competition and spread of non-native and invasive plants, dominant vegetation encroachment, hybridization, development, conversion of prairie to cropland, and prolonged drought.

This perennial plant blooms from late-July through late-August, fruiting early-August through early-September in Wisconsin (WDNR, n.d.).

Habitat for the PBC typically includes undisturbed prairie sites or disturbed tall grass prairies that have been disrupted by mowing, cultivation, burning, or grazing. Disturbance is often a requirement for the PBC, controlling encroaching non-native and woody vegetation that easily crowd out this species (USFWS, 2021).

Most often this species can be found in slightly concave or sloped areas, including north, west, or east-facing slopes. Soil conditions for this species can vary, but can include coarse textured loam, colluvium with high sand or gravel content, fine sandy loam, sand, dry, dry-mesic, mesic, or bedrock prairies (MNDNR, n.d.). Physical scarification is required for PBC seeds to undergo proper germination.

There is no critical habitat designated for the PBC.

ENVIRONMENTAL BASELINE

The environmental baseline for the I-39/90/94 project presents an analysis of the effects of past and ongoing human and natural factors to species and their habitats. The Project action area includes three main habitat types: the upland transportation corridor, wetlands, and the aquatic habitat of several waterways.

The northern portion of the Project corridor runs from Dees Road to WIS 60 through Juneau, Sauk, and Columbia Counties. Early aerial imagery indicates that adjacent land consisted of agricultural fields, forestland, wetlands, and rural roads. The existing I-90/94 freeway between WIS 60 and Dees Road was originally constructed as a four-lane freeway beginning in the late 1950s through the mid-1960s. The portion of I-90/94 between WIS 60 and the I-39 I-90/94 split was converted to a six-lane freeway in the mid-1980s.

The southern portion of the Project area follows US 151 and I-94 to the east of Madison. The section along US 151 consists mostly of commercial and residential development, while the section along I-94 consists of mostly residential development and agricultural fields. The Cities of Madison, Portage, and Wisconsin Dells, and the Village of DeForest are evident in the 1937 aerial imagery and exhibit significant expansion in subsequent years.

Areas in between developed lands are dominated by agricultural fields with occasional residences and residential/manicured lawns. Wetlands and waterways are common throughout the area of investigation. A significant proportion of the plant communities in rights-of-way are dominated by non-native, invasive species.

Information obtained from the I-39/90/94 study corridor Draft EIS, WDNR Mussel Survey Report from the Baraboo River, and work conducted by GEI over the past few years in preparation for this interstate work was used to establish an environmental baseline.

GEI completed a delineation of wetlands and waterways along the I-39/90/94 corridor in 2021, 2022 and 2023 in Dane, Columbia, Sauk, and Juneau Counties. Wetland delineation reports are provided in the BA. GEI also completed habitat assessments to identify suitable habitat for the threatened and endangered species that have potential to be found within the action area. Habitat assessment fieldwork was completed from June 21 through July 1, 2022, and July 11-14, 2022.

The WDNR completed a mussel survey on September 21, 2021, at the I-90/94 bridge crossings eastbound and westbound (EB/WB) of the Baraboo River. The purpose of the survey was to provide information on the presence of native mussels in the Baraboo River at the bridge crossing and to determine whether any state or federally listed mussel species occurred in the Project area. Poor substrate conditions at the site did not indicate a dense mussel bed or suitable habitat associated with the presence of federally listed species. No federally listed mussels were encountered during the survey.

As part of the BA preparation, GEI conducted desktop review of locations where in-water work may occur to identify locations of potentially suitable habitat for Higgins eye, sheepnose and salamander mussels. Criteria included water quality conditions, substrate type, channel orphology, and flow. No additional potentially suitable habitat for Higgins eye or sheepnose mussel were identified. Potentially suitable habitat may exist within Mirror Lake (Dell Creek) for the salamander mussel. This waterbody has adequate water quality and good substrate. As such, this BA assumes presence of the salamander mussel at Mirror Lake (Dell Creek), however no in-water work below the OHWM is anticipated at this time.

During the 2023 field season, GEI completed presence/probable absence survey for eastern prairie fringed orchid and prairie bush-clover within areas of identified as suitable habitat during the 2022 habitat assessment surveys. Presence/probable absence surveys were conducted during the optimal identification period for the specific species. Surveys for eastern prairie fringed orchid were conducted on July 20, 21, and 23, 2023, while surveys for prairie bush-clover were conducted on August 10, 2023. No individual plant species were observed during surveys of suitable habitats.

Structure inspections for NLEB and tricolored bat species began on July 5, 2023, and were completed on August 17, 2023. Above and below all bridges were surveyed within the project area along the I-39/90/94 Project for presence or absence of bats. Culverts four feet (48 inches) in diameter and larger were also surveyed for indicators of bat use within the Project area. Three bridge locations along the Project corridor were confirmed for the presence of guano; however, no individual bats were observed. Bat species was not determined.

Upland Habitats

Upland areas provide habitat for wildlife species commonly found in central to southern Wisconsin. Such areas include woodlands and shrub thickets, fallow fields, fence lines, transportation-utility corridor, surrogate grasslands, mesic prairie, and remnant prairies dominated by grasses and forbs.

GEI characterized uplands habitat within the Project area as part of the 2022 habitat assessment survey efforts. Habitats were classified using the WDNR Natural Heritage Inventory (NHI) Classification System. Upland NHI community types identified include:

- Dry cliff
- Dry mesic prairie
- Mesic prairie
- Northern dry forest
- Northern dry mesic forest
- Oak opening
- Oak woodland
- Southern dry mesic forest
- Southern mesic forest
- Surrogate grassland
- Transportation corridor

Impacts to upland habitat in the form of vegetation clearing, loss of habitat due to highway and interchange construction, bridge demolition, construction, and maintenance may occur throughout the Project corridor. Long term impacts are limited to loss of habitat due to construction of new interchanges and expansion of the existing footprint of the corridor in some locations. To minimize impacts, Project work is planned to occur within the existing footprint as much as is practicable.

Wetland Habitat

GEI completed wetland delineations along the I-39/90/94 corridor in 2021, 2022 and 2023 in Dane, Columbia, Sauk, and Juneau Counties. Wetland communities were classified using the WisDOT Wetland Classification System. WDNR NHI wetland communities associated with the WisDOT wetland communities are included below. WDNR NHI wetland communities were utilized throughout the BA for consistency. WisDOT classified wetland communities identified during the delineations that may be impacted by project activities include:

- Deep Marsh and Deep Marsh (Degraded)
- Riparian Emergent and Riparian Emergent (Degraded)
- Riparian Wooded and Riparian Wooded (Degraded)
- Shallow Marsh and Shallow Marsh (Degraded)
- Shrub Scrub and Shrub Scrub (Degraded) Wet Meadow and Wet Meadow (Degraded)
- Wooded Swamp and Wooded Swamp (Degraded)

Impacts to wetland habitat in the form of wetland fills, vegetation clearing, loss of habitat due to highway and interchange construction, bridge demolition, construction, and maintenance may occur throughout the Project corridor. Long term impacts are limited to loss of habitat due to construction of new interchanges and expansion of the existing footprint of the corridor in some locations. To minimize impacts, Project work is planned to occur within the existing footprint as much as is practicable.

Aquatic Habitat (Wisconsin River)

Threatened and endangered species associated with the waterways/aquatic habitats include Higgins eye, sheepnose, and salamander mussels. Aquatic habitat that may be affected by the proposed action includes portions of Spring Brook, Baraboo River, Hulburt Creek, Rowan Creek, Wheeler Wilcox Creek, Yahara River, Token Creek, Door Creek, West Branch Starkweather Creek, and several unnamed waterbodies. No in-water work below the OHWM is anticipated to occur in Mirror Lake (Dell Creek) at this time. Descriptions of the named waterbodies are provided below.

The portion of the I-39/90/94 Corridor that crosses the Wisconsin River was assessed as a separate BA and is not part of this Biological Opinion (BO).

Spring Brook (WBIC 1295600) is a small warm water tributary to Lake Delton located in the Dell Creek Watershed. An impoundment on the stream creates Blass Lake. The stream is considered a warm water forage fishery. Although the stream is currently listed to be in good condition by the WDNR, the stream is impacted by elevated temperatures, low dissolved oxygen, low flow and limited in-stream habitat due to nonpoint source pollution (WDNR, 2002).

Mirror Lake (WBIC 1296000) is a 139-acre impoundment of Dell Creek located above Lake Delton in Sauk County. The lake has a maximum depth of 19 feet and is listed as impaired due to high concentrations of total phosphorus (WDNR, 2017) and does not meet designated uses for recreation or fish and aquatic life. However, available biological data did not indicate impairment (i.e., no macroinvertebrate or fish Index of Biotic Integrity (IBI) scored in the “poor” condition category). The lower 1.5 miles of Dell Creek (WBIC 1295200) is a warm water sport fishery, and the upper 10.5 miles is classified as a Class II trout stream. The proposed project is in the lower portion of Dell Creek. The general condition is currently unknown according to the WDNR, but known problems include sediment and nutrient loading from agricultural sources, and a lack of in-stream habitat. In 2018 the creek was proposed for the impaired waters list

(WDNR, 2002). No in-water work below the OHWM is anticipated to occur in Mirror Lake (Dell Creek) at this time.

Baraboo River (WBIC 1271100) is a tributary to the Wisconsin River. This warm water sport fishery and canoe trail is currently listed as impaired due to high concentrations of total phosphorus and does not meet designated uses for aquatic life. However, available biological data did not indicate impairment (i.e., no macroinvertebrate or fish IBI scored in the "poor" condition category). Segment 108.60 - 118.93 flows under I-90 and I-39 before emptying into the Wisconsin River. The river is located within the Seymour Creek and Upper Baraboo River Watershed (WDNR, 2017). The portion of the Baraboo River that flows under I-90/94 bridge crossing has predominantly silt and wood substrate, with some clay, sand, and gravel (Kitchel & Weizinger, 2022).

Hulburt Creek (WBIC 1298500) is a tributary to the Wisconsin River at Wisconsin Dells and is located within the Dell Creek Watershed. Miles 0-1.55 is the segment that flows under I-39. The creek is impaired due to high concentrations of total phosphorus (WDNR, 2015).

Rowan Creek (WBIC 1263700) is located in the Lake Wisconsin Watershed with natural reproduction of brown trout. The segment of the stream that intersects with this interstate project is miles 0-10.41. The stream flows under I-39 and then empties into Lake Wisconsin. Approximately four miles of the stream are Class I trout waters and designated as an exceptional water resource, and eight miles are Class II (WDNR, 2017). Substrate is predominately gravel with some rubble and sand.

Wheeler Wilcox Creek (WBIC 807500) is a cool/cold 4.56-mile river located within the Yahara River and Lake Mendota Watershed in Dane County. This river is managed for fishing and swimming and is currently not considered impaired (WDNR, 2016). Observations made during a wetland delineation in 2021/2022 include the presence of litter or debris, undercut banks, and destruction of terrestrial vegetation with predominantly gravel substrate (GEI, 2023).

Yahara River (WBIC 798300) is a large tributary located in Dane County that drains into the Rock River. The river is close to 63 miles in length, with approximately 23 miles located within the Yahara River and Lake Kegonsa Watershed. The segment that flows under I-39 (miles 47.02 to 63.02) is listed as impaired (WDNR, 2002) with chloride and total phosphorus being listed as pollutants. Observations made during a wetland delineation in 2021/2022 include the presence of litter or debris, and sediment deposition with predominantly clay and silt substrate (GEI, 2023).

Token Creek (WBIC 806600) originates in Windsor Township (T9N, R10E) and empties into the Yahara River north of Lake Mendota. It drains 27.3 square miles of residential, agricultural, and marsh land in the Yahara River and Lake Mendota Watershed. This spring-fed Class III trout stream provides significant base flow for the Yahara River and Lake Mendota (Token Creek, Yahara River and Lake Mendota Watershed (LR09), 2002). Token Creek, from its mouth to US 51 (miles 0 to 2.95), is on the Healthy Waters List (WDNR, 2023). A portion of Token Creek, from US 51 to impoundment dam (miles 2.95 to 3.44), is listed as impaired and has a sediment TMDL that was approved by USEPA in 2002 (WDNR, 2002). Observations made during a wetland delineation in 2021/2022 include the presence of litter or debris, sediment deposition, and erosion with predominantly clay and silt substrate (GEI, 2023).

Door Creek (WBIC 802800) begins in the southeast corner of the Town of Burke and flows south to Lake Kegonsa. The creek drains 29.5 square miles of agricultural land in the drumlinmarsh area of eastern Dane County and is located within the Yahara River and Lake Kegonsa Watershed. Groundwater discharge to Door Creek has been reduced by an estimated 28% due to pumping and wastewater diversion in the area.

Portions of Door Creek flow under I-94 and I-39. The creek is listed as impaired due to high concentrations of total phosphorus (WDNR, 2002). Observations made during a wetland delineation in 2021/2022 include evidence of scouring along the modified channel with unstable banks, erosion, and riprap. The predominant substrate is clay and silt (GEI Consultants, 2023).

West Branch Starkweather Creek (WBIC 805100) is a tributary to Lake Monona. The west branch drains the area around the Dane County Regional Airport, a portion of the east side of Madison, and urbanizing areas north of U.S. Highway 151. The creek received decades of intensive toxic point source discharges of many different substances. Some of these discharges remain in the sediment of the creek and continue to pose problems for fish and aquatic life. Pollutants include unspecified metals, chloride, Perfluorooctane sulfonic acid (PFOS), biological oxygen demand (BOD), sediment, and *E. coli*. Impairments include acute aquatic toxicity, low dissolved oxygen, recreational restrictions due to pathogens, degraded habitat, chronic aquatic toxicity, elevated human health risks due to toxins, and PFOS contaminated fish tissue.

EFFECTS OF THE ACTION

In accordance with the Endangered Species Act of 1973, as amended (ESA), Sub-part B, 50 CFR402.02, effects of the Project (or action) are defined as "all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (United States, 1983). The consequences that meet this two-part determination are covered under this BO.

This effects analysis will address the direct, indirect, and cumulative effects of the proposed Project on the identified federally listed, proposed, and candidate species, migratory birds, and other wildlife.

No critical habitats were identified in the proposed action area.

Direct Effects

Effects of the action include all consequences caused by the project to listed species or critical habitat. A direct effect is the direct or immediate effect of the project on a species or its habitat, whether beneficial or adverse (50 CFR § 402.02).

Whooping Crane *(Grus americana)*

Whooping crane nesting does not occur in this part of Wisconsin. It is anticipated that the Project will result in temporary and permanent loss of existing wetlands that may serve as whooping crane stopover habitat. Whooping cranes prefer large, open wetland mosaics as stopover habitat. Permanent stopover habitat loss is anticipated to be minimal because most of the impacted wetlands are isolated or degraded. In Wisconsin, the listing status is Experimental Population, Non-Essential. This project should have no effect on the whooping crane. As such, it is not likely that the wetland impacts associated with the Project would jeopardize the continued existence of the species.

Karner Blue Butterfly (*Lycaeides melissa samuelis*)

Sauk and Juneau Counties are listed as locations where the Karner blue butterfly (KBB) is known or likely to occur in Wisconsin. The USFWS KBB current species range includes all of Sauk and Juneau Counties. The USFWS KBB current species range is county-based. Since January 1999, WisDOT has been a partner to the WDNR's KBB Habitat Conservation Plan (HCP) and Section 10 incidental take permit issued by USFWS (WDNR, n.d.). As a HCP partner, WisDOT implements the Construction, Maintenance, Repair and Management Guideline (Construction Guideline) for projects that fall within the WDNR KBB high potential range (WDNR, 2010). The WDNR KBB HPR includes the northern portion of Juneau County; however, the northern-most point of the I-39/90/94 Project is approximately 15 miles south of the southern edge of the KBB HPR.

A Karner blue butterfly presence/probable absence survey has not been conducted; however, a habitat survey was conducted from June 21through July 14, 2022. Survey results indicated that potentially suitable KBB habitat can be found within the WisDOT ROW. Potentially suitable habitat included dry mesic prairie, oak opening, surrogate grassland, and transportation utility corridor. Oak Opening was found at four locations along the Project corridor in Juneau and Columbia Counties. The Transportation-Utility Corridor habitat extends throughout the Project area.

Comprehensive surveys for the presence of lupine were not completed in all areas of potentially suitable habitat. However, lupine was observed within one dry-mesic prairie community during the 2022 habitat assessments. The WDNR KBB HPR modelling was completed in 2019, and there are known WDNR KBB occurrences outside of the existing model. Although the Project area does not fall within the most recent WDNR KBB HPR, it is included within the USFWS KBB current species range and contains potentially suitable KBB habitat.

As such, the presence of the KBB is assumed within portions of the project area in Sauk and Juneau Counties.

Construction activities associated with the Project may directly affect native wild blue lupine (*Lupinus perennis*) which is the host plant for KBB. Construction of access roads and staging areas will temporarily remove vegetation from upland areas that include lupine and other plant species that provide nectar resources. Impacts to lupine could result in direct mortality to KBB eggs and larvae. Harm within the action area may result due to direct mortality from crushing, injury, or smothering due to fill, construction materials, soil compaction. Temporary habitat loss will be offset by the re-establishment of vegetation via the use of native pollinator seed mixes, which contain wild blue lupine. However, direct consequences due to permanent habitat loss in areas where the footprint of the highway infrastructure (i.e., pavement) will be expanded will remain.

KBB habitat quality varies within the existing Interstate right-of-way (ROW). Impacts occurring within the first 15 feet of ROW off the interstate are generally considered low quality habitat due to annual maintenance/mowing, herbicide treatments, noise, vibration, and salt input. Other portions of the ROW may be mowed once every three years to manage brush or left unmanaged (i.e., never or very infrequently mowed or treated with herbicide). These areas provide higher quality habitat for the KBB and impacts to these areas may have a more notable effect to the species. Certain portions of the ROW (within first 15 of ROW and in known locations of NR 40 prohibited plants) may receive herbicide and/or plant growth regulator treatments. In areas where habitat will be temporarily impacted and vegetation re-establishment will occur, the land use changes resulting from this Project may benefit the KBB in the long-term. KBB can be found along roadsides, utility ROWs, or other areas that are maintained in an open early successional stage. These corridors can provide suitable conditions for wild blue lupine and create an important link between larger habitat areas and encourage dispersal and genetic diversity. In such cases, the positive long-

term impacts may outweigh the temporary losses that will occur. However, without adequate vegetation re-establishment, temporary impacts to these habitats may be a detriment to the KBB long-term as non-native plants tend to colonize areas following disturbance and non-native plants are a lower quality food source than native species (Fabrizio, et. al. 2020).

