Appendix A-5 Appendix Chapter 5: Biological Environment Documents

Appendix A-5 Appendix Chapter 5: Biological Environment Documents are companion documents to the Supplemental Draft Environmental Impact Statement containing Chapter 5 (Physical and Environmental Analysis). These documents are available online: https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Environmental/Supplemental-Draft-EIS.aspx

Documents included:

United States Fish and Wildlife Service Biological Assessment January 2023
Blandings Turtle Fact Sheet
United States Fish and Wildlife Service Verification Letter and Programmatic Biological Opinion on Final 4(d)

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METRO Blue Line Light Rail Transit (BLRT) Extension

Biological Analysis

Prepared using IPaC

Generated by Rebecca Beduhn (rbeduhn@sehinc.com)

January 18, 2023

The purpose of this document is to assess the effects of the proposed project and determine whether the project may affect any federally threatened, endangered, proposed, or candidate species. If appropriate for the project, this document may be used as a biological assessment (BA), as it is prepared in accordance with legal requirements set forth unde Section 7 of the Endangered Species Act (16 U.S.C. 1536 (c)).

In this document, any data provided by U.S. Fish and Wildlife Service is based on data as of January 17, 2023.

Prepared using IPaC version 6.86.1-rc5

METRO Blue Line Light Rail Transit (BLRT) Extension Biological Assessment

Table Of Contents

1 Description Of The Action

1.1 Project Name

METRO Blue Line Light Rail Transit (BLRT) Extension

1.2 Executive Summary

No suitable habitat for any mussel species is present within the project corridor.

Tree clearing for the northern station and the operations and maintenance facility are likely the greatest impact to any critical habitat for any listed species in the project corridor. Work will be conducted over the winter months when the species are unlikely to be present to minimize impact.

Disturbed ground will be re-seeded with pollinator species and milkweeds to ensure adequate habitat for the monarch butterfly is present.

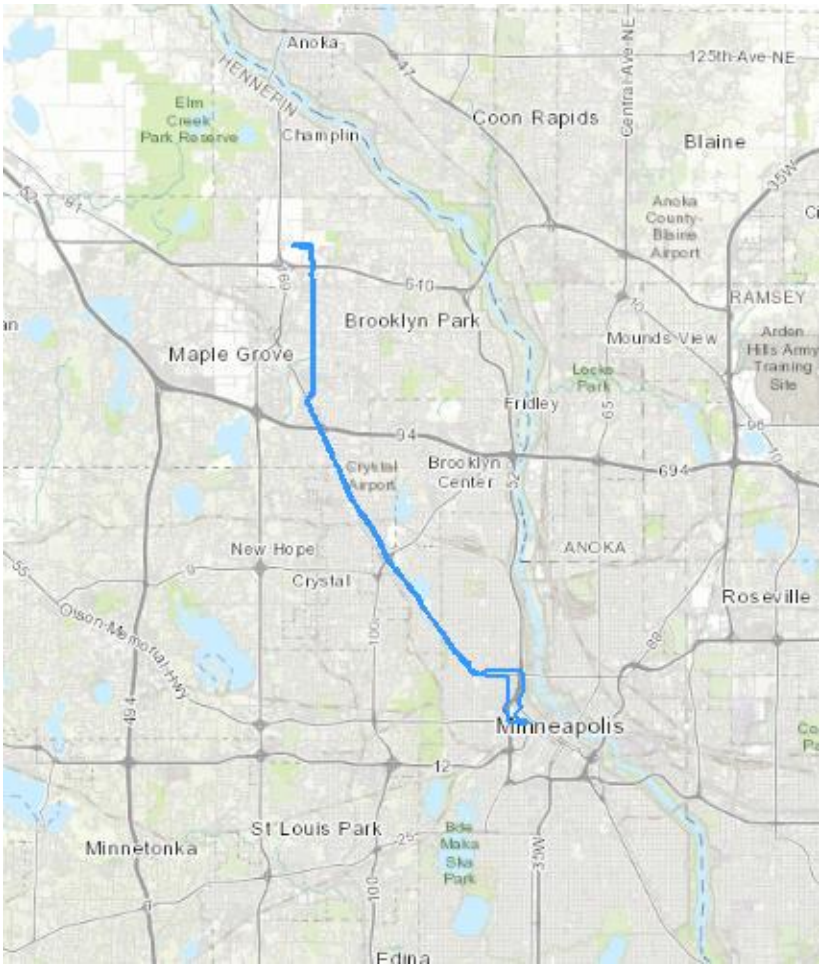
1.3 Effect Determination Summary

SPECIES (COMMON NAME)	SCIENTIFIC NAME	LISTING STATUS	PRESENT IN ACTION AREA	EFFECT DETERMINATION
Higgins Eye (pearlymussel)	Lampsilis higginsii	Endangered	No	NE
Monarch Butterfly	Danaus plexippus	Candidate	Yes	NLAA
Northern Long-eared Bat† **. This species or critical habitat is covered by a DKey.**	Myotis septentrionalis	Endangered		MA
Snuffbox Mussel	Epioblasma triquetra	Endangered	No	NE
Tricolored Bat	Perimyotis subflavus	Proposed Endangered	Yes	NE
Winged Mapleleaf	Quadrula fragosa	Endangered	No	NE

† This species or critical habitat is covered by a DKey.

