

APPENDIX N

MADISON EAST-WEST BRT

Documented Categorical Exclusion

Ecologically Sensitive Areas and Endangered Species Technical
Report

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Prepared for:

City of Madison



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Cross-Spectrum Acoustics

REVISIONS

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1. Introduction

The Madison East-West Bus Rapid Transit (BRT) Project (the project) is a proposed 15-mile route serving east-west travel needs in central Madison, Wisconsin. The project extends from East Springs Drive on the east side of Madison to a proposed new park-and-ride at Junction Road on the west side of Madison. Operating primarily via East Washington Avenue, University Avenue, and Mineral Point Road, the BRT line would serve the major regional destinations of the isthmus (downtown Madison), the University of Wisconsin-Madison (UW) campus, Madison Area Technical College, and major employers and several shopping centers located throughout the corridor. BRT buses would use a combination of center-running bus lanes, side bus lanes, and mixed-traffic lanes. The project also includes electric bus charging infrastructure at the Sun Prairie Park-and-Ride and the Metro Satellite Maintenance Facility where BRT layovers will occur.

This technical report describes the potential impacts to ecologically sensitive areas and protected species resulting from construction of the project. This report was prepared for the documented Categorical Exclusion (DCE) in accordance with NEPA requirements. The following sections provide an overview of the potential suitable habitat within the project area, anticipated impacts, and avoidance, minimization, and mitigation measures.

2. Affected Habitat

The project is largely located within an urban roadway corridor within the existing right-of-way. Potential habitat for endangered species is present at the proposed park-and-ride facility site in the southwest quadrant of the Mineral Point Road/Junction Road intersection. The site consists of undeveloped land. Woody vegetation removal will be required to construct the proposed park-and-ride facility and stormwater best management practices (BMP) improvements.

3. State-Protected Species

Project staff reviewed the Wisconsin Department of Natural Resources (DNR) Natural Heritage Inventory (NHI) Public Portal for potential effects to endangered resources and an Endangered Resources Preliminary Assessment of the project area was generated (dated March 23, 2021). Attachment A includes the results of the Endangered Resources Preliminary Assessment. The results of the Endangered Resources Preliminary Assessment report determined that endangered resources are present within a one-mile radius of the project area and further actions are required to ensure compliance with Wisconsin's Endangered Species Law and the federal Endangered Species Act. Therefore, a formal Endangered Resources Review was requested.

The DNR completed an Endangered Resources Review of the project and identified required and recommended measures to avoid impacts to endangered resources (dated May 19, 2021).

Table 1 identifies endangered resources that the project may have an impact on. Attachment B includes the results of the DNR's Endangered Resources Review.

Table 1: State-Projected Species that May be Impacted by the Project

Common Name	Scientific Name	Status
Rusty Patched Bumble Bee	<i>Bombus affinis</i>	Federal endangered, State Special Concern
Yellow Bumble Bee	<i>Bombus fervidus</i>	State Special Concern
Lake Sturgeon	<i>Acipenser fulvescens</i>	State Special Concern

3.1. Rusty Patched Bumble Bee

The Rusty Patched Bumble Bee (*Bombus affinis*) is a federally-listed endangered species and a Wisconsin State Special Concern species. Suitable habitat for the rusty patched bumble bee consists of prairies, woodlands, marshes/wetlands, agricultural landscapes, and residential parks and gardens. Overwintering habitat includes non-compacted and often sandy soils or woodlands. The proposed park-and-ride site near the intersection of Mineral Point Road and Junction Road may contain suitable habitat for the rusty patched bumble bee. The DNR determined that the project may have an impact on the Rusty Patched Bumble Bee and that the impact is likely to be adverse.

3.2. Yellow Bumble Bee

The Yellow Bumble Bee (*Bombus fervidus*) is a Wisconsin State Special Concern species. The yellow bumble bee inhabits grassy, open areas including forest clearings, garden parks and along roadsides. The proposed park-and-ride site may contain suitable habitat for the Yellow Bumble Bee. The DNR determined that the project may have an impact on the Yellow Bumble Bee; these impacts are not expected to be adverse.

3.3. Lake Sturgeon

Lake Sturgeon (*Acipenser fulvescens*) is a Wisconsin State Special Concern species. Lake Sturgeon is found in large rivers and lakes, along with shoal waters of the Great Lakes. The DNR determined that land disturbance activities during Project construction may have an impact on Lake Sturgeon; these impacts are not expected to be adverse.

4. Federally-Protected Species

Project staff-initiated consultation with the USFWS through the USFWS Information for Planning and Conservation (IPaC) tool.¹ An official species list was generated through the USFWS to identify federally protected threatened and endangered species that may occur within the project area.

¹ Information for Planning and Conservation tool. Available at <https://ecos.fws.gov/ipac/>. Accessed 24 November 2021.

Table 2 lists species identified in the USFWS official species list. Attachment C includes results of the online consultation. Attachment D includes correspondence with USFWS.