There is no critical habitat identified for the KBB in the proposed action area.

Monarch Butterfly (*Danaus plexippus*)

A monarch butterfly presence/absence survey has not been conducted; however, suitable habitat can be found along field edges and within the WisDOT ROW. As such, presence of the monarch butterfly is assumed to occur in the Project area.

The Project may directly affect the host plant for the monarch butterfly which are milkweed species (*Asclepias spp*.). Impacts to milkweeds could also result in directly affecting eggs and larvae depending on presence and seasonal timing of impacts. Common milkweed (*Asclepias syriaca*) can be found along field edges and within the WisDOT ROW as it can tolerate in lower quality upland habitats. Potentially suitable habitats observed in the project include habitats such as dry mesic prairie, mesic prairie, surrogate grassland, upland transportation utility corridor, emergent marsh, southern sedge meadow, wet prairie, and wet mesic prairie.

Construction of access roads and staging areas will temporarily remove vegetation from upland areas that include milkweed species and other non-native species that provide nectar resources. Harm within the Project action area may result due to direct mortality of larvae from crushing, injury, or smothering due to fill, construction materials, soil compaction, and heavy machinery.

It is anticipated that the Project will result in temporary and permanent loss of monarch butterfly habitat which includes potential habitat for milkweed species and therefore monarch larvae and eggs. Direct consequences due to temporary habitat loss will be offset by the re-establishment of vegetation via the use of pollinator seed mixes. However, without adequate vegetation reestablishment, temporary impacts to these habitats may be a detriment to the monarch butterfly long-term as non-native plants tend to colonize areas following disturbance and non-native plants are a lower quality food source than native species (Fabrizio, et. al. 2020). Direct consequences due to permanent habitat loss in areas where the footprint of the highway infrastructure (i.e., pavement) will be expanded will remain.

Because the monarch butterfly is not federally protected as a candidate species, there are no required actions. The MN-WI determination key in IPaC indicated No Effect to monarch butterfly on February 29, 2024. WisDOT and FHWA will resolve Section 7 requirements prior to construction activities commencing if this species is listed.

There is no critical habitat identified for the monarch butterfly.

Rusty Patched Bumble Bee (*Bombus affinis*)

Dane, Columbia, and Sauk Counties are listed as locations where the rusty patched bumble bee (RPBB) is known or believed to occur in Wisconsin. The USFWS high potential zone (HPZ) for rusty patched bumble bee includes portions of Dane, Columbia, and Sauk Counties and partially overlaps with the Project area (USFWS, 2024).

A RPBB presence/probable absence survey has not been conducted; however, suitable habitat can be found along field edges and within the WisDOT ROW. As such, presence of the rusty patched bumble bee is assumed within portions of the Project area in Dane, Columbia, and Sauk Counties.

The Project will directly affect foraging, nesting, and queen overwintering habitat for the rusty patched bumble bee. Preliminary design estimates that 111.79 acres of foraging habitat will be affected by the project. This acreage includes 10.84 acres of foraging-only habitat, 88.47 acres of foraging habitat that overlaps with nesting habitat, and 12.48 acres of foraging habitat that overlaps with overwintering habitat. Habitat impacts will be a combination of temporary and permanent impacts and may include removing vegetation, grading, excavation, and placement of fill material.

Construction activities may result in direct harm to bees from crushing, compaction, or disturbance of nesting colonies in upland grasslands, shrublands, or woodlands, and overwintering queens in upland forests.

Due to their long window of activity, access to food is required from mid-April to early October. Construction will permanently as well as temporarily remove vegetation from upland areas that include preferred flowers and other species that provide pollen and nectar resources. In locations of medium to high quality floral resources in the HPZ, vegetation clearing activities would be minimized as much as practical to allow the food source for bees in the area to remain intact. Where applicable, topsoil will be stripped and reused. Additionally, WisDOT standard seed mix #70 and #70a, which contains native forb species, and/or native flowering shrubs will be planted as part of the restoration of the disturbed areas.

RPBB habitat quality varies within the existing Interstate right-of-way (ROW). Impacts occurring within the first 15 feet of ROW off the interstate are generally considered low quality habitat due to annual maintenance/mowing, herbicide treatments, noise, vibration, and salt input. Other portions of the ROW may be mowed once every three years to manage brush or left unmanaged (i.e., never or very infrequently mowed or treated with herbicide). These areas provide higher quality habitat for the rusty patched bumble bee and impacts to these areas may have a more notable effect to the species. Certain portions of the ROW (within first 15 of ROW and in known locations of NR 40 prohibited plants) may receive herbicide and/or plant growth regulator treatments.

Direct consequences due to temporary habitat loss will be offset by the re-establishment of vegetation via the use of native pollinator seed mixes. However, direct consequences due to permanent summer forage and nest habitat loss in areas where the footprint of the highway infrastructure (i.e., pavement) will expand. Summer nesting habitat will also be reduced from soil compaction; however, these areas may still be suitable foraging habitat. Areas that will be cleared of vegetation and mowed regularly will no longer be suitable as overwintering habitats as wooded habitat suitable for overwintering will not be reestablished. Overwintering habitats that are cleared of vegetation and mowed regularly may be suitable for foraging or summer nesting habitat following construction.

In areas where habitat will be temporarily impacted and vegetation re-establishment will occur, the land use changes resulting from this Project are likely to only temporarily adversely affect RPBB and may benefit the RPBB in the long-term due to re-establishment of potentially higher quality floral resources. However, without adequate vegetation re-establishment, temporary impacts to these habitats may be a detriment to the RPBB long-term as non-native plants tend to colonize areas following disturbance and non-native plants are a lower quality food source than native species (Fabrizio, et. al. 2020).

There is no critical habitat identified for the rusty patch bumble bee.

Gray wolf (*Canis lupis*)

The IPaC database indicated that the northern section of the Project area extends a short distance into the range of the gray wolf. The current range correlates with the WDNR mapped gray wolf Zone 5 in Juneau County, Wisconsin. A review of the WDNR NHI database was completed on January 23, 2024 and indicated that no gray wolf element occurrences (EOs) are currently known to occur within 1 mile of the Project Corridor. For gray wolves, dens, rather than their territory are considered EOs. A preliminary study of highway expansion impacts on wolves in northwestern Wisconsin indicated that wolves typically establish dens near the center of their territory and avoid areas of high road density (Kohn, et al. 1999). The center of gray wolf Zone 5 is located around the center of Juneau County, so it is unlikely that a den would be located at the southern extent of their range nearby the Project area (WDNR, 2023).

Wolves are generally shy of people and avoid contact with humans. However, wolves may occasionally get close to human dwellings or worksites in search of prey. Wolves can also be attracted to discarded food and become habituated (loss of fear of humans) to receiving food from humans at outdoor work sites. Habituation can lead to increased human-wolf conflict which poses a risk to wolves as predators as well as humans and livestock. Worksites along the construction corridor will be kept clear of food and food scraps to prevent habituation from food scrap sources.

However, a presence/absence survey for gray wolves has not been conducted. As such, presence of the gray wolf is assumed in portions of the Project area within Sauk and Juneau Counties. Given the range and adaptability of this species, variety of prey, fear of humans, the healthy status of the population throughout the state, and no EOs identified within 1-mile of the project corridor, no direct effects are anticipated as a result of this Project.

There is no critical habitat identified for the gray wolf in the proposed action area.

Northern Long-Eared Bat (*Myotis septentrionalis*)

Bat inspections were completed along the Project corridor in July and August 2023 to look for bats or evidence of bat use at accessible bridges and culverts four feet (48 inches) in diameter or larger. The assessments were conducted in accordance with USFWS guidance (USFWS, 2010). Small amounts of bat guano were observed at three locations: Dees Road overpass (Federal bridge ID: B-29-20), CPRR overpass (Federal bridge ID: B29-19-62), and Mirror Lake bridge (Federal bridge ID: B-56-47/48-61). Guano at the Dees Road overpass and Mirror Lake bridge was observed in the spaces between concrete end walls and the bridge deck. Guano and staining at the CPRR overpass were observed on the bridge, concrete surfaces, spaces between concrete end walls and bridge deck, and vertical surfaces on concrete I-beams. The WDNR NHI database was accessed on January 30, 2024 and indicated an active roost of NLEB within 0.25 miles of the Project, near Tritz Road south of I-90/94 within the Pine Island State Natural Area.

Due to the presence of guano at three locations, presence of live trees and/or snags ≥3 inches DBH, and WDNR NHI database mapped occurrence of a NLEB summer roost within 0.25 miles of the project corridor, the presence of NLEB is assumed in the Project area. As such, this Project has the potential to directly affect NLEB.

Due to the presence of forested areas, adjacent riparian corridors, and bridges, the project may affect the NLEB. NLEB are known to roost in trees and human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should be considered potential summer habitat. They typically occupy

their summer habitat from mid-April through mid-September each year and the species may arrive or leave some time before or after this period (USFWS, n.d.).

There are several potential risks for direct affects including tree clearing, bridge work, noise, and temporary lighting.

Habitat Effects

NLEB exploits different habitat types throughout the year; their active season is designated as April 1 through October 31 and their inactive season is designated as November 1 through March 31 in the state of Wisconsin. During their hibernation (i.e., over the winter), bats will select caves and mines that provide the appropriate thermal and moisture conditions. There is some evidence that NLEB can hibernate outside of caves or mines in features such as rock crevices, talus, tunnels, bunkers, basements, bridges, aqueducts, trees, earthen burrows (USFWS 2022b).

Meanwhile, during the non-hibernating season (i.e., spring, summer, fall), NLEB roost in trees with loose bark, cavities and or crevices as well as anthropogenic structures such as buildings, and bridges (WDNR, 2022; USFWS, 2022). Both male and female NLEBs also exhibit high site fidelity. Female NLEBs form maternity colonies, where pups from multiple females are housed. Females will leave non-volant pups in these colonies while they forage and return frequently to nurse their young.

Tree cutting restrictions in suitable summer habitat will be implemented during the NLEB active season from April 1 through October 31. According to the design engineers, it is anticipated that approximately 85.2 acres of suitable summer habitat would be impacted by tree clearing for the Project. Tree removal is needed for the construction of access roads, causeways, and staging areas. There are large upland forested and woodland areas present adjacent to the northern portion of the project area. The adjacent forested and woodland areas would provide more desirable habitat for roosting due to being a further distance from interstate noise and disturbances. Although tree removal will result in a permanent loss of habitat in the immediate vicinity, it is not anticipated to cause direct mortality to roosting bats or affect the survival of the species or prevent its recovery.

Tree cutting restrictions in suitable summer habitat will be implemented and will be consistent with the Programmatic Biological Opinion (PBO) for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat (USFWS, 2018), even though the Project does not meet the scope of the PBO. Tree cutting avoidance periods will occur during the NLEB active season from April 1 through October 31.

Effects from Structure Work

These bats are known to roost in trees and human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should be considered potential summer habitat and presence of the bats are assumed. They typically occupy their summer habitat from mid-April through mid-September each year and the species may arrive or leave some time before or after this period (USFWS, 2022).

USFWS considers negative inspections valid for two years. Bridges and culverts will be reinspected for bats and signs of bat within 2 years of structure demolition, reconstruction, or disruptive activities (WisDOT does not anticipate replacing the Dees Road overpass). The assessment will be conducted in accordance with USFWS guidance (USFWS, 2010) which outlines favorable characteristics of bridges and structures that may provide habitat for NLEB and preliminary indicators to determine if any NLEB are actively using bridges or structures.

The Project will consider a suite of options to address direct effects to NLEB during structure work including avoidance periods and exclusion measures. Structure demolition or reconstruction activities at locations with signs of bat usage may be completed from November 1 to March 31 to avoid the active season. If WisDOT determines the avoidance period is not feasible at the locations with signs of bat usage, exclusion measures will be considered.

Exclusion measures may be utilized during structure demolition, reconstruction, and disruptive activities to exclude bats from using existing I-39/90/94 corridor bridges with signs of bat usage prior to and during the active season (April 1 through October 31). The feasibility of bat exclusion will depend upon specific bat usage of the structures. Exclusion measures for NLEB consists of sealing joints and weep holes during the inactive season when the structure is not occupied by NLEBs (Wetzel & Roby, 2023). Other measures may include appropriately designed and installed bat exclusion netting.

Buildings and human-use structures are also proposed to be removed as a part of the Project. Known structure removals include the following: a barn on a severed farm at the Milwaukee Street interchange in Dane County, a maintenance building (Polynesian Hotel) at WIS 13 interchange, a small business (north side of County Highway H, east of the interstate), and a shed (Trappers Turn Golf Course). There may be more structure removals necessary in the flooded area around the I-39 and I-90/94 split interchange near the Baraboo River crossing. Additional structure removals will be identified during the final design phase.

Buildings and human-use structures will be inspected for presence of bats and for signs of bat use within 2 years prior to demolition (or within 1 year if the structure is within the 1-mile buffer of a NHI bat occurrence per WDNR requirements). If evaluation of a structure cannot take place, bat presence will be assumed. Structures that do not exhibit signs of bat usage will not have timing restrictions or exclusion measures associated with their demolition. The application of timing restrictions will protect the species from direct harm (i.e., mortality) due to the construction activities (i.e., building demolition). Appropriately designed and installed bat exclusion measures that are installed prior to the start of the active season would also protect the species from direct harm. These actions are anticipated to have a discountable direct effect on NLEB.

Noise Effects

A noise study has been completed for the proposed construction alternative along the I-39/90/94 corridor, and results indicate that noise levels will increase during construction. The increases in noise levels will have a variable impact on the NLEB depending on proximity to suitable habitat and the type of construction activities conducted. Noise disturbance from traffic and construction activities could potentially result in reduced survivability of individuals from increased susceptibility to predation, reduced quality of social environments, reduced foraging efficiencies, and hearing loss (CA DOT, 2016). However, adult bats have multiple behavioral and physiological defensive mechanisms that help them prevent noise overexposure, which is likely to effectively shield individuals from most trauma events that would occur from highway and construction noise West, 2016). Bats present at existing I-39/90/94 structures and nearby summer roosting habitats have been previously exposed to traffic noise and will likely be tolerant of future traffic disturbances. Although young bats are more sensitive to noise disturbance during the breeding season, tree cutting timing restrictions will be implemented to avoid certain noise disturbances to young bats during the breeding season. Noise disturbances to young bats associated with other construction activities will remain. However, as most Project improvements will occur within the existing I-39/90/94 ROW, the overall environment will not be altered following construction.

The project will implement AMMs to reduce the potential for directly impacting bats. As such, this Project is anticipated to have minimal direct effects on NLEB due to an increase in noise.

Lighting Effects

Construction activities and re-routing of traffic during reconstruction will alter artificial lighting along the corridor which could alter bat behavior patterns. Lighting applicable AMMs will be implemented whenever practicable.

NLEB avoid or reduce activity in areas lit artificially and studies involving bat species like the NLEB suggest that artificial light could reduce the suitability of an area for foraging and cause them to avoid lit areas (USFWS 2023b). Although the additional lighting may reduce the suitability of the area for NLEB, the areas where lighting will be installed along the I-39/90/94 corridor are already urbanized and are lit. Therefore, impacts to the suitability of the habitat for NLEB due to a slight increase in additional lighting are expected to be minimal. The avoidance of lit areas is therefore not expected to impact mortality from vehicle collisions, affect activity levels, or alter predator-prey relationships.

This project will implement AMMs to reduce the potential for directly impacting bats. As such, this Project is anticipated to have minimal direct effects on NLEB.

Tricolored Bat (*American perimyotis*)

Bat inspections were completed along the Project corridor in July and August 2023 to look for bats or evidence of bat use at accessible bridges and culverts four feet (48 inches) in diameter or larger. The assessments were conducted in accordance with USFWS guidance (USFWS, 2010). Small amounts of bat guano were observed at three locations: Dees Road overpass (Federal bridge ID: B-29-20), CPRR overpass (Federal bridge ID: B29-19-62), and Mirror Lake bridge (Federal bridge ID: B-56-47/48-61). Guano at the Dees Road overpass and Mirror Lake bridge was observed in the spaces between concrete end walls and the bridge deck. Guano and staining at the CPRR overpass were observed on the bridge, concrete surfaces, spaces between concrete end walls and bridge deck, and vertical surfaces on concrete I-beams. A summary of the survey results is provided in the BA.

Due to the presence of guano at three locations and presence of live trees and/or snags ≥3 inches DBH, the presence of tricolored bats is assumed in the Project area. As such, this Project has the potential to directly affect tricolored bats. Due to the presence of forested areas, adjacent riparian corridors, and bridges, the project may affect the tricolored bats. Tricolored bats are known to roost in trees and human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should be considered potential summer habitat. They typically occupy their summer habitat from mid-April through mid-September each year and the species may arrive or leave some time before or after this period (USFWS, n.d.).

There are several potential risks for direct affects including tree clearing, bridge work, noise, and temporary lighting.

Habitat Effects

Tricolored bats exploit different habitat types throughout the year; their active season is designated as April 1 through October 31 and their inactive season is designated as November 1 through March 31 in the state of Wisconsin.

Similar to NLEB, tricolored bats could be exposed to noise disturbance from traffic noise and construction activities potentially resulting in an increased susceptibility to predation, reduced quality of social environments and reduced foraging efficiencies. Potential effects of increased noise on bats are acute acoustic trauma, disturbance and displacement from important food and shelter resources, and signal masking. However, bats have multiple behavioral and physiological defensive mechanisms that help them prevent noise overexposure, likely effectively shielding individuals from most trauma events that would occur from highways noise. Bats are frequently confronted with exceptionally loud sounds from their own and other bat echolocation signals which can reach 110 db. As a result, bats have evolved protective mechanisms to prevent sensory overload and auditory system damage. Signal masking is also likely to have no impact because bat echolocation calls are in the ultrasonic range beyond the upper frequency limits of highway noise (West, 2016).