1.4 Project Description

1.4.1 Location



LOCATION
Hennepin County, Minnesota

1.4.2 Description of project habitat

The project corridor is mostly comprised by urban land, previously disturbed. The majority of the proposed railline follows existing road right-of-way. At the northern end of the project, an operations and maintence facility and a park and ride/station platform is proposed on parcels that are not currently developed. These parcels are comprised of mostly upland, with few small, isolated wetland depressions. There is woodland and open meadow land.

1.4.3 Project proponent information

Provide information regarding who is proposing to conduct the project, and their contact information. Please provide details on whether there is a Federal nexus.

Requesting Agency
SEH

FULL NAME
Rebecca Beduhn

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Lead agency
Department of Transportation

Federal Transit Administration

1.4.4 Project purpose

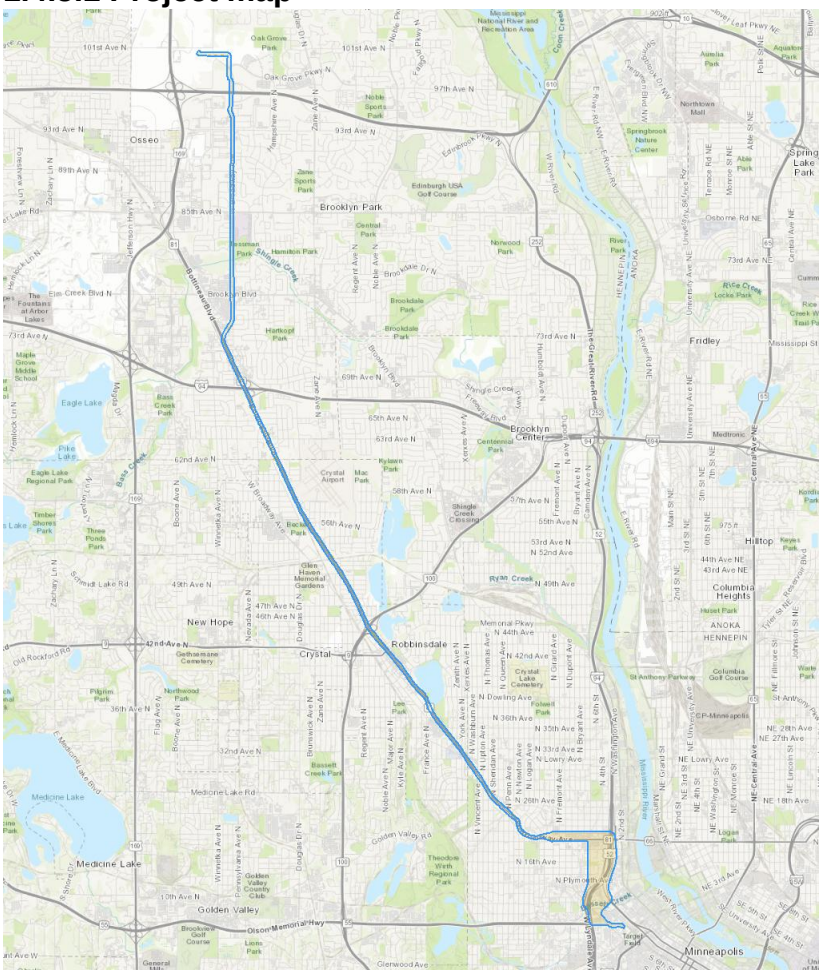
The purpose of the proposed Blue line Light Rail (BLRT) Extension project is to provide transit service, which will satisfy the long-term regional mobility and accessibility needs for businesses and the traveling public. Additionally, the BLRT Extension project will invest in a corridor that has experienced a history of systemic racism and disinvestment, provide improved connectivity andaccess for communities in the corridor, and advance local and regional equity.

The proposed BLRT Extension project would be located in Hennepin County, Minnesota, extending approximately 13 miles from downtown Minneapolis to the northwest, serving north Minneapolis and the suburbs of Robbinsdale, Crystal, and Brooklyn Park. The light rail transit (LRT) is anticipated to serve a broader area, including the communities of Golden Valley, New Hope, Brooklyn Center, Maple Grove, Osseo, Champlin, and Dayton.

1.4.5 Project type and deconstruction

This project is a public transportation project.

1.4.5.1 Project map



LEGEND

Project footprint

Blue Line Railroad : Railroad track (structure)

1.4.5.2 railroad track

Structure completion date
April 04, 2024

Removal/decommission date (if applicable)
Not applicable

Stressors

ENVIRONMENTAL QUALITY FEATURES

- Increase in air quality

Description
The planned METRO Blue Line Extension (Bottineau) light rail transit project will operate about 13 miles northwest from downtown Minneapolis through north Minneapolis, Golden Valley, Robbinsdale, Crystal and Brooklyn Park, drawing riders northwest of Brooklyn Park. The line will have 11 new stations. The project corridor is proposed in a previously disturbed, highly urban landscape.