Table 2: USFWS Official Species List Results

Common Name	Scientific Name	Status	Determination
Northern Long-Eared Bat	<i>Myotis septentrionalis</i>	Threatened	May affect, likely to adversely affect
Rusty Patched Bumble Bee	<i>Bombus affinis</i>	Endangered	May affect, not likely to adversely affect
Whooping Crane	<i>Grus americana</i>	Experimental population, Non-Essential	No effect
Eastern Prairie Fringed Orchid	<i>Platanthera leucophaea</i>	Threatened	No effect
Mead's Milkweed	<i>Asclepias meadii</i>	Threatened	No effect
Prairie Bush-clover	<i>Lespedeza leptostachya</i>	Threatened	No effect

4.1. Northern Long-Eared Bat

The Northern Long-Eared Bat (*Myotis septentrionalis*) is a federally-listed threatened species. The Northern Long-Eared Bat hibernates in caves and mines, swarming through surrounding wooded areas in autumn. The Northern Long-Eared Bat forages in upland forests during the spring and summer seasons. Project staff consulted with the DNR to determine if the project would be near documented maternity roost trees and/or hibernacula. The DNR determined that the project would be more than 150 feet from a known maternity roost tree and more than one-quarter mile from known hibernacula.

The project was reviewed through the Federal Highway Administration (FHWA), Federal Railway Administration (FRA), and Federal Transit Administration (FTA) Programmatic Biological Opinion (PBO) for Transportation Projects within the range of the Northern Long-Eared Bat (revised February 5, 2018) to satisfy the requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA).² The results of the review determined that the project *may affect, is likely to adversely affect* the Northern Long-Eared Bat (dated May 24, 2021). Therefore, consultation with USFWS was required. The USFWS Green Bay Field Office reviewed the effects of the project and determined that the project is consistent with the conservation measures and scope of the PBO and is not likely to jeopardize the continued existence of the Northern Long-Eared Bat.

4.2. Rusty Patched Bumble Bee

The Rusty Patched Bumble Bee (*Bombus affinis*) is a federally-listed endangered species. The project is located within a High Potential Zone (HPZ) for the Rusty Patched Bumble Bee, defined by the USFWS as an area in which the Rusty Patched Bumble Bee is likely present. The proposed park-and-ride site was identified as suitable habitat for the Rusty Patched Bumble Bee. USFWS determined ground disturbance to potential Rusty Patched Bumble Bee in the HPZ is low quality because it is adjacent to a roadway corridor that is subjected to highway

² Endangered Species Act of 1973. Available at <https://www.fws.gov/endangered/esa-library/pdf/ESAall.pdf>. Accessed 24 November 2021.

noise and likely has soil with a high salt content from winter highway maintenance. The USFWS concurred that the project *may affect, not likely to adversely affect* the Rusty Patched Bumble Bee.

4.3. Whooping Crane

The whooping crane (*Grus americana*) is federally-designated experimental population, non-essential species, which is a special designation USFWS can apply to a population of a threatened or endangered species prior to reestablishing it in an unoccupied portion of its former range. There is only one self-sustaining wild population of whooping cranes, the Aransas-Wood Buffalo National Park population, which nests in Wood Buffalo National Park and adjacent areas in Canada and winters in coast marshes in Texas and Arkansas. A small migratory population of individuals was introduced in 2001 that migrates between Wisconsin and Florida. The East-West BRT corridor does not include suitable habitat for the whooping crane. Therefore, it was determined that the project would have no effect on the whooping crane.

4.4. Eastern Prairie Fringed Orchid

Eastern prairie fringed orchid (*Platanthera leucophaea*) is a federally-listed threatened species that occurs in a variety of habitats ranging from mesic prairies to wetlands. The proposed park-and-ride site is unlikely to provide suitable habitat for the eastern prairie fringed orchid as it is adjacent to a roadway corridor and development. Therefore, it was determined that the project would have no effect on the eastern prairie fringed orchid.

4.5. Mead's Milkweed

Mead's milkweed (*Asclepias meadii*) is a federally-listed threatened species that is native to tallgrass prairies. Suitable habitat for Mead's milkweed is not present within the East-West BRT corridor. Therefore, it was determined that the project would have no effect on Mead's milkweed.

4.6. Prairie Bush-Clover

Prairie bush-clover (*Lespedeza leptostachya*) is a federally-listed threatened species. It is a plant in the pea family and native to tallgrass prairies in the Midwest region. The project is largely comprised of a disturbed, urban corridor. Suitable habitat for the prairie bush-clover is not present in the East-West BRT corridor. Therefore, it was determined that the project would have no effect on the prairie bush-clover.

5. Avoidance, Minimization, and Mitigation Measures

The following measures will be implemented to minimize potential impacts to federally-listed threatened and endangered species and Wisconsin State Special Concern species:

- Northern Long-Eared Bat.
 - New or replacement permanent lighting will use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" or 0 and "backlight" as low as practicable.
 - Tree removal will be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field.
 - Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all environmental commitments, including all applicable avoidance and minimization measures (AMMs).
- Rusty Patched Bumble Bee.

- Implement BMPs, especially those that serve to minimize the spread of invasive species and to avoid or minimize soil compaction.
- Avoid or minimize soil disturbance and heavy equipment operation during overwintering (mid-October to mid-March).
- Avoid or minimize forest management that may destroy spring blooming flowers during their bloom periods.
- Consider thinning or single tree selection and dense invasive shrub removal that may improve overwintering and spring foraging habitat.
- Rusty Patched Bumble Bee and Yellow Bumble Bee.
 - Use native trees, shrubs, and flowering plants in landscaping.
 - Provide plants that bloom from spring through fall.
 - Remove and control invasive plants in any habitat used for foraging, nesting, or overwintering.
- Lake Sturgeon.
 - Implement erosion and runoff prevention measures.