During their hibernation (i.e., over the winter), tricolored bat will select caves and mines that provide the appropriate thermal and moisture conditions necessary to support their reduced metabolic activity (USFWS, n.d.). In the southern limits of their ranges where caves may be sparse, there is evidence that tricolored bat hibernate in road-associated culverts, as well as sometimes in tree cavities and abandoned water wells (USFWS, n.d.).

Meanwhile, during the non-hibernating season (i.e., spring, summer, fall), tricolored bat primarily roost among clusters of live or recently dead deciduous hardwood trees (USFWS, n.d.). Other roosting habitats can include, within pine needle accumulations, artificial roosts, barns, porches, bridges and concrete bunkers (USFWS, n.d.). Female tricolored bats exhibit high site fidelity, though they may regularly switch between roosting locations. They typically return annually to the same set of summer roosting locations. Females also form maternity colonies, where pups from multiple females are housed together. Females will leave non-volant pups in these colonies while they forage and return frequently to nurse their young. Tree cutting restrictions in suitable summer habitat will be implemented during the tricolored bat active season from April 1 through October 31. According to the design engineers, it is anticipated that approximately 85.2 acres of suitable summer habitat would be impacted by tree clearing for the Project. Tree removal is needed for the construction of access roads, causeways, and staging areas. There are large upland forested and woodland areas present adjacent to the northern portion of the project area. The adjacent forested and woodland areas would provide more desirable habitat for roosting due to being a further distance from interstate noise and disturbances. Although tree removal will result in a permanent loss of habitat in the immediate vicinity, it is not anticipated to cause direct mortality to roosting bats or affect the survival of the species or prevent its recovery.

Tree cutting restrictions in suitable summer roost habitat will be implemented and will be consistent with the Programmatic Biological Opinion (PBO) for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat (USFWS, 2018), as avoidance minimization measures for specifically for tricolored bat have not been released by USFWS at this time. Tree cutting avoidance periods will occur during the tricolored bat active season from April 1 through October 31.

Effects from Structure Work

Tricolored bats are known to roost in trees and human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should be considered potential summer habitat and presence of the bats are assumed. They typically occupy their summer habitat from mid-April through mid-September each year and the species may arrive or leave some time before or after this period (USFWS, 2022).

USFWS considers negative inspections valid for two years. Bridges and culverts will be reinspected for bats and signs of bat use within 2 years prior to structure demolition, reconstruction, or disruptive activities (WisDOT does not anticipate replacing the Dees Road overpass). The assessment will be conducted in accordance with USFWS guidance (USFWS, 2010) which outlines favorable characteristics of bridges and structures that may provide habitat for bats and preliminary indicators to determine if any bats are actively using bridges or structures. Negative assessments are considered valid for two years.

The Project will consider a suite of options to address direct effects to tricolored bats during structure work including avoidance periods and exclusion measures. Structure demolition or reconstruction activities at locations with signs of bat usage may be completed from November 1 to March 31 to avoid the active season. If the WisDOT Design and Construction Engineer determines the avoidance period is not feasible at the locations with signs of bat usage, exclusion measures will be considered.

Exclusion measures may be utilized during structure demolition, reconstruction, and disruptive activities to exclude bats from using existing I-39/90/94 corridor structures with signs of bat usage prior to and during the active season (April 1 through October 31). The feasibility of bat exclusion will depend upon specific bat usage of the structures. Exclusion measures for tricolored bats consists of sealing joints and weep holes during the inactive season when the structure is not occupied by tricolored bats (Wetzel & Roby, 2023). Other measures may include appropriately designed and installed bat exclusion netting.

Building and human-use structures are also proposed to be removed as a part of the Project. Known structure removals include the following: a barn on severed farm in Milwaukee Street interchange in Dane County, a maintenance building (Polynesian Hotel) at the WIS 13 interchange, a small business (north side of County Highway H east of the interstate), and a shed (Trappers Turn Golf Course). There may be more structure removals necessary in the flooded area around I-39 and I-90/94 split interchange near the Baraboo River crossing. Additional structure removals will be identified during the final design phase.

Buildings and human-use structures will be inspected for presence of bats and for signs of bat use within 2 years prior to demolition (or within 1 year if the structure is within the 1-mile buffer of a NHI bat occurrence per WDNR requirements). If evaluation of a structure cannot take place, bat presence will be assumed. Structures that do not exhibit signs of bat usage will not have timing restrictions or exclusion measures associated with their demolition. The application of timing restrictions will protect the species from direct harm (i.e., mortality) due to the construction activities (i.e., building demolition). Appropriately designed and installed bat exclusion measures that are installed prior to the start of the active season would also protect the species from direct harm. These actions are anticipated to have a discountable direct effect on tricolored bats.

Noise Effects

A noise study has been completed for the proposed construction alternative along the I-39/90/94 corridor, and results indicate that noise levels will increase during construction. The increases in noise levels will have a variable impact on the tricolored bat depending on proximity to suitable habitat and the type of construction activities conducted. Noise disturbance from traffic and construction activities could potentially result in reduced survivability of individuals from increased susceptibility to predation, reduced quality of social environments, reduced foraging efficiencies, and hearing loss (CA DOT, 2016). However, adult bats have multiple behavioral and physiological defensive mechanisms that help them prevent noise overexposure, which is likely to effectively shield individuals from most trauma events that would occur from highway and construction noise West, 2016). Bats that are present at existing I-39/90/94 structures have been previously exposed to traffic noise and will likely be tolerant of future traffic disturbances.

Although young bats are more sensitive to noise disturbance during the breeding season, tree cutting timing restrictions may be implemented to avoid certain noise disturbances to young bats during the breeding season. Noise disturbances to young bats associated with other construction activities may remain. However, as most Project improvements will occur within the existing I-39/90/94 ROW, the overall environment will not be altered following construction.

The project will implement AMMs to reduce the potential for directly impacting bats. As such, this Project is anticipated to have minimal noise effects on tricolored bat due to an increase in noise.

Lighting Effects

Some studies suggest that artificial lighting impacts bat species differently based on foraging habits, and may cause an increase in activity by bats, have no effect to bat activity, or lowers the activity around artificial lighting (Mathews et. al. 2015). Additionally, different types of lighting (LED, halogen, etc.) emit different types of light that effect the level of attraction to prey species (insects) and may affect the tolerance level of different bat species to different types of lights (Haddock et. al. 2019). Tricolored bats commonly forage with eastern red bats (*Lasiurus borealis*) and silver-haired bats (*Lasionycteris noctivagans*) (USFWS, n.d.). Seewagen and Adams (2021) showed that artificial lighting has no effect on foraging activity on eastern red bats and that lighting did not affect presence/absence of silver-haired bats but decreased their activity. Therefore, the project may have a direct effect to tricolored bats due to lighting, but it is unknown as to what extent.

Construction activities and re-routing of traffic during reconstruction will alter artificial lighting along the corridor which could alter bat behavior patterns. Applicable avoidance and minimization measures (AMMs) for construction and roadside lighting will be implemented whenever practicable. Although artificial lighting may impact the suitability of the area for bats, the areas where temporary lighting will be used along the Project corridor are already lit, so the impacts to the suitability of the habitat for the bats are expected to be minimal. Potential bat avoidance of lit areas is therefore not expected to increase mortality, affect activity levels, or alter predator-prey relationships.

This project will implement AMMs to reduce the potential for directly impacting bats. As such, this Project is anticipated to have minimal direct effects on tricolored bats.

Mussels

Proposed I-39/94/90 corridor construction activities at locations of bridge crossings and culverts are not anticipated to have direct impacts to freshwater mussels and their associated host species (fish and mudpuppy) due to a lack of suitable habitat. Construction activities may include installation of sheet pile for coffer dams, dewatering of isolated areas within coffer dams, demolition and replacement of existing bridge piers and culverts, and associated rip rap.

The I-39/94/90 project corridor crosses the current range of the sheepnose, Higgins eye, and salamander mussels. The WDNR completed a mussel survey on September 21, 2021, at the I-90/94 bridge crossings (EB/WB) of the Baraboo River. The purpose of the survey was to provide information on the presence of native mussels in the Baraboo River at the bridge crossing and to determine whether any state or federally listed mussel species occurred in the Project area. No state or federally listed mussels were encountered during the survey. Poor substrate conditions at the site did not indicate a dense mussel bed or specialized habitat typically associated with the presence of federally listed species. The mussel survey report is

provided in the BA.

For the remaining locations where in-water work is anticipated, waterbodies were evaluated for the potential to provide suitable habitat for sheepnose, Higgins eye, and salamander mussels. Based on available information from the WDNR, results from wetland delineations performed within the Project area, and habitat needs for each species, no potentially suitable habitat was identified for the Higgins eye or sheepnose mussels at any of the locations proposed for in-water work within the Project area. Potentially suitable habitat may exist within Mirror Lake (Dell Creek) for the salamander mussel. This waterbody has adequate water quality to support both the mussel and host species. Unlike known host fish for Higgins eye and sheepnose, mudpuppy can inhabit a range of aquatic environments, including cool-cold waters and certain impaired systems. Suitable substrate occurs within Mirror Lake. As such, the BA assumes presence of the salamander mussel at Mirror Lake (Dell Creek), However no in-water work below the OHWM is anticipated at Mirror Lake (Dell Creek) at this time.

Actions taken to further minimize adverse effects to Higgins eye, sheepnose, and salamander mussel species during construction are further defined in the BA.

Higgins Eye Mussel (*Lampsilis higginsi*)

As previously noted, WDNR's 2021 survey did not confirm the presence of Higgins eye mussels at the I-90/94 bridge crossings (EB/WB) of the Baraboo River (i.e., no dead or shell fragments of this species have been found to date). Substrate at the site was predominantly silt and wood and not suitable for Higgins eye. For the remaining locations where in-water work is anticipated, waterbodies were evaluated for the potential to provide suitable habitat.

Freshwater mussels are among the most sensitive species to water pollution which is why they are key water quality indicators (Bakshi, et al., 2023). Spring Brook, Baraboo River at the I-39 crossing, Hurlburt Creek, and West Branch Starkweather Creek have poor water quality. As such, those waterbodies are likely unable to support viable populations of the Higgins eye mussel.

Higgins eye mussels are typically found in larger, deeper rivers with sand, gravel, and boulder substrates. Substrates that may negatively impact species presence include solid clay, silt, organic material, and bedrock. The Yahara River, Token Creek and Door Creek were observed to have predominately clay and silt substrate. Rowan Creek and Wheeler Wilcox Creek are smaller in size with shallower depths. As such, those waterbodies are unlikely to provide suitable habitat for the Higgins eye mussel.

No suitable habitat for the Higgins eye mussel was identified as part of the BA. As a result, no direct effects are anticipated for the Higgins eye mussel.

Sheepnose Mussel (*Plethobasus cyphyus*)

As previously noted, WDNR's 2021 survey did not confirm the presence of sheepnose mussels at the I-90/94 bridge crossings (EB/WB) of the Baraboo River (i.e., no dead or shell fragments of this species have been found to date). For the remaining locations where in-water work is anticipated, waterbodies were evaluated for the potential to provide suitable habitat.

Sheepnose mussels are sensitive to water quality, waterways with point and non-point source contaminants can have detrimental effects on habitat suitability. Spring Brook, Baraboo River at the I-39 crossing, Hurlburt Creek, and West Branch Starkweather Creek have poor water quality. As such, those waterbodies

are unlikely able to support viable populations of the sheepnose mussel. Sheepnose mussels are typically found in medium to large stream systems, with moderate to fast currents over stable substrate of a combination of coarse sand, gravel, and clay. Suitable habitat for sheepnose includes waterways where the wild host species, sauger, is present in large riverine systems, and some large lakes. The Yahara River, Token Creek and Door Creek were observed to have predominately clay and silt substrate. Rowan Creek and Wheeler Wilcox Creek are smaller in size with shallower depths. As such, those waterbodies are unlikely to provide suitable habitat for the sheepnose mussel.

No suitable habitat for the sheepnose mussel was identified in the BA. As a result, no direct effects are anticipated for the sheepnose mussel.

Salamander Mussel (*Simpsonaias ambigua*)

As previously noted, WDNR's 2021 survey did not confirm the presence of salamander mussels at the I-90/94 bridge crossings (EB/WB) of the Baraboo River (i.e., no dead or shell fragments of this species have been found to date). For the remaining locations where in-water work is anticipated, waterbodies were evaluated for the potential to provide suitable habitat.

Freshwater mussels are among the most sensitive species to water pollution which is why they are key water quality indicators (Bakshi, et al., 2023). Spring Brook, Hurlburt Creek, and West Branch Starkweather Creek have poor water quality. As such, those waterbodies are likely unable to support viable populations of salamander mussels.

The salamander mussel is almost exclusively found under flat rocks, ledges, or other flat debris, settled into the silt or sand that has accumulated in these refugia in larger, flowing rivers and streams (Porto-Hannes, McNicholas-O'Rourke, Goguen, & Fang, 2021) (USFWS, 2023). Its presence is usually linked to that of the mudpuppy, which is also often found under large rocks and logs (Beattie, Whiles, & Willink, 2017). The Yahara River, Token Creek and Door Creek were observed to have predominately clay and silt substrate and Rowan Creek was observed to have predominantly gravel with some rubble and sand. As such, those waterbodies are unlikely to provide suitable habitat for the salamander mussel.

No suitable habitat for the salamander mussel in the project impact area was identified as part of the BA. Suitable habitat may be present in Mirror Lake (Dell Creek), however no in-water impacts below the OHWM are anticipated at this time. As a result, no direct effects are anticipated for the salamander mussel.

Eastern Massasauga Rattlesnake (*Sistrurus catenatus*)

A presence/absence survey for massasauga has not been conducted. The WDNR NHI database was accessed on January 30, 2024, and indicated one massasauga occurrence (suitable habitat and past observation) within the WisDOT ROW. The known occurrence was in Sauk County within a wetland complex at the I-39 and I-90/94 split interchange through the Pine Island State Natural Area.

The BA assumed presence of the massasauga within the portions of the Project corridor that overlap with the WDNR massasauga occurrence and contain suitable habitat for the species. The proposed I-39/94/90 corridor reconstruction may result in direct effects to the massasauga due to loss of habitat and increased mortality. Construction of access roads and staging areas will temporarily remove vegetation from approximately 26 acres of massasauga habitat included within the WDNR massasauga occurrence. These habitats include dry-mesic prairie, surrogate grasslands, ephemeral ponds, emergent marsh, floodplain forests, shrub-carr, wet-mesic prairie, southern hardwood swamp, and southern sedge meadow. The 26-acre

area of habitat disturbance for the massasauga is entirely within currently owned state and federal properties. Land temporarily disturbed on these properties require post construction seeding with native seed mixes. Direct harm within the action area may result due to direct mortality from crushing and injury from heavy machinery and earth moving as well as smothering due to fill. Because eastern massasauga rattlesnake habitat varies seasonally and over its range, the destruction of parts of a population's habitat (such as hibernacula or gestational sites) may cause a negative effect to individual snakes. This could reduce the numbers of individual in a population resulting in reduced viability of a population. This rattlesnake requires multiple, self-sustaining populations distributed across areas of genetic and ecological diversity to be sustainable over the long term (USFWS, 2016).

Construction of additional traffic lanes and other structures built within eastern massasauga rattlesnake habitat may further fragment the rattlesnake's habitat. This can result in direct mortality through the loss of access to habitat components for the survival of the snakes. However, existing suitable habitat within the Project area is already considered fragmented. Therefore, minor additional fragmentation associated with the Project activities are unlikely to have a significant effect on the eastern massasauga rattlesnake.

These Project activities may also compact soil. Compacted soil and fill could potentially reduce the number available hibernacula such as crayfish burrows and other ground fissures. Direct impacts will be minimized by using 100% biodegradable, wildlife safe erosion control products (ex. leno weave) and installing "J-turns" at silt fence ends adjacent to wetlands and open water areas to exclude and redirect reptiles away from the Project area. Exclusion fencing and "J-turns" shall be installed during the massasauga inactive season prior to emergence from their overwintering habitats in early April. Additionally, preconstruction sweeps will be performed by a qualified and permitted biologist to minimize incidental take of the rattlesnake. Project personnel will be instructed to report any eastern massasauga rattlesnake observations, or observation of any other listed threatened or endangered species, during construction to the USFWS within 24 hours. The efforts to minimize direct impacts to massasaugas are discussed in detail within the BA.

WisDOT will also minimize the spread of invasive species into suitable habitat by following best management practices. Suitable habitat areas will be seeded with appropriate native plant species to ensure habitat is restored to condition that is equal to or better than current conditions.

There is no critical habitat for the eastern massasauga located within the Project area.

Eastern Prairie Fringed Orchid (*Platanthera leucophaea*)

GEI completed rare species presence/probable absence surveys for eastern prairie fringed orchid on July 20, 21, and 23, 2023, during the optimal identification period within areas of suitable habitat throughout the Project area. Eastern prairie fringed orchid was not observed during the survey effort. However, suitable habitat was observed during the survey effort. A summary of the survey results is provided in The BA.

Despite having the surveyors not observing the plant during the 2023 survey, the eastern prairie fringed orchid may be present within the Project area due to the presence of suitable habitat. The Project may directly permanently or temporarily affect eastern prairie fringed orchid habitat, including emergent marsh, southern sedge meadows, wet prairie, and wet mesic prairie habitats.

The expansion of the interstate and the implementation of long-term maintenance of previously unmanaged habitats will result in the permanent impacts to suitable habitat. Due to the probable absence of eastern prairie fringed orchid throughout the Project area from the 2023 survey, direct impacts from habitat loss are

anticipated to be discountable and extremely unlikely to occur. Direct effects due to temporary habitat loss will be minimized by the re-establishment of vegetation following construction.

There is no critical habitat for the eastern prairie fringed orchid located within the Project area.

Prairie Bush-clover (*Lespedeza leptostachya*)

GEI completed rare species presence/probable absence surveys for prairie bush-clover on August 10, 2023, during the optimal identification period within areas of suitable habitat throughout the Project area. Prairie bush-clover was not observed during the survey effort. However, suitable habitat was observed during the survey effort. A summary of the survey results is provided in the BA.