1.4.6 Anticipated environmental stressors

Describe the anticipated effects of your proposed project on the aspects of the land, air and water that will occur due to the activities above. These should be based on the activity deconstructions done in the previous section and will be used to inform the action area.

1.4.6.1 Plant Features

Individuals from the Plantae kingdom, such as trees, shrubs, herbs, grasses, ferns, and mosses. This feature also includes products of plants (e.g., nectar, flowers, seeds, etc.).

1.4.6.2 Environmental Quality Features

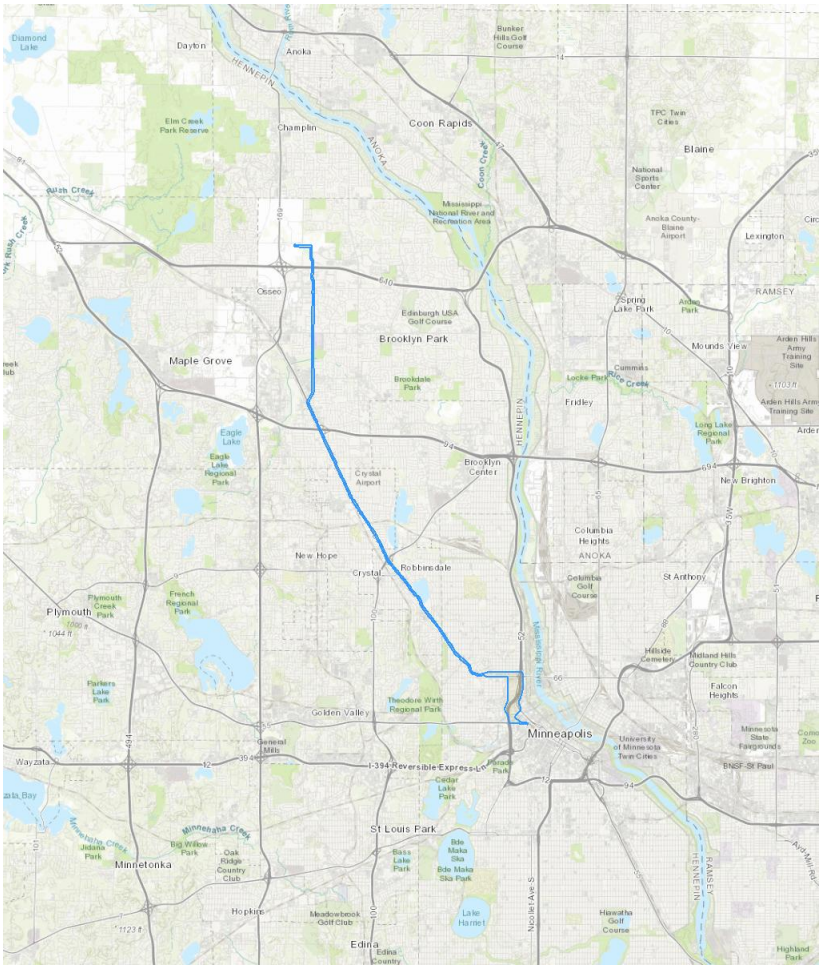
Abiotic attributes of the landscape (e.g., temperature, moisture, slope, aspect, etc.).

1.4.6.2.1 Increase in air quality

ANTICIPATED MAGNITUDE

The addition of public transit is intended to remove vehicle traffic from the roadway in the surrounding areas. The reduction in traffic is expected to improve air quality.

STRESSOR LOCATION



LEGEND

Project footprint

Stressor location

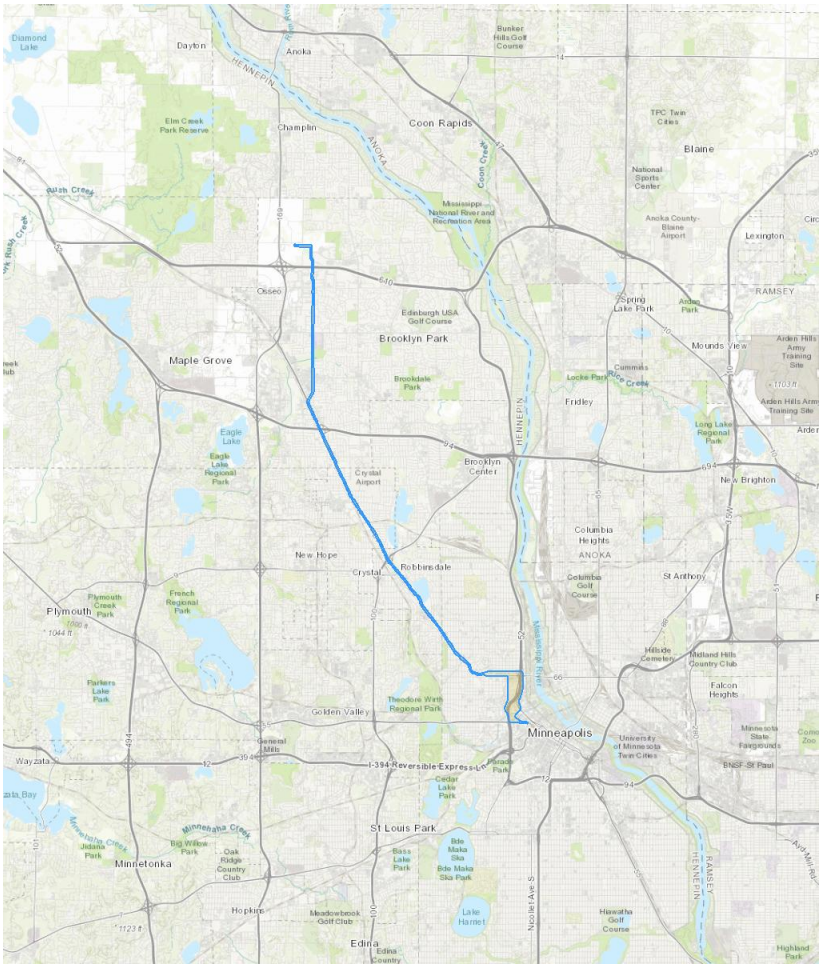
CONSERVATION MEASURES

No conservation measures for this stressor

STRUCTURES AND ACTIVITIES

- Railroad track

1.5 Action Area



1.6 Conservation Measures

1.6.1 plant more milkweeds around project area

Description
The project will use a restoration seed mix for disturbed sites that includes milkweeds.

Direct interactions
- plant damage

1.7 Prior Consultation History
Consultation with the USFWS occurred in 2015, during the initial NEPA review for the project area. The project alignment has shifted since that consultation.

1.8 Other Agency Partners And Interested Parties
Metropolitan Council, USACE, State of Minnesota, MPCA, MNDNR, Hennepin County

1.9 Other Reports And Helpful Information
URL to previously submitted EIS (including previous USFWS coordintaion):

https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Environmental/Final-EIS.aspx (https://metrocouncil.org/Transportation/Projects/Light-Rail-Projects/METRO-Blue-Line-Extension/Environmental/Final-EIS.aspx)

2 Species Effects Analysis

This section describes, species by species, the effects of the proposed action on listed, proposed, and candidate species, and the habitat on which they depend. In this document, effects are broken down as direct interactions (something happening directly to the species) or indirect interactions (something happening to the environment on which a species depends that could then result in effects to the species).

These interactions encompass effects that occur both during project construction and those which could be ongoing after the project is finished. All effects, however, should be considered, including effects from direct and indirect interactions and cumulative effects.

2.1 Higgins Eye (Pearlymussel)

This species has been excluded from analysis in this environmental review document.

Relevant documentation

Although the project corridor crosses 3 watercourses, they are all considered too shallow for Higgins Eye. Primarily a sedentary species, the Higgins buries itself at the bottom of large rivers. The Mississippi River is the closest known resource with habitat suitable for the species and is located at least 0.5 miles away from the project footprint.

Justification for exclusion

There is no suitable habitat within the project corridor.

2.2 Monarch Butterfly

2.2.1 Status of the species

This section should provide information on the species' background, its biology and life history that is relevant to the proposed project within the action area that will inform the effects analysis.

2.2.1.1 Legal status

The Monarch Butterfly is federally listed as 'Candidate' and additional information regarding its legal status can be found on the ECOS species profile.

2.2.1.2 Recovery plans

Available recovery plans for the Monarch Butterfly can be found on the ECOS species profile.

2.2.1.3 Life history information

Note - the monarch is a candidate species and not yet listed or proposed for listing. Consultation with U.S. Fish and Wildlife Service under section 7 of the Endangered Species Act is not required for candidate species, like the monarch. We encourage agencies, however, to take advantage of any opportunity they may have to conserve the species.

For information on monarch conservation, visit https://www.fws.gov/savethemonarch/, http://www.mafwa.org/?page_id=2347, and, for the West, https://wafwa.org/committees-working-groups/monarch-working-group/.

Adult monarch butterflies are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. The black border has a double row of white spots, present on the upper side of the wings. Adult monarchs are sexually dimorphic, with males having narrower wing venation and scent patches. The bright coloring of a monarch serves as a warning to predators that eating them can be toxic.

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 into reproductive diapause (suspended reproduction) and live six to nine months.

In many regions where monarchs are present, monarchs breed year-round. Individual monarchs in temperate climates, such as eastern and western North America, undergo long-distance migration, and live for an extended period of time. In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites. This migration can take monarchs distances of over 3,000 km and last for over two months. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back through the breeding grounds and their offspring start the cycle of generational migration over again.