Despite the surveyors not observing the plant during the 2023 survey, the prairie bush-clover is assumed to be present within the Project area due to the presence of suitable habitat. The Project may directly permanently or temporarily affect prairie bush-clover habitat, including dry-mesic prairie, mesic prairie, oak opening, and oak woodland habitats.

The construction of access roads and staging areas will temporarily remove vegetation from areas that provide suitable habitat to the prairie bush-clover. The expansion of the interstate and the implementation of long-term maintenance of previously unmanaged habitats will result in the permanent impacts to suitable upland habitat.

Direct effects due to temporary habitat loss will be minimized by the re-establishment of vegetation following construction. Due to the probable absence of prairie bush-clover throughout the Project area, direct impacts from habitat loss are anticipated to be discountable and extremely unlikely to occur.

There is no critical habitat for the prairie bush-clover located within the Project area.

Indirect Effects

Indirect effects are those effects that are caused by the proposed action and occur later in time but are still reasonably certain to occur (50 CFR § 402.02). The Project is likely to have indirect effects to the KBB, monarch butterfly, rusty patched bumble bee, NLEB, tricolored bat, eastern massasauga rattlesnake, eastern prairie fringed orchid, and prairie bush-clover.

Whooping Crane *(Grus americana)*

Whooping crane nesting does not occur in this part of Wisconsin. It is anticipated that the Project will result in temporary and permanent loss of existing wetlands that may serve as whooping crane stopover habitat. Whooping cranes prefer large, open wetland mosaics as stopover habitat. Permanent stopover habitat loss is anticipated to be minimal because most of the impacted wetlands are isolated or degraded. The Project will not have significant impacts on stopover habitat. In Wisconsin, the listing status is Experimental Population, Non-Essential. As such, it is not likely that the wetland impacts associated with the Project would jeopardize the continued existence of the species.

The Project includes the addition of two new travel lanes and two new interchanges which will result in a wider barrier for whooping cranes (eight lanes of traffic to cross vs. six) and may result in an increase in vehicle strikes of whooping cranes. As most Project improvements will occur within the existing I-39/90/94 ROW, is unlikely that the number of vehicle strikes to whooping cranes would significantly increase as a

result of Project activities. No indirect or delayed consequences are anticipated for the whooping crane as a result of this Project.

Whooping cranes are considered omnivores. Their summer diet primarily consists of insects, frogs, rodents, small birds, and minnows. Their diet during migration additionally includes crayfish, plant tubers, and agricultural grains. It is anticipated that a slight increase in vehicle strikes may occur to frogs, rodents, and small birds due to the wider barrier for prey species to cross and may result in an increase in vehicle traffic following construction. However, due to the variety of prey items whooping cranes consume, it is unlikely that the proposed Project activities would jeopardize the existence of whooping crane populations.

Karner Blue Butterfly (*Lycaeides melissa samuelis*)

The Project includes the addition of two new travel lanes and two new interchanges which will result in a wider barrier for KBB (eight lanes of traffic to cross vs. six) and may result in an increase in vehicle strikes of KBB. As most Project improvements will occur within the existing I-39/90/94 ROW, is unlikely that the number of vehicle strikes to KBB would significantly increase as a result of Project activities.

It is anticipated that the interstate expansion may result in the promotion of new development near the two new interchanges in Dane County. However, this area is outside of the USFWS KBB current species range; therefore, new development in Dane County is not likely to impact the KBB. No new development is anticipated to occur within Columbia, Juneau, and Sauk Counties as a result of this Project, therefore, indirect effects to KBB from increased development out of the Project footprint are not likely to occur.

Indirect effects to KBB also include habitat loss associated with the invasion of nonnative plant species following construction and vegetation disturbance outside of the Project corridor as a result of increased development. Disturbed ground along transportation corridors is at high risk to encroachment and establishment of nonnative plants. Indirect consequences due to temporary habitat loss and invasion of nonnative species will be minimized through the re-establishment of vegetation via the use of native pollinator seed mixes. However, without adequate vegetation reestablishment, impacts to these habitats may be a detriment to the KBB long-term as non-native plants are a lower quality food source than native species and important life events may be impacted without an abundance of appropriate native plant species (Fabrizio, et. al. 2020).

Monarch Butterfly (*Danaus plexippus*)

The project includes the addition of two new travel lanes and two new interchanges which will result in a wider barrier for monarch butterflies (eight lanes of traffic to cross vs. six) and may result in an increase in vehicle strikes of monarch butterflies. As most Project improvements will occur within the existing I-39/90/94 ROW, it is unlikely that the number of vehicle strikes to monarch butterflies would significantly increase as a result of Project activities.

It is anticipated that the interstate expansion may result in the promotion of new development, primarily in Dane County near the two new interchanges, which may result in the permanent removal of additional monarch habitat outside of the Project footprint. This includes potential habitat for milkweed species and monarch larvae and eggs. However, indirect effects from the Project are anticipated to be limited. Except for the two new interchanges, the Project is addressing existing capacity issues and development along the corridor is happening regardless of the Project due to a variety of reasons such as housing needs.

Indirect effects to the monarch butterfly also include habitat loss associated with the invasion of nonnative plant species following construction and vegetation disturbance outside of the Project corridor as a result of increased development. Disturbed ground along transportation corridors is at high risk to encroachment and establishment of nonnative plants. Indirect consequences due to temporary habitat loss and invasion of nonnative species will be minimized through the reestablishment of vegetation via the use of native pollinator seed mixes. However, without adequate vegetation re-establishment, impacts to these habitats may be a detriment to the monarch butterfly long-term as non-native plants are a lower quality food source than native species and important life events may be impacted without an abundance of appropriate native plant species (Fabrizio, et. al. 2020).

Rusty Patched Bumble Bee (*Bombus affinis*)

The Project includes the addition of two new travel lanes and two new interchanges which will result in a wider barrier for RPBB (eight lanes of traffic to cross vs. six) and may result in an increase in vehicle strikes of RPBB. As most Project improvements will occur within the existing I-39/90/94 ROW, it is unlikely that the number of vehicle strikes to RPBB would significantly increase as a result of Project activities.

The new interchanges will be constructed in Dane County which is located within a USFWS rusty patched bumble bee HPZ. It is anticipated that the interstate expansion and new interchange construction may result in the promotion of new development in the area which may result in the permanent removal of additional rusty patched bumble bee habitat outside of the Project footprint. This includes potential habitat for nectar resources, nesting sites, and overwintering sites. However, indirect effects from the Project are anticipated to be limited.

Indirect effects to RPBB also include habitat loss associated with the invasion of nonnative plant species following construction and vegetation disturbance outside of the Project corridor as a result of increased development. Disturbed ground along transportation corridors is at high risk to encroachment and establishment of nonnative plants. Indirect consequences due to temporary habitat loss and invasion of nonnative species will be minimized through the re-establishment of vegetation via the use of native pollinator seed mixes. However, without adequate vegetation reestablishment, impacts to these habitats may be a detriment to the RPBB long-term as non-native plants are a lower quality food source than native species and important life events may be impacted without an abundance of appropriate native plant species (Fabrizio, et. al. 2020).

Gray wolf (*Canis lupis*)

The expansion of the existing interstate infrastructure is not expected to increase mortality due to vehicle collisions as studies have shown wolves tend to avoid high road density areas. Research suggests a negative correlation between road density and probability of an area being colonized by wolf packs in Wisconsin (Wydeven, 2001). The WDNR's annual gray wolf monitoring reports identified five gray wolf mortalities in 2021-2022 and two gray wolf mortalities in 2022- 2023 associated with vehicle collisions within the WDNR gray wolf Zone 5, which overlaps the Project in Juneau and Columbia Counties and extends north to Chippewa County (WDNR, 2022) (WDNR, 2023b). As most Project improvements will occur within the existing I-39/90/94 ROW and wolves avoid areas with high road density, it is unlikely that the number of vehicle strikes to gray wolves would increase as a result of Project activities.

Given the range and adaptability of the species, variety of prey, fear of humans, and the healthy status of the population throughout the state, and no WDNR EOs identified within 1-mile of the project area, no indirect effects are anticipated as a result of this Project.

Grey wolves are considered generalist carnivores and primarily consume medium to large ungulates; however, their diet is known to range from bison to mice. In the Great Lakes Region, white-tailed deer, moose, beaver, elk, and snowshoe hare are the primary prey items for wolves, with white-tailed deer generally comprising about 70-90% of prey biomass consumed by wolves. It is anticipated that a slight increase in vehicle strikes would occur to white-tailed deer due to the additional vehicle lanes and anticipated increase in traffic volumes; however, due to the variety of prey items wolves consume it is unlikely that this would adversely affect grey wolf populations or the species recovery.

Northern Long-Eared Bat (*Myotis septentrionalis*)

Construction activities associated with the Project may result in indirect consequences to the NLEB because of the presence of forested areas, adjacent riparian corridors, bridges near the Project site and associated construction activities. Several possible indirect effects were considered as part of the BA.

Habitat Effects

The Project includes the addition of two new travel lanes and two new interchanges which will result in a wider barrier for NLEB (eight lanes of traffic to cross vs. six) and may result in an increase in vehicle strikes of NLEB. As most Project improvements will occur within the existing I-39/90/94 ROW, it is unlikely that the number of vehicle strikes to NLEB would significantly increase as a result of Project activities.

However, the two new interchanges will be constructed in Dane County in areas where NLEB are known or likely to occur. It is anticipated that the interstate expansion and new interchange construction may result in the promotion of new development in the area which may result in the permanent removal of additional NLEB habitat outside of the Project footprint. This includes potential forested areas, adjacent riparian corridors, and human-made structures, such as buildings, barns, bridges, and bat houses. These effects are not anticipated to affect the survival of the species or prevent its recovery.

Noise Effects

A noise study has been completed for the proposed construction alternative along the I-39/90/94 corridor, and findings indicate that additional travel lanes will results in an incremental increase in noise levels following construction. The increase in noise levels will vary across the Project and are anticipated to not be more than 14 decibels (dBA) over existing conditions. The southern portion of the Project, which includes the Madison Metropolitan Area and the two new interchanges, is predicted to experience higher incremental increases in noise levels than the northern portions of the Project.

The increases in noise levels will have a variable impact on the NLEB depending on proximity to suitable habitat and change from the existing noise environment. Due to the existing conditions of heavy traffic noise, indirect noise effects on NLEB will be minimal in the majority of the Project's action area. Indirect noise effects on NLEB could be adverse where the larger noise level increases are projected in the southern portion of the project, however, summer suitable habitat is considered lower quality in urbanized areas. Noise impacts to NLEB would diminish over time as bats would habituate to the new noise environment.

Lighting Effects

The Project may increase artificial lighting at the two new interchanges and at other modified interchanges. NLEB avoid or reduce activity in areas lit artificially and studies involving bat species like the NLEB

suggest that artificial light could reduce the suitability of an area for foraging and cause them to avoid lit areas (USFWS 2023b).

Although the additional lighting may reduce the suitability of the area for NLEB, the areas of the two new interchanges and the Project corridor are already urbanized and are lit, so by a slight increase in additional lighting, the impacts to the suitability of the habitat for NLEB are expected to be minimal. The avoidance of lit areas is therefore not expected to increase mortality due to vehicle collision, affect activity levels, or alter predator-prey relationships.

This Project will implement applicable avoidance and minimization measures (AMMs), as described in the BA, to reduce the potential for delayed consequences to bats. As such, this Project is anticipated to have minimal indirect effects on NLEB or prevent its recovery.

Tricolored Bat (*American perimyotis*)

Construction activities associated with the Project may result in indirect consequences to tricolored bats because of the presence of forested areas, adjacent riparian corridors, bridges near the Project site and associated construction activities. Several possible indirect effects were considered as part of the BA.

Habitat Effects

The Project includes the addition of two new travel lanes and two new interchanges which are anticipated to result in an increase in traffic volumes following construction. This will result in an increase in vehicle strikes of tricolored bat. As most Project improvements will occur within the existing I-39/90/94 ROW, it is unlikely that the number of vehicle strikes to tricolored bats would significantly increase as a result of Project activities

However, the two new interchanges will be constructed in Dane County in areas which tricolored bat are known or likely to occur. It is anticipated that the interstate expansion and new interchange construction may result in the promotion of new development in the area which may result in the permanent removal of additional tricolored bat habitat outside of the Project footprint. This includes potential forested areas, adjacent riparian corridors, and human-made structures, such as buildings, barns, bridges, and bat houses. These effects are not anticipated to affect the survival of the species or prevent its recovery.

Noise Effects

A noise study has been completed for the proposed construction alternative along the I-39/90/94 corridor, and findings indicate that additional travel lanes will results in an incremental increase in noise levels following construction. The increase in noise levels will vary across the Project and are anticipated to not be more than 14 decibels (dBA) over existing conditions. The southern portion of the Project, which includes the Madison Metropolitan Area and the two new interchanges, is predicted to experience higher incremental increases in noise levels than the northern portions of the Project.

The increases in noise levels will have a variable impact on the tricolored bat depending on proximity to suitable habitat and change from the existing noise environment. Due to the existing conditions of heavy traffic noise, indirect noise effects on tricolored bat will be minimal in the majority of the Project's action area. Indirect noise effects on tricolored bat could be adverse where the larger noise level increases are projected in the southern portion of the project, however, summer suitable habitat is considered lower

quality in urbanized areas. Noise impacts to tricolored bat would diminish over time as bats would habituate to the new noise environment.

Lighting Effects

Expanding the existing interstate may increase the potential for indirect effects to tricolored bats due to increased vehicle strikes and modified foraging behavior due to increase artificial lighting at the two new interchanges and at other modified interchanges. Some studies suggest that artificial lighting impacts bat species differently based on foraging habits, and may cause an increase in activity by bats, have no effect to bat activity, or actually lowers the activity around artificial lighting (Mathews, et al., 2015). Additionally, different types of lighting (LED, halogen, etc.) emit different types of light that effect the level of attraction to prey species (insects) and may affect the tolerance level of different bat species to different types of lights (Haddock, Threlfall, Law, & Hochuli, 2019). Tricolored bats commonly forage with eastern red bats (*Lasiurus borealis*) and silver-haired bats (*Lasionycteris noctivagans*) (USFWS, n.d.). Seewagen and Adams (2021) showed that artificial lighting has no effect on foraging activity on eastern red bats and that lighting did not affect presence/absence of silver-haired bats but decreased their activity. Therefore, the project may have an indirect effect to tricolored bats due to lighting, but it is unknown as to what extent.

Although artificial lighting has potential to reduce the suitability of the area for bats, the areas where permanent lighting will be installed are already lit, so the impacts to the suitability of habitat for bats is expected to be minimal. Bat avoidance of lit areas is therefore not expected to increase mortality, affect activity levels, or alter predator-prey relationships.

This Project will implement applicable avoidance and minimization measures (AMMs), as described in in the BA, to reduce the potential for indirect effects to bats. As such, this Project is anticipated to have minimal indirect effects on tricolored bats.

Prey species of the NLEB and tricolored bat includes moths (*Lepidoptera*), flies (*Diptera*) and beetles (*Coleoptera*) (WDNR, 2022). Prey species of the tricolored bat also includes wasps (*Hymenoptera*). While increased Project lighting may increase the abundance of prey species, lighting measures, including the use of LED lights, is not reasonably expected to significantly affect the prey species of bats.

Mussels

The Project has the potential to indirectly impact all federally listed and proposed mussel species during construction and post-construction reduction in water quality resulting from stormwater runoff impacting water quality, specifically the discharge of total suspended solids (TSS) into aquatic habitats inhabited by the listed and proposed mussel species, sedimentation from construction, and contamination from construction spills. The discharge of untreated stormwater containing high levels of TSS can lead to sedimentation in aquatic habitats, potentially affecting mussel populations. Sedimentation can degrade water quality by reducing light penetration, smothering benthic habitats, and interfering with mussel feeding and respiration (Bakshi, et al., 2023).

The project has the potential to indirectly impact prey species of the federally listed and proposed mussel species, typically algae, phytoplankton, and detritus, through construction and post-construction reduction in water quality resulting from stormwater runoff impacting water quality, specifically the discharge of TSS and sediments into aquatic habitats inhabited by the listed and proposed mussel species. The discharge of untreated stormwater can cause a reduction in the photosynthetic ability of algal communities in turbid water

from decreased light availability (Pearson, Mara, Mills, & Smallman, 1987) and reduced algal density as clay particle form aggregates with algae causing them to sink (Guenther & Bozelli, 2004). Increase levels of TSS has been shown to alter community composition of plankton communities (Cuker, 1993).

Wisconsin Administrative Code Chapter NR 151 establishes runoff pollution performance standards for transportation facilities, including requirements for TSS removal. Under this regulation, redevelopment projects are required to remove 40% of total suspended solids compared to no runoff management controls, while new development, including new interchanges at Hoepker Road and Milwaukee Street, must remove 80% of total suspended solids compared to no runoff management controls. WisDOT will incorporate compliance with these rules into final design to the maximum extent practicable.

Compliance with the regulatory standards outlined in Wisconsin Administrative Code Chapter NR 151, coupled with the implementation of effective stormwater management measures, will minimize the Project's indirect effects on water quality and listed and proposed mussel species from TSS and sedimentation.

Best management practices will be implemented for the duration of construction to minimize the potential for oil, fuel, or other substances to enter a watercourse. Additionally, storage of fuels and fueling of construction equipment will be done in upland areas, away from environmentally sensitive locations. Accidental spills during refueling at construction sites or resulting from accidents involving hazardous material haulers will be handled in accordance with local government response procedures. First response will be through local fire departments and emergency service personnel to ensure public safety and to contain immediate threats to the environment. Depending on the nature and/or size of the spill, WDNR may be notified to provide additional instructions regarding cleanup procedures and restoration of any affected resources. The above best management practices and emergency response procedures will minimize the Project's indirect effects on water quality and listed and proposed mussel species from contamination from construction spills.

Higgins Eye Mussel (*Lampsilis higginsi*)

Prey species to the primary host of Higgins eye, sauger, walleye, yellow perch, largemouth bass, smallmouth bass, and freshwater drum, are not anticipated to be adversely impacted from proposed construction activities. The prey of these host species includes a variety of organisms such as benthic invertebrates, mayfly larvae, and small fishes (Barton, 2011). Such prey would be readily available outside, but near, the proposed action area and should not become limited due to project activities.