Identified resource needs

Milkweed

None

2.2.1.4 Conservation needs
As pollinators, the monarch butterfly migration across the continent provides an invaluable service, essential for many ecosystems to thrive. It is thanks to pollinators, such as butterflies, bees, and other insects, that we have many of the flowers and dietary staples that we enjoy, like squash and blueberries.

2.2.2 Environmental baseline
*The environmental baseline describes the species' health **within the action area only** at the time of the consultation, and does not include the effects of the action under review. Unlike the species information provided above, the environmental baseline is at the scale of the Action area.*

2.2.2.1 Species presence and use
During the breeding season, monarchs lay their eggs on their obligate milkweed host plant. Milkweeds are present within the project area.

Relevant documentation

2.2.2.2 Species conservation needs within the action area
The northern part of the project limits is currently open meadow that contains monarch habitat and milkweed species. Additional milkweed species can be planted after the project to ensure the butterflies have access.

2.2.2.3 Habitat condition (general)

milkweed (None)
There have been observed milkweed plants at the northern end of the project limits.

2.2.2.4 Influences
Project area is previously disturbed and the majority of the project area no longer has suitable habitat for the butterfly.

2.2.2.5 Additional baseline information
None

2.2.3 Effects of the action

This section considers and discusses all effects on the listed species that are caused by the proposed action and are reasonably certain to occur, including the effects of other activities that would not occur but for the proposed action.

2.2.3.1 Indirect interactions

RESOURCE NEED	STRESSORS	CONSERVATION MEASURES	AMOUNT OF RESOURCE IMPACTED	INDIVIDUALS AFFECTED
Milkweed (none)	No exposure path			***There will be no impacts to this resource, so no individuals will be affected.***

2.2.3.2 Direct interactions

DIRECT IMPACT	CONSERVATION MEASURES	INDIVIDUALS IMPACTED	IMPACT EXPLANATION
Plant damage	Plant more milkweeds around project area	No	Butterflies may be temporarily be displaced, but will be able to utilize new plants that will be planted post project

2.2.4 Cumulative effects

None

2.2.5 Discussion and conclusion

Determination: NLAA

Compensation measures

None

2.3 Snuffbox Mussel

This species has been excluded from analysis in this environmental review document.

Relevant documentation

The snuffbox prefers rivers with steady current and sand and gravel substrates. The three watercourses within the project alignment do not meet these criteria as they dry up during periods of less precipitation and typically only have fast moving current during the wetter spring months.

Justification for exclusion

There is no suitable habitat within the project corridor.

2.4 Tricolored Bat

2.4.1 Status of the species

This section should provide information on the species' background, its biology and life history that is relevant to the proposed project within the action area that will inform the effects analysis.

2.4.1.1 Legal status

The Tricolored Bat is federally listed as 'Proposed Endangered' and additional information regarding its legal status can be found on the ECOS species profile.

2.4.1.2 Recovery plans

Available recovery plans for the Tricolored Bat can be found on the ECOS species profile.

2.4.1.3 Life history information

The tricolored bat is a small insectivorous bat that is distinguished by its unique tricolored fur and often appears yellowish to nearly orange. The once common species is wide ranging across the eastern and central United States and portions of southern Canada, Mexico and Central America. During the winter, tricolored bats are often found in caves and abandoned mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts where they exhibit shorter torpor bouts and forage during warm nights. During the spring, summer, and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and occasionally human structures. Tricolored bats face extinction due primarily to the rangewide impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. White-nose syndrome has caused estimated declines of more than 90 percent in affected tricolored bat colonies across the majority of the species range. To address the growing threat of white-nose syndrome to the tricolored bat and other bats across North America, the U.S. Fish and Wildlife Service is leading the White-nose Syndrome National Response Team, a coordinated effort of more than 150 non-governmental organizations, institutions, Tribes, and state and federal agencies. Together we are conducting critical white-nose syndrome research and developing management strategies to minimize impacts of the disease and recover affected bat populations. For more information on white-nose syndrome, please see: https://www.whitenosesyndrome.org/ For more information on tricolored bats, please see: https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus

Identified resource needs

Tree cavities

During the spring, summer and fall - collectively referred to as the non-hibernating seasons - tricolored bats primarily roost among live and dead leaf clusters of live or recently dead deciduous hardwood trees.

2.4.1.4 Conservation needs

The primary cause of tricolored bats' steep and sudden decline is white-nose syndrome. The Fish and Wildlife Service also identifies climate change and habitat loss as key threats.

2.4.2 Environmental baseline

*The environmental baseline describes the species' health **within the action area only** at the time of the consultation, and does not include the effects of the action under review. Unlike the species information provided above, the environmental baseline is at the scale of the Action area.*

2.4.2.1 Species presence and use

Tricolored bats could use trees located at the northern end of the project corridor to roost in the non-hibernating seasons.

2.4.2.2 Species conservation needs within the action area
Tricolored bats rely on mature and old-growth forests with closed canopies for roosting and foraging, which are not present within the project area.

2.4.2.3 Habitat condition (general)
It is unlikely habitat for the tricolored bat is present in the project site as there are no old growth forests.

2.4.2.4 Influences
The site has been urbanized for many decades. Most tree clearing occurred 20-50 years ago.

2.4.2.5 Additional baseline information
None.

2.4.3 Effects of the action
This section considers and discusses all effects on the listed species that are caused by the proposed action and are reasonably certain to occur, including the effects of other activities that would not occur but for the proposed action.

2.4.3.1 Indirect interactions

RESOURCE NEED	STRESSORS	CONSERVATION MEASURES	AMOUNT OF RESOURCE IMPACTED	INDIVIDUALS AFFECTED
Tree cavities (during the spring, summer and fall - collectively referred to as the non-hibernating seasons - tricolored bats primarily roost among live and dead leaf clusters of live or recently dead deciduous hardwood trees.)			***This resource is not present in the action area*** no old growth trees exist in the project area, only newer plantings of smaller trees.	***There will be no impacts to this resource, so no individuals will be affected.***

2.4.3.2 Direct interactions
No direct interactions leading to effects on species are expected to occur from the proposed project.

2.4.4 Cumulative effects
None

2.4.5 Discussion and conclusion

Determination: NE

2.5 Winged Mapleleaf
This species has been excluded from analysis in this environmental review document.

Relevant documentation
The Winged Mapleleaf is a native freshwater mussel species of fast-flowing riffles in medium-sized rivers. All watercourse crossings within the project area are considered small and are not suitable for the winged mapleleaf.

Justification for exclusion
There is no suitable habitat within the project corridor.

3 Critical Habitat Effects Analysis

No critical habitats intersect with the project action area.

4 Summary Discussion And Conclusion

4.1 Summary Discussion

The project site is highly developed and previously impacted and is unlikely to have adverse effects on critical habitat.

4.2 Conclusion

Tree clearing for the northern station and the operations and maintenance facility are likely the greatest impact to any critical habitat for any listed species in the project corridor. Work will be conducted over the winter months when the species are unlikely to be present to minimize impact. Disturbed ground will be re-seeded with pollinator species and milkweeds to ensure adequate habitat for the monarch butterfly is present.

Environmental Review Fact Sheet Series

Endangered, Threatened, and Special Concern Species of Minnesota

Blanding's Turtle

(*Emydoidea blandingii*)

Minnesota Status:	Threatened	State Rank[1]:	S2
Federal Status:	none	Global Rank[1]:	G4

HABITAT USE

Blanding's turtles need both wetland and upland habitats to complete their life cycle. The types of wetlands used include ponds, marshes, shrub swamps, bogs, and ditches and streams with slow-moving water. In Minnesota, Blanding's turtles are primarily marsh and pond inhabitants. Calm, shallow water bodies (Type 1-3 wetlands) with mud bottoms and abundant aquatic vegetation (e.g., cattails, water lilies) are preferred, and extensive marshes bordering rivers provide excellent habitat. Small temporary wetlands (those that dry up in the late summer or fall) are frequently used in spring and summer -- these fishless pools are amphibian and invertebrate breeding habitat, which provides an important food source for Blanding's turtles. Also, the warmer water of these shallower areas probably aids in the development of eggs within the female turtle. Nesting occurs in open (grassy or brushy) sandy uplands, often some distance from water bodies. Frequently, nesting occurs in traditional nesting grounds on undeveloped land. Blanding's turtles have also been known to nest successfully on residential property (especially in low density housing situations), and to utilize disturbed areas such as farm fields, gardens, under power lines, and road shoulders (especially of dirt roads). Although Blanding's turtles may travel through woodlots during their seasonal movements, shady areas (including forests and lawns with shade trees) are not used for nesting. Wetlands with deeper water are needed in times of drought, and during the winter. Blanding's turtles overwinter in the muddy bottoms of deeper marshes and ponds, or other water bodies where they are protected from freezing.

LIFE HISTORY

Individuals emerge from overwintering and begin basking in late March or early April on warm, sunny days. The increase in body temperature which occurs during basking is necessary for egg development within the female turtle. Nesting in Minnesota typically occurs during June, and females are most active in late afternoon and at dusk. Nesting can occur as much as a mile from wetlands. The nest is dug by the female in an open sandy area and 6-15 eggs are laid. The female turtle returns to the marsh within 24 hours of laying eggs. After a development period of approximately two months, hatchlings leave the nest from mid-August through early-October. Nesting females and hatchlings are often at risk of being killed while crossing roads between wetlands and nesting areas. In addition to movements associated with nesting, all ages and both sexes move between wetlands from April through November. These movements peak in June and July and again in September and October as turtles move to and from overwintering sites. In late autumn (typically November), Blanding's turtles bury themselves in the substrate (the mud at the bottom) of deeper wetlands to overwinter.