Sheepnose Mussel (*Plethobasus cyphyus*)

Prey species to the primary host of sheepnose, sauger, are not anticipated to be adversely impacted from proposed construction activities. The prey of sauger include a variety of organisms such as benthic invertebrates, mayfly larvae, and small fishes (Barton, 2011). Such prey would be readily available outside, but near, the proposed action area and should not become limited due to project activities.

Salamander Mussel (*Simpsonaias ambigua*)

Prey species to the host of salamander mussel, the mudpuppy, are not anticipated to be adversely impacted from proposed construction activities, as mudpuppy consume a wide arrange of prey including crayfish, minnows, snails, tadpoles, worms, discarded bait, or other injured or dead animals (Harding, 2000). Such

prey would be readily available outside, but near, the proposed action area and should not become limited due to project activities.

Eastern Massasauga Rattlesnake (*Sistrurus catenatus*)

The proposed I-39/94/90 corridor reconstruction may result in indirect effects and delayed consequences to the eastern massasauga rattlesnake due to loss of habitat, habitat degradation, and vehicle strikes.

Indirect effects to the massasauga include habitat loss associated with the invasion of nonnative plant species following construction and vegetation disturbance. Disturbed ground along transportation corridors is at high risk to encroachment and establishment of invasive, nonnative plants. Indirect effects will be minimized by avoiding spreading invasive plant species into suitable habitat and reducing the amount of further, yet minor, habitat fragmentation as much as possible. Massasauga prefer open canopy areas within forests for basking and encroachment of invasive, woody shrubs in these areas reduces basking locations due to invasive shrubs capability to rapidly establish a closed canopy. More information on AMMs is provided in the BA.

Roads, bridges, and other structures built within eastern massasauga rattlesnake habitat may further fragment the rattlesnake's habitat. This may result in mortality as snakes are killed trying to cross these structures (Shepard, Dresklik, Jellen, & Phillips, 2008), as well as indirectly through the loss of access to habitat components for the survival of the snakes. However, the expansion of the existing interstate infrastructure is not expected to significantly increase mortality due to vehicle collisions. Studies have shown that roadways act as barriers to massasauga movement as they tend to avoid crossing roads (Kingsbury, 2002). Single lane roadways may act as minor barriers to massasauga movement; however, high traffic roadways, such as the I-39/90/94 corridor, act as an almost complete barrier to massasauga movement (Kingsbury, 2002). It is expected that the additional traffic lanes will further deter the massasaugas from crossing the roadway. Although vehicle strikes may occur if the massasaugas choose to cross the interstate, it is unlikely that the number of vehicle strikes will significantly increase as a result of Project activities.

Massasaugas are considered carnivores and primarily consume small rodents, reptiles, and amphibians, including mice, voles, frogs, and snakes. It is anticipated that a slight increase in vehicle strikes would occur to small rodents, snakes, and amphibians due to the additional vehicle lanes and anticipated increase in traffic volumes. Additional habitat fragmentation due to additional traffic lanes and other structure construction may further fragment foraging locations for the massasauga. Due to the variety of prey items massasaugas consume and the existing level of habitat fragmentation within the landscape, it is unlikely that the proposed project activities would adversely affect availability of massasauga prey species and indirect effects to massasauga are anticipated to be minimal.

Eastern Prairie Fringed Orchid (*Platanthera leucophaea*)

Indirect effects to eastern prairie fringed orchid include habitat loss associated with habitat the invasion of nonnative plant species following construction and vegetation disturbance outside of the Project corridor as a result of increased development. Disturbed ground along transportation corridors is at high risk to encroachment and establishment of nonnative plants. Indirect effects will be minimized by avoiding spreading invasive species into suitable habitat as much as possible. More information on AMMs is provided in the BA.

Prairie Bush-clover (*Lespedeza leptostachya*)

Indirect effects to eastern prairie fringed orchid include habitat loss associated with habitat the invasion of nonnative plant species following construction and vegetation disturbance outside of the Project corridor as a result of increased development. Disturbed ground along transportation corridors is at high risk to encroachment and establishment of nonnative plants.

Indirect effects will be minimized by avoiding spreading invasive species into suitable habitat as much as possible. More information on AMMs is provided in the BA.

Indirect Land Use Impacts

The Project is intended to address current traffic, safety issues, and infrastructure conditions. Although it will be able to accommodate increased volumes of traffic by expanding the number of lanes along the mainline, only two new service interchanges will be constructed along the 67- mile corridor. The two interchanges will be located at Milwaukee Street and Hoepker Road in Dane County. Other Project components, such as replacing existing bridge infrastructure and interchanges, do not provide new access to areas in the Project vicinity. Most of the Project will occur within the existing disturbed right-of-way.

Land use surrounding the corridor has shown strong residential, commercial, and industrial growth. It is anticipated that the interstate expansion and new interchange construction may result in the promotion of new development in the area outside the project footprint. However, the Project is not expected to significantly impact land use as the Project area has been historically altered by the existing highway, utilities and surrounding commercial and residential developments. As such, it is anticipated that the Project will not cause significant indirect effects.

Interrelated and Interdependent Actions and Activities

Interrelated projects include proposed actions under consideration and other projects or activities that are part of a larger project and depend on the larger project for their justification. Interdependent projects have no independent utility apart from the proposed action under consideration (50 CFR 402.02).

This Project and its impacts on threatened and endangered species do not have any interrelated actions or activities.

Interdependent actions or activities associated with the Project are relocation of existing utilities along the corridor. At this point in the design development, specific locations of utility relocations are unknown and will be finalized throughout the design process. Private utility owners will be responsible for conducting independent environmental reviews, regulatory agency coordination, and obtaining permits necessary for utility relocations, as consistent with the *WisDOT Highway Maintenance Manual – Chapter 09 – Section 15* (WisDOT, 2024). Therefore, the private utility owners are responsible for addressing all impacts to threatened and endangered species related to the relocation of utilities. This is applicable for all private utility relocations within the WisDOT ROW regardless of whether they are determined to be compensable relocations that are eligible for state or federal funding.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future state, tribal, local, or private actions that are reasonably certain to occur within the action area considered in this biological assessment (50 CFR 402.02). Future federal actions that are unrelated to the proposed action are not considered in this section because they required separate consultation pursuant to Section 7 of the ESA.

Final project designs are ongoing; however, it is assumed that minor modifications to the County V diamond interchange will occur as part of this Project. If a private developer decides to reconstruct the County V interchange in the future, those actions would be completed independently of this Project and may result in cumulative effects on federally listed or proposed species within the County V interchange area.

The Project area and surrounding landscapes have experienced continued growth over the years, primarily in the Madison metropolitan area and in areas of existing and proposed interchanges. Future growth in the Madison metropolitan is anticipated to occur on the edges of the action area, including next to the two new interchanges. Planned regional growth along the corridor, which includes residential, commercial and industrial development or redevelopment, may result in cumulative effects to federally listed or proposed species.

The local municipalities in the action area have adopted comprehensive growth plans, shoreland zoning ordinances, and stormwater management regulations, which describe the long-term development concepts to manage land usage and growth in the future. Utilizing these elements in conjunction with environmental permit requirements may lessen cumulative effects to federally listed or proposed species.

Water Quality

Future state, tribal, local, and private actions expected within the Project action area will be required to adhere to applicable local, regional, and state requirements and regulations. Water quality within the action area is currently affected by human activities including agricultural and urban development. Portions of the Yahara River and its tributaries (i.e., Door Creek, Starkweather Creek, and Token Creek), and the Baraboo River are considered impaired waterbodies under Section 303(d) of the Clean Water Act. Mirror Lake, an impoundment of Dell Creek, is on the state's list of impaired waters. Portions of Hulbert Creek, a tributary to the Wisconsin River, is also on the state's impaired waters list. Further, two unnamed streams between Hoepker Road and the I-94/WIS 30 interchanges are impaired. Impairment and water quality data on the remaining unnamed streams is not available.

Resource regulation and management efforts are ongoing to improve water quality in the project area. Dane, Columbia, Sauk, and Juneau Counties all have land and water resource plans that outline goals and objective to improving the impaired waters listed in their respective county (Columbia County Land and Water Conservation Department, 2020; Dane County Regional Planning Commission, 2004; Juneau County Land and Water Resources, 2018; Sauk County, 2022).

Cumulative effects to surface water quality and freshwater mussel species (salamander mussel, Higgins eye, and sheepnose) could include general and indirect impacts to water quality and freshwater mussel species. Increased impervious area in the action area could increase the likelihood of stormwater carrying sediment and other nonpoint-source pollutants to waterbodies. The potential future actions could continue to incrementally degrade water quality due to runoff. Excess nitrogen, phosphorus, and road salt in runoff may degrade water quality resulting in potential impacts to federally listed and proposed

freshwater mussel species. Future state, tribal, local and private actions within the Project action area will be required to adhere to applicable local, regional, and state requirements and regulations for stormwater management and would not be anticipated to cause substantial negative effects on local water quality. Taken as a whole, these future actions are not anticipated to have substantial cumulative effects on the salamander mussel, Higgins eye, and sheepnose mussel.

Wetland Habitats

A variety of wetland community types exist throughout the Project action area and I-39/90/94 Project corridor. Wetland quality has been affected by population growth and urban development, excessive use as pasture, cultivation, and stormwater runoff. Almost 60% of the wetlands identified through on-site wetland delineation are considered degraded. The future actions may result in continued incremental loss of wetland habitats associated with federally listed species within the Project action area. Federally listed and proposed species with suitable habitat consisting of wetlands including whooping crane, monarch butterfly, rusty patched bumble bee, northern long-eared bat, tricolored bat, eastern massasauga rattlesnake, and eastern prairie fringed orchid.

Increased development could increase the influx of surface water and sediments, fragmentation of wetland complexes, loss of recharge areas, or changes in local drainage patterns. Private development projects are anticipated to primarily occur in outskirts of existing urbanized areas, such as the Madison Metropolitan Area. Future private development actions would be subject to Chapter 30 WI Stat § 281.36 (2022) and federal wetland permitting requirements of Section 404 of the Clean Water Act. In consideration of federal and state wetland permitting and wetland mitigation requirements, cumulative effects to wetlands are not anticipated to be substantial within the action area.

Impacts from future actions will have some effects on monarch butterfly, rusty patched bumble bee, northern long-eared bat, and tricolored bat due to loss of wetland foraging habitat. Future actions will have minimal effects on whooping crane as whooping crane occupy large wetland complexes that would be unsuitable for future development within the action area. The eastern prairie fringed orchid may be impacted by future development within the action area due to wetland habitat loss. These future impacts to the monarch butterfly, rusty patched bumble bee, NLEB, tricolored bat, whooping crane, and eastern prairie fringed orchid would be offset by state and federal wetland permitting and wetland mitigation requirements. The eastern massasauga rattlesnake currently consists of a limited number of known populations throughout the state and are not known to occur in areas that development is anticipated within the action area, therefore impacts from future actions will have minimal effects on eastern massasauga rattlesnake due to wetland habitat loss.

Upland Habitats

A variety of upland community types exist throughout the Project action area and I-39/90/94 Project corridor, many of which are degraded due to agriculture and urban development. The future actions could have a cumulative effect on upland habitats associated federally listed and proposed species within the Project action area. Federally listed and proposed species with suitable habitat consisting of uplands including Karner blue butterfly, monarch butterfly, rusty patched bumble bee, gray wolf, NLEB, tricolored bat, eastern massasauga rattlesnake, and prairie bush-clover.

Impacts from future actions will have some effects on Karner blue butterfly and monarch butterfly due to loss of upland foraging habitat. Impacts from future actions will have some effects on rusty patched bumble bee due to a loss of upland foraging habitat, forested overwintering habitat, and summer nesting

habitat.

Gray wolves are known to actively avoid areas with human presence and have not been documented in the areas within the action area that development is anticipated, therefore impacts from future actions will have minimal effects on gray wolf populations due to upland habitat loss.

Both the NLEB and tricolored bats have the potential to be impacted by future actions due to upland habitat loss and direct impacts if future actions do not adhere to species specific guidance measures for avoidance and minimization measures. These future impacts would be gradual over time and are not anticipated to contribute to the jeopardy of the existence of NLEB and tricolored bats from upland habitat loss.

The eastern massasauga rattlesnake currently consists of a limited number of known populations throughout the state and are not known to occur in areas that development is anticipated within the action area, therefore impacts from future actions will have minimal effects on eastern massasauga rattlesnake due to upland habitat loss.

Prairie bush clover is not likely to be impacted by future actions. Suitable habitat for the species does not exist in areas of planned development as areas that are likely to be developed for future actions consists of areas that have been previously developed for urban, suburban, and agricultural uses. Impacts from future actions will have minimal effects to prairie bush clover due to upland habitat loss.

The local municipalities in the action area have adopted comprehensive growth plans which describe the long-term development concepts to manage land usage and growth in the future. Utilizing comprehensive plans administered by the local municipalities in conjunction with environmental permit requirements may lessen cumulative effects to federally listed or proposed species.

SUMMARY OF EFFECT DETERMINATIONS

A summary of effect determinations for listed species is included below (Table 2). There is no designated or proposed critical habitat present within the Project's action area.

Table 2: Summary of Effect Determinations.

Species Common Name	Activity Category	Minimization Measure	Enhancement Activities	Presence/ Exposure Listed species	Chemical and Physical Changes	Biological Response	Effect Determination
Whooping crane	All work	None required at this time	Not necessary	No	None	None	Not likely to jeopardize the continued existence of the species
Karner blue butterfly	All work	Avoid or minimize impacts in sensitive areas	Restoration using native pollinator plant species	Possible	Minimal	Minimal	May affect and is likely to adversely affect
Monarch butterfly	All work	Not necessary	N/A	Possible	Minimal	None	Not likely to jeopardize the continued existence of the species
Rusty patched bumble bee	All work	Avoid or minimize impacts in sensitive areas, activities within occupied habitat will be sequenced with seasonal timeframes if feasible	Restoration using native pollinator plant species	Possible	Minimal	Minimal	May affect and is likely to adversely affect
Gray wolf	All work	Not necessary	None	Possible	Minimal	Minimal	May affect, but is not likely to adversely affect
Northern long-eared bat	All work	Active season avoidance for tree clearing and structure removals	Not necessary	Possible	Minimal	Minimal	May affect and is likely to adversely affect
Tricolored bat	All work	Active season avoidance tree clearing and structure removals	Not necessary	Possible	Minimal	Minimal	Not likely to jeopardize the continued existence of the species – provisional effect determination: may affect and is likely to adversely affect
Higgins eye mussel	In-Water Work	Stormwater management BMPs	None	No	None	None	May affect, but is not likely to adversely affect
Sheepnose mussel	In-Water Work	Stormwater management BMPs	None	No	None	None	May affect, but is not likely to adversely affect
Salamander mussel	In-Water Work	Stormwater management BMPs	None	No	None	None	Not likely to jeopardize the continued existence of the species – provisional effect determination: May affect, but is not likely to adversely affect
Eastern massasauga rattlesnake	All work	Exclusion fencing, on-site biological monitor	Restoration using native plant species	Possible	Minimal	Minimal	May affect and is likely to adversely affect
Eastern prairie fringed orchid	All work	Best management practices to avoid the spread of invasive species	Not necessary	No	None	None	May affect, but is not likely to adversely affect
Prairie bush-clover	All work	Best management practices to avoid the spread of invasive species	Not necessary	No	None	None	May affect, but is not likely to adversely affect

No Effect Determinations for Listed Species

Whooping Crane

The whooping crane is a non-nesting migrant in this part of Wisconsin. Nesting does not occur in this part of Wisconsin. It is anticipated that the Project will result in temporary and permanent loss of existing wetlands that may serve as whooping crane stopover habitat. Whooping crane prefer large, open wetland mosaics as stopover habitat. Permanent stopover habitat loss is anticipated to be minimal because most of the impacted wetlands are isolated or degraded. In Wisconsin, the listing status is Experimental Population, Non-Essential. As such, the project "**is not likely to jeopardize the continued existence"** of the whooping crane.

May Affect, Not Likely to Adversely Affect Determinations for Listed Species

Gray Wolf

The USFWS IPaC MN-WI Endangered Species determination key resulted in a "**may affect, but is not likely to adversely affect**" determination for the gray wolf. Given the range and adaptability of the species, variety of prey, fear of humans, and the healthy status of the population throughout the state along with the project activities having minimal direct, indirect or delayed consequences, this Project will not prevent the survival or recovery of the gray wolf population.

Higgins Eye Mussel

The USFWS IPaC MN-WI Endangered Species determination key generated a "may affect" result for Higgins eye mussels. This result was expected since in-water work is proposed. The BA determined that no suitable habitat is present for the species, however construction and post-construction stormwater runoff, construction sedimentation, and contamination from construction spills may impact downstream populations of mussels. Following stormwater best management practices and regulations, the Project will result in a 40% reduction in TSS compared to no runoff management in redevelopment areas and 80% reduction in TSS compared to no runoff management in new development areas. Therefore, this Project is not anticipated to prevent the survival or recovery of the Higgins eye mussel populations. As such, the project "**may affect, but is not likely to adversely affect**" the Higgins eye mussel.

Sheepnose Mussel

The USFWS IPaC MN-WI Endangered Species determination key generated a "may affect" result for sheepnose mussels. This result was expected since in-water work is proposed. The BA determined that no suitable habitat is present for the species, however construction and post-construction stormwater runoff may impact downstream populations of mussels. Following stormwater best management practices and regulations, the Project will result in a 40% reduction in TSS compared to no runoff management in redevelopment areas and 80% reduction in TSS compared to no runoff management in new development areas.

Therefore, this Project is not anticipated to prevent the survival or recovery of the sheepnose mussel

populations. As such, the project "**may affect, but is not likely to adversely affect**" the sheepnose mussel.