IMPACTS / THREATS / CAUSES OF DECLINE

- loss of wetland habitat through drainage or flooding (converting wetlands into ponds or lakes)
- loss of upland habitat through development or conversion to agriculture
- human disturbance, including collection for the pet trade* and road kills during seasonal movements
- increase in predator populations (skunks, racoons, etc.) which prey on nests and young

*It is illegal to possess this threatened species.

RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS

These recommendations apply to typical construction projects and general land use within Blanding's turtle habitat, and are provided to help local governments, developers, contractors, and homeowners minimize or avoid detrimental impacts to Blanding's turtle populations. **List 1** describes minimum measures which we recommend to prevent harm to Blanding's turtles during construction or other work within Blanding's turtle habitat. **List 2** contains recommendations which offer even greater protection for Blanding's turtles populations; this list should be used *in addition to the first list* in areas which are known to be of state-wide importance to Blanding's turtles (contact the DNR's Natural Heritage and Nongame Research Program if you wish to determine if your project or home is in one of these areas), or in any other area where greater protection for Blanding's turtles is desired.

List 1. Recommendations for all areas inhabited by Blanding's turtles.	**List 2. *Additional* recommendations for areas known to be of state-wide importance to Blanding's turtles.**
GENERAL	
A flyer with an illustration of a Blanding's turtle should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.	Turtle crossing signs can be installed adjacent to road-crossing areas used by Blanding's turtles to increase public awareness and reduce road kills.
Turtles which are in imminent danger should be moved, by hand, out of harms way. Turtles which are not in imminent danger should be left undisturbed.	Workers in the area should be aware that Blanding's turtles nest in June, generally after 4pm, and should be advised to minimize disturbance if turtles are seen.
If a Blanding's turtle nests in your yard, do not disturb the nest.	If you would like to provide more protection for a Blanding's turtle nest on your property, see "Protecting Blanding's Turtle Nests" on page 3 of this fact sheet.
Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.	Construction in potential nesting areas should be limited to the period between September 15 and June 1 (this is the time when activity of adults and hatchlings in upland areas is at a minimum).
WETLANDS	
Small, vegetated temporary wetlands (Types 2 & 3) should not be dredged, deepened, filled, or converted to storm water retention basins (these wetlands provide important habitat during spring and summer).	Shallow portions of wetlands should not be disturbed during prime basking time (mid morning to mid- afternoon in May and June). A wide buffer should be left along the shore to minimize human activity near wetlands (basking Blanding's turtles are more easily disturbed than other turtle species).
Wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.	Wetlands should be protected from road, lawn, and other chemical run-off by a vegetated buffer strip at least 50' wide. This area should be left unmowed and in a natural condition.
ROADS	
Roads should be kept to minimum standards on widths and lanes (this reduces road kills by slowing traffic and reducing the distance turtles need to cross).	Tunnels should be considered in areas with concentrations of turtle crossings (more than 10 turtles per year per 100 meters of road), and in areas of lower density if the level of road use would make a safe crossing impossible for turtles. Contact your DNR Regional Nongame Specialist for further information on wildlife tunnels.
Roads should be ditched, not curbed or below grade. If curbs must be used, 4 inch high curbs at a 3:1 slope are preferred (Blanding's turtles have great difficulty climbing traditional curbs; curbs and below grade roads trap turtles on the road and can cause road kills).	Roads should be ditched, not curbed or below grade.

ROADS cont.	
Culverts between wetland areas, or between wetland areas and nesting areas, should be 36 inches or greater in diameter, and elliptical or flat-bottomed.	Road placement should avoid separating wetlands from adjacent upland nesting sites, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details).
Wetland crossings should be bridged, or include raised roadways with culverts which are 36 in or greater in diameter and flat-bottomed or elliptical (raised roadways discourage turtles from leaving the wetland to bask on roads).	Road placement should avoid bisecting wetlands, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details). This is especially important for roads with more than 2 lanes.
Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.	Roads crossing streams should be bridged.
UTILITIES	
Utility access and maintenance roads should be kept to a minimum (this reduces road-kill potential).	
Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.	
LANDSCAPING AND VEGETATION MANAGEMENT	
Terrain should be left with as much natural contour as possible.	As much natural landscape as possible should be preserved (installation of sod or wood chips, paving, and planting of trees within nesting habitat can make that habitat unusable to nesting Blanding's turtles).
Graded areas should be revegetated with native grasses and forbs (some non-natives form dense patches through which it is difficult for turtles to travel).	Open space should include some areas at higher elevations for nesting. These areas should be retained in native vegetation, and should be connected to wetlands by a wide corridor of native vegetation.
Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).	Ditches and utility access roads should not be mowed or managed through use of chemicals. If vegetation management is required, it should be done mechanically, as infrequently as possible, and fall through spring (mowing can kill turtles present during mowing, and makes it easier for predators to locate turtles crossing roads).