Eastern Prairie Fringed Orchid

The USFWS IPaC MN-WI Endangered Species determination key generated a "may affect" result for eastern prairie fringed orchid. Presence/probable absence surveys of the project area documented a lack of eastern prairie fringed orchid populations. However, due to the presence of suitable habitat, the BA determined that there may be direct effects from habitat loss. The risk of adverse effects to the species is considered to be discountable and extremely unlikely to occur. Therefore, this Project "**may affect, but is not likely to adversely affect**" the eastern prairie fringed orchid or prevent the survival or recovery of the species.

Prairie Bush-clover

The USFWS IPaC MN-WI Endangered Species determination key generated a "may affect" result for prairie bush-clover. Presence/probable absence surveys of the project area documented a lack of prairie bush-clover populations. However, due to the presence of suitable habitat, the BA determined that there may be direct effects from habitat loss. The risk of adverse effects to the species is considered to be discountable and extremely unlikely to occur. Therefore, this Project "**may affect, but is not likely to adversely affect**" the prairie bush-clover or prevent the survival or recovery of the species.

May Affect, Likely to Adversely Affect Determinations for Listed Species

Karner blue butterfly

The USFWS IPaC MN-WI Endangered Species determination key generated a "may affect" result for the Karner blue butterfly. Due to the presence of potentially suitable habitat, it is assumed that the Karner blue butterfly is present within the action area. As such, the Project may affect this species.

It is anticipated that the Project will affect 48.66 acres of potentially suitable KBB habitat through temporary and permanent impacts. KBB habitat in one location known to contain the butterfly's host plant, wild blue lupine, and other areas of potentially suitable habitat are assumed to contain lupine. Therefore, the project has the potential to harm KBB eggs and larvae. Harm within the action area may result due to direct mortality of eggs and larvae from crushing, injury, or smothering due to fill.

Permanent habitat loss is anticipated to be minimal because most Project activities will take place within the existing interstate footprint. Most of the impacts will be occurring in the existing median, which is less likely to contain lupine populations compared to the outside ROW. Temporary habitat loss will be offset by the re-establishment of vegetation and the use of BMPs to prevent the spread of invasive species. Where applicable, topsoil will be stripped and reused. Additionally, WisDOT standard seed mix #70 & #70a, which contain wild blue lupine (*Lupinus perennis*), will be used to restore temporarily disturbed areas.

This Project "**may affect and is likely to adversely affect"** Karner blue butterflies within the action area, however the Project will not prevent the survival or recovery of the Karner blue butterfly.

Rusty Patched Bumble Bee

The USFWS MN-WI Endangered Species determination key review generated a "may affect" result for the rusty patched bumble bee. Due to the high potential zones and presence of suitable foraging, overwintering and nesting habitat in the Project area, it is assumed that rusty patched bumble bees are present, therefore, the Project may affect the rusty patch bumble bee.

Forage habitat removal reduces availability of nectar and pollen containing forage plants for nesting populations and for overwintering queens upon spring emergence. Preliminary design estimates that 111.79 acres of foraging habitat will be affected by the project. This acreage includes 10.84 acres of foraging-only habitat, 88.47 acres of foraging habitat that overlaps with nesting habitat, and 12.48 acres of foraging habitat that overlaps with overwintering habitat. USFWS (2021) determined that removal of RPBB foraging habitat that exceeds 2 acres is likely to adversely affect the species. Adverse impacts may be reduced if removal of foraging habitat is restricted to the inactive season and if areas of temporary removal of forage habitat are restored to equal or greater quality habitat. The Proposed project will exceed 2 acres of permanent foraging habitat loss.

Soil disturbances to nesting habitat during the active season can be harmful to nesting colonies of rusty patched bumble bees and may result in nest destruction. The project is anticipated to result in temporary or permanent impacts to 88.47 acres of nesting habitat. RPBB may nest at densities ranging from one nest for every 5.4 acres of nesting habitat to one nest for every 17.6 acres of high quality nesting habitat (USFWS, 2021). Based on that estimate, the Project may impact approximately 5 to 17 RPBB nests.

Little is known about the overwintering habits of RPBB, but it is assumed that soil disturbance to overwintering habitats during the inactive season would be harmful to overwintering queens. Based on preliminary Project design estimates 12.48 acres of potential overwintering habitat would be impacted as part of the project.

USFWS implementation guidance (USFWS, 2021) outlines conservation measures that may be implemented (e.g., native plantings post construction, removal of invasive plants in foraging, nesting, and overwintering habitat). The avoidance and minimization measures proposed for the Project are outlined in the BA. This Project "**may affect and is likely to adversely affect**" the rusty patched bumble bee but will not prevent the survival or recovery of the species.

Northern Long-Eared Bat

The Project is outside of the scope of the FHWA, FRA, FTA Programmatic Biological Opinion (PBO) for Transportation Projects in the Range of the Indiana Bat and Northern Long-eared Bat. The Rangewide NLEB consultation determination key was utilized on December 5, 2023, and it generated a "may affect" result, requiring further consultation. The Project does not meet the Interim Consultation Framework for the NLEB since incidental take associated with the Project is reasonably certain to occur after summer of 2024. The purpose of this BA is to conduct formal consultation for the NLEB. Due to the presence of suitable roosting habitat which includes existing bridge structures, forested areas, and adjacent riparian corridors, the presence of guano observed in 2023 at three bridge locations, and WDNR NHI Element Occurrence of a NLEB summer roost in close proximity to the project area, it is assumed that NLEB are present.

Based on the results of the surveys, construction avoidance periods and/or bat exclusion measures will be implemented at the applicable structures (i.e., bridges, culverts, buildings, and human-use structures) prior to the active season. Additional bridge assessments will be required within two years prior to the

demolition, reconstruction, or disruptive work on existing bridges and culverts and within one year prior to removal of existing buildings and human-use structures. NLEB take resulting from work on structures is not likely due to the implementation of the above-stated avoidance and minimization measures.

Avoidance and Minimization Measures consistent with the PBO will be adhered to and implemented. These are further outlined in the BA. This Project "**may affect and is likely to adversely affect**" the northern long-eared bat but will not prevent the survival or recovery of the species.

Eastern Massasauga Rattlesnake

The USFWS IPaC MN-WI Endangered Species determination key generated a "may affect" result for the eastern massasauga rattlesnake. Suitable habitat for the eastern massasauga rattlesnake can be found within the WisDOT ROW, therefore, this species is assumed to be present within the Project area.

Indirect effects to the massasauga include habitat loss associated with the invasion of nonnative plant species following construction and vegetation disturbance. Disturbed ground along transportation corridors is at high risk to encroachment and establishment of invasive, nonnative plants.

Roads, bridges, and other structures built within eastern massasauga rattlesnake habitat can fragment the rattlesnake's habitat. This can result in direct mortality as snakes are killed trying to cross these structures (Shepard, Dresklik, Jellen, & Phillips, 2008), as well as indirectly through the loss of access to habitat components for the survival of the snakes. Harm within the action area may also result due to direct mortality from crushing and injury from heavy machinery and earth moving as well as smothering due to fill. These Project activities may also compact soil. Compacted soil and fill could potentially reduce the number available hibernacula such as crayfish burrows and other ground fissures.

Direct and indirect effects will be minimized by installing "J-turns" at silt fence ends adjacent to wetlands and open water areas to exclude and redirect reptiles away from the Project area. Additionally, preconstruction sweeps for the rattlesnake will be conducted by a qualified biological monitor during the snake's active season to minimize incidental take.

Delayed consequences and indirect effects will be minimized by avoiding spreading invasive species into suitable habitat and the utilization of erosion control products that minimize wildlife entrapment/entanglement. More information on AMMs is provided in the BA.

This Project "**may affect and is likely to adversely affect**" the eastern massasauga rattlesnake but will not prevent the survival or recovery of the species.

Effect Determinations for Proposed Federal Listed Species

Salamander Mussel

The salamander mussel's current status as proposed endangered is under review (USFWS, 2023). The species is currently assumed to be present within Mirror Lake (Dell Creek) as suitable habitat exists in that location. However, Project activities should not affect salamander mussels that may be present as no in-water work is anticipated below the OHWM in Mirror Lake (Dell Creek). No other suitable habitat for salamander mussel exists within the Project's action area.

This Project is not anticipated to prevent the survival or recovery of the salamander mussel populations and "**is not likely to jeopardize the continued existence of the species**".

Tricolored Bat

The USFWS IPaC MN-WI Endangered Species determination key generated a "may affect" result for the tricolored bat.

On September 13, 2022, the USFWS announced a proposal to list the tricolored bat as endangered under the ESA. This Project "**is not likely to jeopardize the continued existence**" of the tricolored bat because the bat's primary reason for decline is white-nose syndrome. White-nose syndrome has led to a 90 to 100% decline in tricolored bat winter colony abundance at sites where the disease is present (USFWS, n.d.). Additionally, this Project will not prevent the survival or recovery of the bat population as a whole or affect any hibernaculum. A provisional effect determination has been made that the Project "**may affect and is likely to adversely affect**" the tricolored bat in the event the species is listed during the course of the Project.

Based on the results of the surveys, construction avoidance periods and/or bat exclusion measures will be implemented at the applicable structures (i.e., bridges, culverts, buildings, and human-use structures) prior to the active season. Additional bridge assessments will be required within two years prior to the demolition, reconstruction, or disruptive work on existing bridges and culverts and within one year prior to removal of existing buildings and human-use structures. Tricolored bat take resulting from work on structures is not likely due to the implementation of the above-stated avoidance and minimization measures.

Avoidance and Minimization Measures consistent with the FHWA, FRA, FTA Programmatic Biological Opinion (PBO) for Transportation Projects in the Range of the Indiana Bat and Northern Long-eared Bat will be adhered to and implemented as USFWS has not released tricolored bat specific guidance. These are further outlined in the BA.

Candidate Species

Monarch butterfly was listed as a candidate species on December 15, 2020. The primary threats to the Monarch butterfly include habitat loss and degradation from conversion of grassland to agriculture, widespread use of herbicides, logging/ thinning at overwintering sites in Mexico, incompatible management of overwintering sites in California, urban development, drought, exposure to insecticides, and effects of climate change. It is possible that the species may become listed before the project is completed.

The project will result in temporary impacts to suitable habitat for monarch butterfly. Specifically, common milkweeds may be impacted resulting in take of the eggs and/or larvae of the butterfly. However, the Project "**is not likely to jeopardize the continued existence of the species**" and will not prevent the survival or recovery of the monarch population.

Because this species is a candidate for listing and is not listed or proposed for listing, there are no Section 7 consultation requirements. Therefore, no further action is needed for the monarch butterfly at this time.

CONCLUSION

We considered the current overall status of whooping crane, gray wolf, Karner blue butterfly, rusty

patched bumble bee, northern long-eared bat, Higgins' eye pearlymussel, sheepnose mussel, eastern massasauga rattlesnake, eastern prairie fringed orchid, eastern prairie bush-clover, tri-colored bat, monarch butterfly, and salamander mussel and the inferred condition of the species within the action area (environmental baseline). We then assessed the effects of the proposed action and the potential for cumulative effects in the action area on individuals, the affected population, and the species as a whole. We do not anticipate any reductions in the overall reproduction, numbers and distribution of the whooping crane, gray wolf, Karner blue butterfly, rusty patched bumble bee, northern long-eared bat, Higgins' eye pearlymussel, sheepnose mussel, eastern massasauga rattlesnake, eastern prairie fringed orchid, eastern prairie bush-clover, tri-colored bat, monarch butterfly, and salamander mussel. The Service concurs that the Project May Affect, Not Likely Adversely Affect the gray wolf, Higgins Eye pearlymussel, sheepnose mussel, and prairie brush clover. Furthermore, it is the Service's Opinion that the authorization the reconstruction of Interstate 39/90/94 (I-39/90/94) between United States Highway (US) 12/18 in Madison and Dees Road in Wisconsin Dells, Wisconsin, as proposed, is not likely to jeopardize the continued existence of the Whooping Crane, Monarch Butterfly, Karner blue butterfly, Rusty Patched Bumblebee, Northern Long-eared Bat, Tricolored Bat, Eastern Massasauga rattlesnake, and Salamander mussel.

INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and federal regulation pursuant to Section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without a special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering (50 CFR § 17.3). Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns, which include, but are not limited to, breeding, feeding, or sheltering (50 CFR § 17.3). Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of Section 7(b)(4) and Section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are nondiscretionary, and must be undertaken by FHWA, or applicant so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, for the exemption in Section 7(o)(2) to apply. The FHWA has a continuing duty to regulate the activity covered bythis incidental take statement. If the FHWA: (1) fails to assume and implement the terms and conditions or fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of Section 7(o)(2) may lapse. To monitor the impact of incidental take, FHWA must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR 402.14(i)(3)].

Because incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity, this Incidental Take Statement is valid only upon receipt by FHWA of all appropriate authorizations and permits from federal, state, and local permitting authorities.

Amount or Extent of Take

Formal consultation as defined in the Endangered Species Act of 1973, as amended (ESA), Sub- part B, 50 CFR 402.14(i)(1)(i) states that surrogates may be used to express the amount or extent of anticipated take provided that the Biological Opinion or incidental take statement: (1) describes the causal link between the surrogate and take of the listed species; (2) describes why it is not practical to express the amount of anticipated take or to monitor take-related impacts in terms of individuals of the listed species; and (3) sets a clear standard for determining when the amount or extent of the taking has been exceeded.

Take Estimate

Karner Blue Butterfly

Occupied KBB habitat will be used as a surrogate because determining the exact numerical limits on the amount of incidental take are not practical. Acres of occupied KBB habitat will serve as a reasonable and appropriate surrogate for incidental take of KBB because the Project will directly and indirectly cause anticipated incidental take within the bounds of any occupied KBB habitat. Since occupied KBB habitat is unknown, the 48.66 acres of potentially suitable KBB habitat is considered occupied for the purpose of the take estimate.

For KBB, quantifying the expected take in terms of individual specimens is impractical. Presence/absence surveys are not suitable for estimating population size, making it impossible to predict the exact number of individuals that will be affected. Moreover, monitoring the impacts of take on individual KBB is challenging due to several factors: the small size of the specimens and dense vegetation make it difficult to find dead or impaired individuals; seasonal population fluctuations can obscure losses; and detecting eggs and larvae is very challenging, rendering surveys for them impractical.

Rusty Patched Bumble Bee

For the RPBB, it is not practical to express the anticipated take or monitor take-related impacts in terms of individuals for several reasons. First, the nests of RPBB are located below ground and are rarely identified. There are no records of RPBB nests being discovered after being harmed or destroyed by habitat management activities. Second, RPBB queens overwinter below the soil surface, and their locations are rarely discovered. Third, while it can be concluded that take of RPBB is reasonably certain to occur when 2 acres or more of habitat is removed or disturbed, environmental variability, species abundance in the affected area, and other factors make it impractical to predict or detect the number of bees harmed by these activities.

Additionally, above-ground activities that reduce forage availability could affect colony members—queens, eggs, and larvae—that are below ground and whose locations are rarely known. Although it is reasonable to anticipate that reductions in foraging resources will impact the health of individual RPBB and the productivity of colonies, evidence of these effects is unlikely to be detected in a reliable manner. Therefore, using the location, timing, and acreage of habitat impacts as a surrogate is the most practical method for calculating take and detecting when incidental take might be exceeded. These factors can be easily identified, measured, and monitored. While working outside the evaluated parameters (such as designated work zones, seasonal or timing restrictions, and specified acreages) doesn't automatically indicate that take has been exceeded, these occurrences serve as a clear trigger for the Action Agency to reinitiate consultation. During this process, the USFWS will determine whether incidental take has indeed been exceeded, given that detecting individuals taken, as previously mentioned, is impractical.

Soil disturbances to nesting habitat during the active season can be harmful to nesting colonies of rusty patched bumble bees and may result in nest destruction. The project is anticipated to result in temporary or permanent impacts to 88.47 acres of nesting habitat. RPBB may nest at densities ranging from one nest for every 5.4 acres of nesting habitat to one nest for every 17.6 acres of high-quality nesting habitat (USFWS, 2021). Based on that estimate, the Project may impact approximately 5 to 17 RPBB nests. However, due to the impracticality of documenting impacted nests during construction, the estimation of number of nests that may be impacted is not used as an incidental take metric for the Proposed project (Table 3).

Table 3. Anticipated take of RPBB

Activity	Time Period	Amount of Take Anticipated (Surrogate of Areal Extend of Impacts)	Estimated Number of individuals present (if known)
Removal of foraging only habitat.	Active Season	9.9 acres	Unknown
Removal of summer nesting habitat.	Active Season	88.47 acres	Unknown
Removal of overwintering habitat	Inactive Season	12.48 acres	Unknown

Northern Long-eared Bat

It is anticipated that incidental take will likely occur due to tree removal in suitable habitat and from activities on existing bridges, culverts, and buildings/human-use structures with known or assumed NLEB use that will occur during the active season.

For impacts due to tree removal, using the area of suitable habitat in acres as a surrogate to quantify and monitor the incidental take is necessary because setting precise numerical limits of individual bats is impractical and cannot effectively trigger reinitiation. Any activities within suitable habitats where NLEB are present are reasonably expected to cause incidental take directly and indirectly within the designated acres of habitat. For the NLEB, quantifying the anticipated take in terms of individuals is impractical due to the lack of density or abundance estimates for the portions of the action area where take is expected. Additionally, monitoring take-related impacts on individual NLEBs is not feasible for several reasons: (1) the NLEB's small body size and drab coloration make it unlikely to find dead or injured individuals; (2) they occupy heavily forested summer habitats, making them difficult to locate with multiple roosts within and outside the action area; (3) take may occur offsite (e.g., a bat dying outside the action area); (4) detecting starvation or reproductive failure is not possible; and (5) losses may be obscured by fluctuations in numbers due to white nose syndrome (WNS).

Using the location, timing, and acreage of habitat impacts as a surrogate is the most practical method for

detecting when incidental take might be exceeded. These factors can be easily identified, measured, and monitored. While working outside the evaluated parameters (such as designated work zones, seasonal or timing restrictions, and specified acreages) doesn't automatically indicate that take has been exceeded, these occurrences serve as a clear trigger for the Action Agency to reinitiate consultation. During this process, the USFWS will determine whether incidental take has indeed been exceeded, given that detecting individuals taken, as previously mentioned, is impractical.