Protecting Blanding's Turtle Nests: Most predation on turtle nests occurs within 48 hours after the eggs are laid. After this time, the scent is gone from the nest and it is more difficult for predators to locate the nest. Nests more than a week old probably do not need additional protection, unless they are in a particularly vulnerable spot, such as a yard where pets may disturb the nest. Turtle nests can be protected from predators and other disturbance by covering them with a piece of wire fencing (such as chicken wire), secured to the ground with stakes or rocks. The piece of fencing should measure at least 2 ft. x 2 ft., and should be of medium sized mesh (openings should be about 2 in. x 2 in.). It is ***very important*** that the fencing be **removed before August 1st** so the young turtles can escape from the nest when they hatch!

REFERENCES

[1]Association for Biodiversity Information. "Heritage Status: Global, National, and Subnational Conservation Status Ranks." NatureServe. Version 1.3 (9 April 2001). http://www.natureserve.org/ranking.htm (15 April 2001).

Coffin, B., and L. Pfannmuller. 1988. Minnesota's Endangered Flora and Fauna. University of Minnesota Press, Minneapolis, 473 pp.

REFERENCES (cont.)

Moriarty, J. J., and M. Linck. 1994. Suggested guidelines for projects occurring in Blanding's turtle habitat. Unpublished report to the Minnesota DNR. 8 pp.

Oldfield, B., and J. J. Moriarty. 1994. Amphibians and Reptiles Native to Minnesota. University of Minnesota Press, Minneapolis, 237 pp.

Sajwaj, T. D., and J. W. Lang. 2000. Thermal ecology of Blanding's turtle in central Minnesota. Chelonian Conservation and Biology 3(4):626-636.

United States Department of the Interior

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In Reply Refer To: January 18, 2023
Project code: 2023-0034074
Project Name: METRO Blue Line Light Rail Transit (BLRT) Extension

Subject: Verification letter for the 'METRO Blue Line Light Rail Transit (BLRT) Extension' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Rebecca Beduhn:

The U.S. Fish and Wildlife Service (Service) received on January 18, 2023 your effects determination for the 'METRO Blue Line Light Rail Transit (BLRT) Extension' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Additionally, please note that on March 23, 2022, the Service published a proposal to reclassify the northern long-eared bat (NLEB) as endangered under the Endangered Species Act. The U.S. District Court for the District of Columbia has ordered the Service to complete a new final listing determination for the NLEB by November 2022 (Case 1:15-cv-00477, March 1, 2021). The bat, currently listed as threatened, faces extinction due to the range-wide impacts of white-nose syndrome (WNS), a deadly fungal disease affecting cave-dwelling bats across the continent. The proposed reclassification, if finalized, would remove the current 4(d) rule for the NLEB, as these rules may be applied only to threatened species. Depending on the type of effects a project has on

NLEB, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective (anticipated to occur by December 30, 2022). If your project may result in incidental take of NLEB after the new listing goes into effect this will first need to be addressed in an updated consultation that includes an Incidental Take Statement. If your project may require re-initiation of consultation, please contact our office for additional guidance.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Higgins Eye (pearlymussel) *Lampsilis higginsii* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Snuffbox Mussel *Epioblasma triquetra* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Winged Mapleleaf *Quadrula fragosa* Endangered

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

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[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

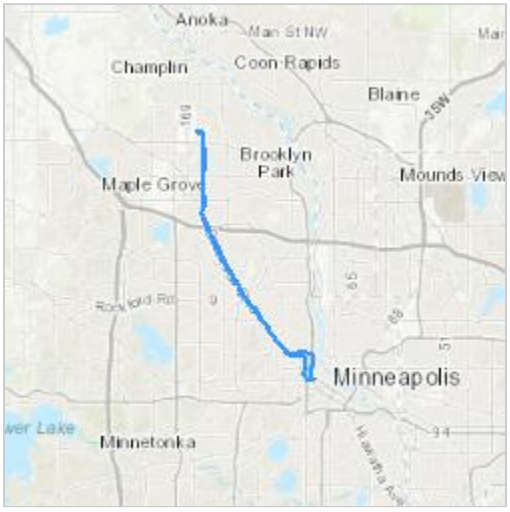
METRO Blue Line Light Rail Transit (BLRT) Extension

2. Description

The following description was provided for the project 'METRO Blue Line Light Rail Transit (BLRT) Extension':

> The proposed Blue Line Light Rail Transit (BLRT) Extension Project is a 13-mile corridor of transportation improvements that extends from downtown Minneapolis to the northwest, serving north Minneapolis, Golden Valley, Robbinsdale, Crystal, New Hope, Osseo, Brooklyn Park, and Maple Grove.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@45.0603696,-93.36217594244053,14z



Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   Yes

2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")

   No

3. Will your activity purposefully **Take** northern long-eared bats?

   No

4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

   Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/media/nleb-roost-tree-and-hibernacula-state-specific-data-links-0.

   Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

   No

7. Will the action involve Tree Removal?

   Yes

8. Will the action only remove hazardous trees for the protection of human life or property?

   No

9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

   No

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

    No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

20

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

IPaC User Contact Information

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Lead Agency Contact Information

Lead Agency: Federal Transit Administration