It is estimated that construction activities conducted during the active season at bridges, culverts, or buildings/human-use structures where signs of bat use were observed during prior inspection or where bat use is assumed (no inspection conducted), could likely result in the harm or death of NLEBs.

Guano quantities at the three bridges with observed bat use did not indicate the presence of maternity colonies and it is assumed to be five or fewer individuals at each location. Similar occupancy assumptions are carried forward to the four buildings/human-use structures that were not able to be inspected at this time. It is also acknowledged that a small percentage of inspections may fail to detect bats initially, but bats could be present during construction, leading to a false-negative inspection. As a result, it is assumed that a small quantity of NLEBs (five or fewer individuals) may be encountered in an estimated three structures due to false-negative inspections, leading to incidental take through injury or death. These assumptions are similar to those used in the FHWA, FRA, FTA PBO for Transportation Projects in the Range of the Indiana Bat and Northern Long-eared Bat.

Table 4. Anticipated take of NLEB

Activity	Time Period	Amount of Take Anticipated (Surrogate of Areal Extend of Impacts)	Estimated Number of individuals present (if known)
Permanent removal of roosting habitat	Inactive Season	Up to 85.2 acres	Unknown

Eastern Massasauga Rattlesnake

Estimating the amount of anticipated take or monitoring the impacts on the massasauga is impractical due to the species' elusive and cryptic nature, low detection probability, ability to move and avoid project activities, and the difficulty of finding injured or dead specimens during the project. Consequently, predicting the exact number of individuals affected by the project is not feasible. However, assuming a presence and relatively uniform distribution of massasauga in suitable habitats identified for this consultation, the extent of occupied and potentially occupied massasauga habitat can be used as a surrogate for monitoring the level of take. Since the habitat area can be easily identified, measured, and monitored, this surrogate provides the most reasonable method for detecting if the take exceeds expected levels due to construction activities.

For direct effects related to crushing individuals during construction activities, and with biological monitors present on site, there is an increased likelihood the massasauga individuals could be detected. Thus, it is appropriate to express the amount of direct take resulting from crushing by equipment as number of individuals.

Based on literature and studies from various locations within the massasauga's range, population densities can vary widely. For example:

- A study in Michigan found densities ranging from 0.1 to 1.3 snakes per acre in suitable habitats (Sage & King, 1994).

- In Illinois, densities were reported to be around 0.2 to 0.5 snakes per acre (Marshall et al., 2006).

Given that massasauga is endangered in Wisconsin, a conservative estimate was used on the lower end of this range. Specific local data is unavailable at this time and therefore a conservative density estimate of 0.2 snakes per acre was determined to be more appropriate. Further, this is also in line with a recent biological opinion (USFWS, 2020), issued on August 19, 2020, where massasauga densities were quantified as occurring from 0.22 to 0.5 snakes per acre within similar habitat located in Wisconsin and overall take for 95.8 acres of potential massasauga habitat disturbance was anticipated to be no more than one massasauga.

Using the above thresholds, the project is likely to affect 26 acres of suitable massasauga habitat and may take up to 1 massasauga as a result of construction activities.

It is anticipated that no more than 26 acres of potential massasauga habitat will be disturbed to the point of take as a result of Project construction. All take is anticipated to occur in the forms of mortality or harm (Table 5).

Table 5. Anticipated take of Eastern Massasauga Rattlesnake

Activity	Time Period	Amount of Take Anticipated (Surrogate of Areal Extend of Impacts)	Estimated Number of individuals present (if known)
Construction Activities	Active Season	NA	1
Impacts to Suitable Habitat	Active Season	26 acres	NA

Tricolored Bat

50 CFR 402.14(i)(1)(i) states that surrogates may be used to express the amount or extent of anticipated take provided the biological opinion or incidental take statement (ITS): (1) describes the causal link between the surrogate and take of the listed species; (2) describes why it is not practical to express the amount of anticipated take or to monitor take-related impacts in terms of individuals of the listed species; and (3) sets a clear standard for determining when the amount or extent of the taking has been exceeded.

It is anticipated that incidental take will likely occur due to tree removal in suitable habitat and from activities on existing bridges, culverts, and buildings/human-use structures with known or assumed tricolored bat use that will occur during the active season.

For impacts due to tree removal, using the area of suitable habitat in acres as a surrogate to quantify and monitor the incidental take is necessary because setting precise numerical limits of individual bats is impractical and cannot effectively trigger reinitiation. Any activities within suitable habitats where tricolored bats are present are reasonably expected to cause incidental take directly and indirectly within the designated acres of habitat. For the tricolored, quantifying the anticipated take in terms of individuals is impractical due to the lack of density or abundance estimates for the portions of the action area where take is expected. Additionally, monitoring take-related impacts on individual tricolored bats is not feasible for several reasons: (1) the tricolored bat's small body size and drab coloration make it unlikely to find dead or injured individuals; (2) they occupy heavily forested summer habitats, making them difficult to locate with multiple roosts within and outside the action area; (3) take may occur offsite (e.g., a bat dying outside the action area); (4) detecting starvation or reproductive failure is not possible; and (5) losses may be obscured by fluctuations in numbers due to WNS.

Using the location, timing, and acreage of habitat impacts as a surrogate is the most practical method for detecting when incidental take might be exceeded. These factors can be easily identified, measured, and monitored. While working outside the evaluated parameters (such as designated work zones, seasonal or timing restrictions, and specified acreages) doesn't automatically indicate that take has been exceeded, these occurrences serve as a clear trigger for the Action Agency to reinitiate consultation. During this process, the USFWS will determine whether incidental take has indeed been exceeded, given that detecting individuals taken, as previously mentioned, is impractical.

It is estimated that construction activities conducted during the active season at bridges, culverts, or buildings/human-use structures where signs of bat use were observed during prior inspection or where bat use is assumed (no inspection conducted), could likely result in the harm or death of tricolored bats.

Guano quantities at the three bridges with observed bat use did not indicate the presence of maternity colonies and it is assumed to be five or fewer individuals at each location. Similar occupancy assumptions are carried forward to the four buildings/human-use structures that were not able to be inspected at this time. It is also acknowledged that a small percentage of inspections may fail to detect bats initially, but bats could be present during construction, leading to a false-negative inspection. As a result, it is assumed that a small quantity of tricolored bats (five or fewer individuals) may be encountered in an estimated three structures due to false-negative inspections, leading to incidental take through injury or death. These assumptions are similar to those used in the FHWA, FRA, FTA PBO for Transportation Projects in the Range of the Indiana Bat and Northern Long-eared Bat. The PBO does not presently address the tricolored bat, but logic can be reasonably applied to the tricolored bat given that species' similar use of structures.

Table 6. Anticipated take of tricolored bat.

Activity	Time Period	Amount of Take Anticipated (Surrogate of Areal Extend of Impacts)	Estimated Number of individuals present (if known)
Permanent removal of roosting habitat	Inactive Season	Up to 85.2 acres	Unknown

Incidental Take Summary

A summary of incidental take estimates for Karner Blue Butterfly, Rusty Patched Bumble Bee, Northern Long-eared Bat, Tricolored Bat, and Eastern Massasauga Rattlesnake is summarized in Table 7.

Table 7. Anticipated incidental take for KBB, RPBB, NLEB, tricolored bat and massasauga.

Species Common Name	Life stage	Amount of Take Anticipated	Amount of Take Anticipated (Surrogate of Areal Extend of Impacts)	Type of Take
Karner blue butterfly	All	NA	48.66 acres	Surrogate – suitable habitat impacted
Rusty patched bumble bee	Foraging-only	NA	9.9 acres	Surrogate – suitable habitat impacted
Rusty patched bumble bee	Summer nesting	NA	88.47 acres	Surrogate – suitable habitat impacted
Rusty patched bumble bee	Overwintering	NA	12.48 acres	Surrogate – suitable habitat impacted
Northern long-eared bat	Inactive Season	NA	85.2 acres	Surrogate – suitable habitat impacted
Tricolored bat	Inactive Season	NA	85.2 acres	Surrogate – suitable habitat impacted
Eastern massasauga rattlesnake	Active Season	NA	26 acres	Harm (reduced fitness) from temporary loss of habitat during construction
Eastern massasauga rattlesnake	Active Season	1	NA	Direct take of individuals

Effects of the Take

The Service has determined that based on the proposed project and the conservation measures described, these levels of anticipated take are not likely to result in jeopardy to the for Karner Blue Butterfly, Rusty Patched Bumble Bee, Northern Long-eared Bat, and Eastern Massasauga Rattlesnake for the Project. Furthermore, Project activities are not expected to jeopardize the existence of Monarch Butterfly, Tricolored Bat, and Salamander Mussel. No critical habitat has been defined for the currently listed species; therefore, the Project will not result in adverse modification of critical habitat.

Reasonable and Prudent Measures

These reasonable and prudent measures, with implementing terms and conditions, are designed to minimize incidental take that might otherwise result from the proposed action. Table 7 depicts incidental

take estimates for Karner Blue Butterfly, Rusty Patched Bumble Bee, Northern Long-eared Bat, Tricolored Bat, and Eastern Massasauga Rattlesnake. If, during the course of the action, this minimized level of incidental take is exceeded, such incidental take represents new information requiring review of the reasonable and prudent measures provided. The Federal agency must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

The FHWA is committed to following reasonable and prudent measures described in the BA. The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize and mitigate for take of Karner Blue Butterfly, Rusty Patched Bumble Bee, Northern Long-eared Bat, Tricolored Bat, and Eastern Massasauga Rattlesnake:

1. Minimize construction impacts
    - Follow the Avoidance and Minimization Measures proposed in the Biological Assessment and mentioned in this BO.

Terms and Conditions

In order to be exempt from the prohibitions of Section 9 of the ESA, FHWA or applicant must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

1. In accordance with Avoidance and Minimization Measures (AMMs) proposed in the Biological Assessment, the following terms and conditions will be followed.

    Birds

    AMMs for bird species protected under the Migratory Bird Treaty Act (MBTA) include:

    - Removal of trees which are likely to support active nests will be completed between November 1 and March 31, which avoids the nesting season (April 15 through August 31).
    - As the Project is expected to span four construction seasons, bridge demolition will occur outside of the nesting season, or physical deterrents such as netting may be installed to deter migratory birds from nesting on existing I-39/90/94 bridges. If physical deterrents are determined to not be prudent or reasonable, and/or bridge demolition cannot be completed outside of the nesting season, a migratory bird depredation permit will be obtained as a last resort.

    Insects

    Karner Blue Butterfly

    AMMs for Karner blue butterfly are as follows:

    - In final design, areas of suitable habitat within the species' range will be surveyed for native wild blue lupine using the monitoring protocols outlined in the WDNR's Karner Blue butterfly Habitat Conservation Plan User Guide (WDNR, 2010). Surveys will be repeated if they are more than five years old at the time of construction.

- In final design, areas determined to contain native wild blue lupine at a sufficient density to support Karner blue butterflies will be surveyed for adult Karner blue butterflies following the WDNR monitoring protocols (WDNR, 2010). Surveys will be repeated if they are more than five years old at the time of construction.
- Where Karner blue butterfly is confirmed to be present, disturbance and vegetation clearing will be minimized to the extent practical.
- Seed mixes containing a diversity of native flowering plants, including native wild blue lupine, will be used to re-seed existing suitable habitat areas that require revegetation/restoration.
- The use of BMPs during construction and vegetation management activities to prevent the spread of invasive species will help to maintain greater plant diversity along the Project corridor.

Rusty Patched Bumble Bee

AMMs for RPBB are as follows:

- In final design, areas within HPZs may be further evaluated using the Rusty Patched Bumble Bee Habitat: Assessment Form & Guide (Xerces Society for Invertebrate Conservation, 2017) or another comparable habitat evaluation method to better define habitat quality and/or refine the extent of project impacts.
- In areas with medium to high quality RPBB suitable habitat within HPZs, temporary and permanent impacts will be minimized to the extent practical.
- In areas with medium to high quality RPBB nesting and overwintering habitat within HPZs, ground disturbance will be minimized or avoided when RPBB may be present, when practical (i.e., during inactive season in overwintering habitat or during active season in nesting habitat).
- In areas of medium to high quality RPBB nesting habitat within HPZs, habitat may be made unsuitable for RPBB nesting prior to the start of the active season through stripping of vegetation/topsoil and/or frequently mowing of vegetation, when practical.
- In areas of medium to high quality RPBB overwintering habitat, hand tools (depending on clearing area size/ location) and felling (cutting but not removing trees) will be utilized for tree clearing when practical for work conducted during the winter.
- Seed mixes containing a diversity of native flowering plants will be used to re-seed existing suitable habitat areas that require re-vegetation/restoration within HPZs.
- The use of BMPs during construction and vegetation management activities to prevent the spread of invasive species will help to maintain greater plant diversity along the Project corridor.

Bats

AMMs for northern long-eared bat and tricolored bat will be consistent with the measures described in the FHWA, FRA, FTA Programmatic Biological Opinion (PBO) for Transportation Projects in the Range of the Indiana Bat and Northern Long-eared Bat. Although USFWS has not released conservation measures for tricolored bat at this time, the NLEB AMMs should be

protective for the tricolored bat. These AMMs are as follows:

- **General AMM 1**: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all environmental commitments, including all applicable AMMs.
- **Lighting AMM 1**. Direct temporary lighting away from suitable habitat during the active season.
- **Lighting AMM 2**. When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society the goal is to be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.
- **Tree Removal AMM 1**. Modify all phases/aspects of the Project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal in excess of what is required to implement the Project safely.
- **Tree Removal AMM 2**. Apply time of year restrictions for tree removal (when bats are not likely to be present). Tree cutting avoidance periods will occur during the NLEB active season from April 1 through October 31.
- **Tree Removal AMM 3**. Ensure tree removal is limited to that specified in Project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).
- **Structure AMM 1: Bat inspections**. Bat inspections for bridges and culverts will be completed within 2 years of demolition, reconstruction or disruptive activities. Bat inspections for buildings will be completed within 2 years prior to demolition (or within 1 year if the structure is within the 1-mile buffer of a NHI bat occurrence per WDNR requirements). Bat inspections will follow current USFWS guidance and reporting requirements.
    - If evidence of bat use (e.g., guano, staining) is observed during the most recent bat inspection, or if a structure cannot be inspected and NLEB and tricolored bat presence is assumed, one of the following measures will apply:
        - **Structure AMM 2: Active season avoidance.** Demolition, reconstruction or disruptive activities will not occur on applicable structures during the bat active season.
        - **Structure AMM 3: Exclusion measures**. Measures specifically designed to exclude bats from structures (e.g., expandable foam, expansion joint gland removal, netting, etc.) will be utilized on applicable structures. Exclusion measures will be implemented/installed prior to the start of the bat active season. Exclusion measures must be inspected and maintained, as appropriate, until disruptive work on structure commences.

Mussels

AMMs for the Higgin's eye, sheepnose, and salamander mussels are as follows:

- Erosion and sediment control best management practices during construction will be used to

minimize impacts per WisDOT, WDNR, and Chapter Trans 401 of the WI Administrative Code. Erosion control measures must adhere to the WPDES TCGP.

- Erosion control strategies that may be used to minimize adverse effects during construction include upslope tracking on all slopes longer than 40 feet, application of soil stabilizer for temporary conditions, erosion mat placement, appropriately sized riprap for steeper slopes, ditches, and completion of restoration/revegetation in a timely manner.
- If necessary, in-stream or river sediment traps and/or turbidity curtains will be used to control erosion and sedimentation within waterways during construction. Authorization (permits) from the appropriate regulatory authorities will be obtained.
- Storing of fuels and fueling of construction equipment will be done in upland areas, away from environmentally sensitive locations. Accidental spills during refueling at construction sites or resulting from accidents involving hazardous material haulers will be handled in accordance with local government response procedures. First response will be through local fire departments and emergency service personnel to ensure public safety and to contain immediate threats to the environment. Depending on the nature and/or size of the spill, WDNR may be notified to provide additional instructions regarding cleanup procedures and restoration of any affected resources.
- Install permanent stormwater facilities to treat road runoff according to Wisconsin Administrative Code Chapter NR 151. Under this statue redevelopment projects required to remove 40% of TSS and the new development at the new interchanges are required to remove 80% of TSS compared to no runoff management controls.

Reptiles

AMMs for the eastern massasauga rattlesnake include:

- Implement best management practices to minimize the spread of invasive species, including the inspection and cleaning of equipment/vehicles for invasive plant materials and seeds before entering eastern massasauga rattlesnake suitable habitat areas. Re-vegetate areas of suitable habitat with appropriate native species to ensure habitat is restored to condition that is equal to or better than current conditions.
- Install exclusionary silt fence with “J-turns” at silt fence ends adjacent to wetlands and open water areas in suitable habitat to exclude and redirect the rattlesnake from the work area. Exclusionary silt fence will be installed during the rattlesnake’s inactive season (mid-November through early April), prior to emergence from their overwintering habitats.
- Utilize wildlife safe erosion control products (ex. leno weave). The products will consist of materials that are 100% biodegradable and use a loose weave that allow animals to wiggle free. To minimize wildlife entanglement and plastic debris pollution, temporary erosion and sediment control products that either do not contain netting, or that contain netting manufactured from 100% biodegradable non-plastic materials such as jute, sisal, or coir fiber, will be used. Degradable, photodegradable, UV-degradable, oxo-degradable, or oxobiodegradable plastic netting (including polypropylene, nylon, polyethylene, and polyester acceptable alternatives and will not be used. All netting materials used will have a wildlifesafe, loose-weave design with movable, non-welded joints between the horizontal and vertical twines, allowing the twines to move independently and thus reducing the potential for wildlife entanglement.

- Conduct preconstruction sweeps for the rattlesnake prior to vegetation or ground disturbance in suitable habitat areas during its active season (early April to mid-November). Sweeps will be conducted by a qualified and permitted biological monitor. If any eastern massasauga rattlesnakes are encountered, the biological monitor will attempt to capture and relocate them to adjacent suitable habitat outside of the work area. Project personnel will be instructed to report any eastern massasauga rattlesnake observations during construction to the USFWS within 24 hours.

Flowering Plants

WisDOT will implement the following AMM to address the eastern prairie fringed orchid and prairie bush-clover:

- Implement best management practices to minimize the spread of invasive species, including the inspection and cleaning of equipment/vehicles for invasive plant materials and seeds before entering suitable habitat areas.

Reporting Requirements

Federal agencies have a continuing duty to monitor the impacts of incidental take resulting from their activities [50 CFR 402.14(i)(3)]. In doing so, the Federal agency must report the progress of the action and its impact on the species to the Service as specified below.

1. FHWA or their representative shall notify the project designated Minnesota-Wisconsin Field Office biologist when project construction is initiated and completed within the Action Area.

2. FHWA shall notify the Service of any unauthorized activities (regardless of who conducted said activities) or emergencies, or if circumstances result in conservation measures not being implemented, resulting in any adverse impacts not described in the BA and addressed in this Opinion. This notification shall be made within 48 hours or sooner, if possible.

REINITIATION NOTICE

This concludes formal consultation on the action(s) outlined in the request. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this Opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this Opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have any questions regarding this Opinion or our shared responsibilities under the ESA, please contact Darin Simpkins at (920)866-1739 or darin_simpkins@fws.gov.

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September 16, 2024

Mr. David Bolin
Horicon NWR/Leopold WMD Complex, Acting Project Leader
U.S. Fish and Wildlife Service
W4279 Headquarters Road
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RE: Section 4(f) *de minimis* Determination

WisDOT Project: 1012-05-03 – I-39/90/94 Corridor Study – Baraboo River Waterfowl Production Area, Columbia County, Wisconsin

Dear Mr. Bolin,

WisDOT is writing to request formal concurrence from US Fish and Wildlife Service (USFWS) for the I-39/90/94 Corridor Study Section 4(f) *de minimis* impact determination for the Baraboo River Waterfowl Production Area. **We ask that you provide your concurrence by Monday October 14, 2024.** See attached signature sheet for your use in providing your concurrence.

The Federal Highway Administration (FHWA) is the lead federal agency for the I-39/90/94 Corridor Study. As such, the Baraboo River Waterfowl Production Area is eligible for protection under 23 *Code of Federal Regulations* 774, commonly referred to as "Section 4(f)". Section 4(f) is the federal act that protects publicly owned parks, recreation areas, and wildlife and waterfowl refuges. Under Section 4(f), impacts that do not adversely affect the activities, features, or attributes qualifying the property for protection under Section 4(f) qualify as *de minimis* impacts (23 CFR 774.17). To make a *de minimis* impact determination, the owner with jurisdiction over the Section 4(f) property (in this case, USFWS) must provide written concurrence that the impact to the Section 4(f) property (in this case, Baraboo River Waterfowl Production Area) does not adversely affect the activities, features, or attributes qualifying the property for protection under Section 4(f) (23 CFR 774.5(b)(2)(i)).

In the vicinity of the Baraboo River Waterfowl Production Area, WisDOT proposes to widen I-90/94 from 4 lanes to 6 lanes by adding a general-purpose lane in each direction in the median. I-90/94 would be raised in the vicinity of the WIS 33 Interchange to minimize flooding that has caused road closures. I-39 would remain 4 lanes but raised about 4 feet to minimize flooding that has caused road closures. The Cascade Mountain Interchange would be reconfigured to improve design deficiencies and reduce flooding. The reconfiguration of the interchange includes rerouting Cascade Mountain Road to connect to the WIS 78 Interchange with I-39 and I-90/94. On December 6, 2023, WisDOT met with USFWS staff to discuss proposed work and anticipated impacts on the property and intent to propose a *de minimis* impact on the property. Since May 9th, 2024, when WisDOT provided the first draft of the *de minimis* impact determination, WisDOT and USFWS have held additional meetings to review the proposed project biological and hydrologic impacts to the WPA. Anticipated *de minimis* impacts and temporary limited easement occupancy impacts are discussed below.

Impacts to Baraboo River Waterfowl Production Area
The proposed construction project would require about 0.1 acre of temporary limited easement, or temporary work outside of an existing right-of-way from a parking lot on the Baraboo River WPA adjacent to Cascade Mt. Rd, see Inset A on the figure on the next page, and another 0.2 acres of temporary limited easement from the west edge of the parcel east of I-39, see Inset B on the figure on the next page. Access to the Baraboo River WPA would remain throughout and after construction.

WisDOT defines a temporary limited easement or TLE as an area that will have temporary occupancy from construction equipment and/or staging equipment for new road construction, may require vegetation/tree removal to perform activities, and may involve re-sloping of land contours and placement of fill for proper road ditch drainage. The USFWS would allow activities for a TLE by issuance of a Special Use Permit, only if they involve short-term upland disturbance, no placement of fill or re-shaping of land contours, and full restoration to original condition of the land to pre-construction condition. Other impacts such as placement of fill in upland or wetland, re-shaping of land contours, and right-of-way expansion, are not considered temporary by the USFWS and may require a land exchange or request for a right of way permit.

Once site specific project plans are developed, WisDOT will coordinate with USFWS to gain any required permits for temporary limited easements, and if a permit is not feasible, determine the next course of action.

Raising the elevation of I-90/94 and I-39 as well as lengthening the existing I-39 bridge over the Baraboo River by 500 feet, though occurring off-refuge lands, would increase the water surface elevation by up to 1.5 feet in the area near the USFWS's field office on Cascade Mountain Road, just north of I-90/94 during a 100-year flood event. Flood waters would encroach onto USFWS's maintenance and storage garage and inundate portions of the parking area associated with the maintenance and storage garages, see Inset C on the figure on the next page. Measures to mitigate impacts are summarized below.

Mitigation Measures
USFWS will evaluate the proposed actions to on-refuge lands, via a compatibility determination once site-specific project plans are available. To minimize temporary construction impacts, WisDOT will restore disturbed areas to pre-construction condition. In consultation with USFWS, WisDOT will restore habitat with seed mixes and vegetation that USFWS specifies. No fill will be placed on USFWS lands without appropriate permitting from USFWS. If impacts to temporary easements areas cannot be avoided or minimized, USFWS would consider additional options such as a land exchange or new right of way application.

Mitigation measures due to increased surface water elevation impacts to the USFWS buildings from the 100-year flood event resulting from construction activities occurring off USFWS lands would include relocation of the buildings to a site agreed upon by USFWS.

The proposed improvements to I-90/94 and I-39 are along the existing roadway alignment thereby minimizing encroachment onto the Baraboo River Waterfowl Production Area.

The public was afforded the opportunity to review and comment on the project's impacts to the property as well as ask questions at the January 30-31 and February 1, 2024 public involvement meetings and public hearings on the draft Environmental Impact Statement on July 30-31 and August 1, 2024. Comments were accepted until August 15, 2024. No public comments regarding the property were received.

WisDOT requests that USFWS sign, date, and return the enclosed form indicating concurrence that WisDOT's impact to the property do not adversely affect the activities, features, or attributes which qualify the property for protection under Section 4(f). If USFWS concurs, FHWA may make a *de minimis* impact determination and may utilize USFWS's written concurrence that the project will not adversely affect the activities, features, or attributes of the property in making this determination. FHWA will include the determination in the Final Environmental Impact Statement that WisDOT and FHWA are preparing to complete the National Environmental Policy Act (NEPA) process for the study.

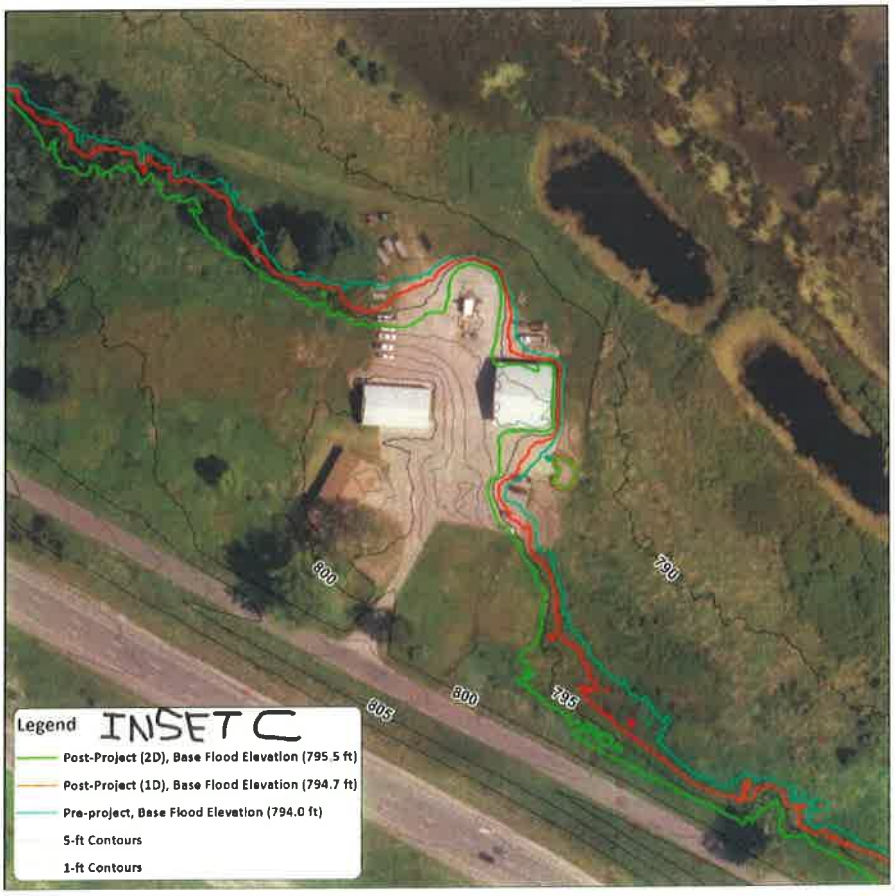
Your response is respectfully requested by Monday, October 14. If you have any questions regarding this letter, please reach out to me at David2.Schmidt@dot.wi.gov or 608-516-9041.

Thank you.
David Schmidt, P.E., Project Manager


Cascade Mountain Rd
See Inset C
See Inset A
See Inset B
Inset A
Cascade Mountain Rd
Inset B
Inset C
39
90
94
Juneau
Columbia
Sauk
Dane
Legend
Parks, Recreational Areas, and Wildlife and Waterfowl Refuges
Potential Right of Way
Existing Right of Way
Proposed Temporary Limited Easement
Project Linework
Post Project, Base Flood Elevation (794.7 Ft)
Pre-Project, Base Flood Elevation (794.0 Ft)
0 300 600
Feet


INSET A
PROPOSED R/W
PROPOSED TLE


LEGEND
INSET B
PROPOSED R/W
PROPOSED TLE
EXISTING R/W
PROPOSED PAVEMENT EDGE


Legend
INSET C
Post-Project (2D), Base Flood Elevation (795.5 ft)
Post-Project (1D), Base Flood Elevation (794.7 ft)
Pre-project, Base Flood Elevation (794.0 ft)
5-ft Contours
1-ft Contours
800
790
805
800
795

Concurrence

I concur with the determination that the impacts to Baraboo River Waterfowl Production Area described in the attached letter would not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f). I have also been informed that, based on my concurrence, the FHWA may make a *de minimis* finding regarding impacts to the property, thus satisfying the requirements of Section 4(f). If the project design or impacts described herein should change, USFWS reserves the right to revisit this determination.

Name (print): David Bolin, Acting Project Leader

Signature: _____ Date: 9/16/24

Please keep a copy for your records and return a signed and dated original to my attention by October 14, 2024 to the following address:

David Schmidt, P.E., Project Manager
David2.Schmidt@dot.wi.gov
WisDOT
2101 Wright Street
Madison, WI 53704

U.S. Fish and Wildlife Service

Leopold Wetland Management District / Wisconsin Private Lands Office

I94 DOT Project - Relocation Scope of Work

Current Conditions:

Leopold Wetland Management District Headquarters / Wisconsin Private Lands Office Site

The Leopold Wetland Management District (Leopold WMD) / Wisconsin Private Lands Office is located at W10040 Cascade Mountain Road in Portage, Wisconsin. The land is U.S. Fish & Wildlife Service (USFWS) fee title property that was purchased on December 9, 1998 using Migratory Bird Conservation Fund dollars under authority of the Conservation Stamp Act of 1934.

The site was previously a family farm that was composed of a dwelling and several farm related storage and animal rearing buildings. The USFWS has spent significant funding since time of acquisition removing the old structures and replacing them with new buildings that meet modern codes and engineering requirements as well as serving Leopold WMD staff needs better.

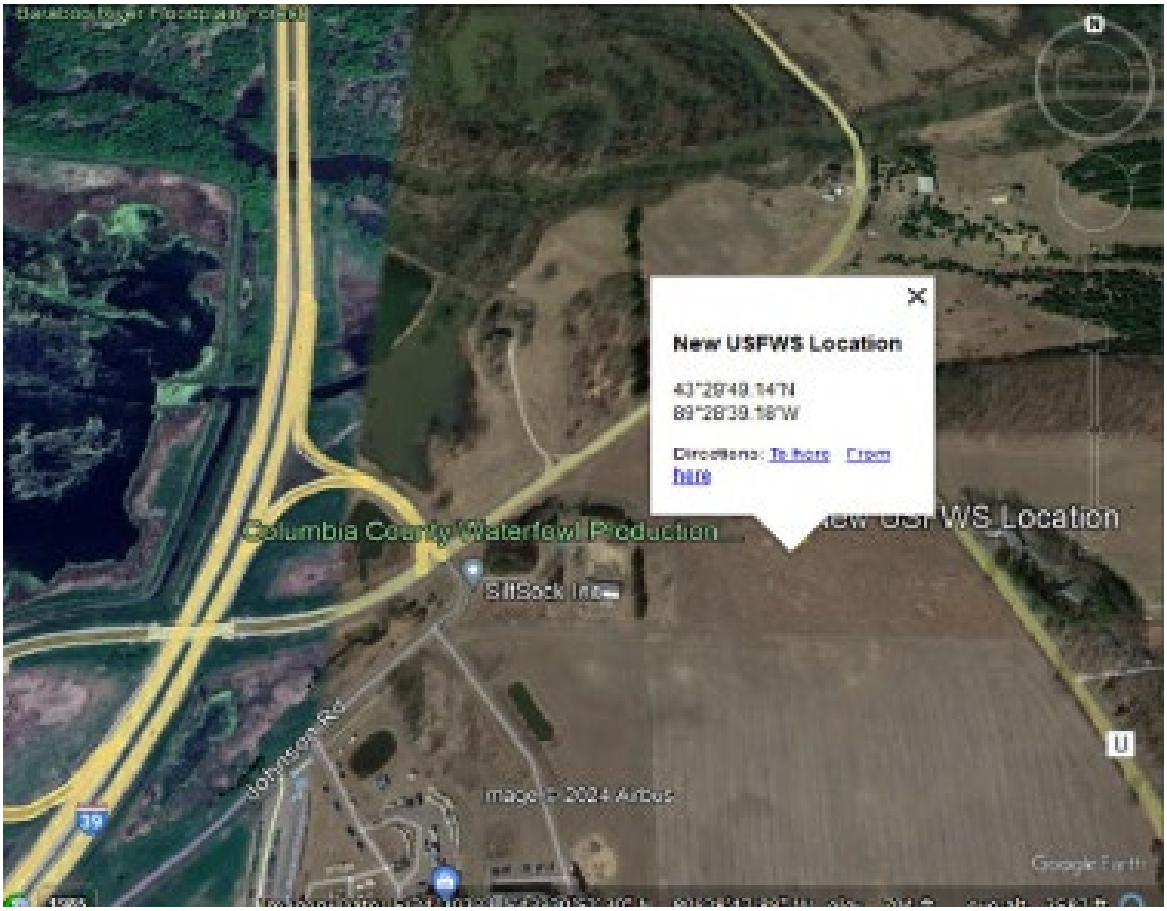
The included image shows the current assets as identified in the USFWS "Real Property Inventory" as of August 7, 2024. Details on each asset are listed in the chart below.

Asset Number	Asset Name/Type	Size	Construction Year	Replacement Cost
10065953 (includes 10055659 & 10055660)	BLDG MULTI-PURPOSE, OFFICE - BARABOO RIVER WPA	2,613 SQFT	2019	$4,575,927.62 (includes well and septic system)
10050573 (includes 30038969)	BLDG WH EQUIP VEHICLE - BARABOO RIVER MAINT SHOP	3,024 SQFT	2004	$871,989.50 (includes chemical storage building and 1,250 gallon above ground fuel tanks (x3) with concrete pad, lighting, and fence)
10053596	BLDG MAINT SHOP - HQ NEW	3,600 SQFT	2007	$1,772,640.27 (includes LNG tank and septic system)
10070593	RT#949, HEADQUARTERS PARKING - BARABOO RIVER WPA (Public parking with paved surface)	668 SQYD	1998	$884,657.91

10060597	RT#800, SHOP PKG BARABOO RIVER WPA (Non-public parking with gravel surface)	3,464 SQYD	1998	$143,311.46
See Attached Appendix A. for reference photos of existing infrastructure.				

Future Location of Replacement of Real Property:

Location York Tract (43.294914 /-89.283918):



Replacement Infrastructure:

1. An approximately 5,500 sq ft building that contains 2,500 sq ft of office space and 3,000 sq ft of heated storage/shop stick built on site with associated paved parking including an ADA parking stall and sidewalks.
2. A second 3,000 sq ft rigid frame steel building with a standing seam metal roof with overhead doors, a concrete floor, concrete aprons, electrical service, LED lighting and receptacles and a lean to overhang on one side for implement storage.

3. Parking lot/entrance road to include areas for public and FWS parking, at least one parking space and the path to the office must be ADA accessible. Parking/road must have turning radius to accommodate a semi-trailer, at least 50% or more of this to be paved.
4. All infrastructure for the buildings including well sewer/septic and electrical transformers.
5. Bulk fuel storage with concrete pads, fencing, electricity.

Appendix A. USFWS Existing Infrastructure and Facilities:

Office Building: 2,624 sqft (2 bathrooms/shower/conference room/storage/office spaces, handicap accessible, handicap parking, signage)

Shop 1: 3,068.5 sqft (electric, water, insulated and heated)

Shop 2: 3,233 sqft (electric lights/doors/mezzanine)

Fuel Storage: 500-gallon tanks of Gasoline and Diesel

Equipment Parking: 20,000 sqft

Vehicle Parking: 22,500 sqft