Section 4.9
General Ecology and Wildlife Resources

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Acronyms and Abbreviations

BRT ..... Bus Rapid Transit
EIS ..... Environmental Impact Statement
EO ..... Executive Order
FTA ..... Federal Transportation Authority
IPaC ..... Information Planning and Consultation
LRT ..... Light Rail Transit
NYSDEC ..... New York State Department of Environmental Conservation
NYSDOT ..... New York State Department of Transportation
PBO ..... Programmatic Biological Opinion
Project ..... Buffalo-Amherst-Tonawanda Corridor Transit Expansion
USFWS ..... United States Fish and Wildlife Service

4. Environmental Consequences

4.9 GENERAL ECOLOGY AND WILDLIFE RESOURCES

This section describes the potential impacts of the Project on the general ecology and wildlife resources (i.e., ecological communities, wildlife, and Threatened or Endangered species) within the study area. This section also discusses Metro's strategies to avoid or minimize any potential effects of the Project. Existing ecology and wildlife resources within the study area and the federal and state regulations that pertain to the general ecology and wildlife are described in Appendix H, "General Ecology and Wildlife Resources Supplemental Information".

Table 4.9-1 presents the ecology and wildlife resources findings related to the Project for both LRT Alternative and BRT Alternative. No adverse impacts to plant communities, wildlife, forests, and protected species would occur under the No Build Alternative.

Table 4.9-1. General Ecology and Wildlife Resources - Impacts Summary

Resource	LRT Build Alternative		BRT Build Alternative	
	Permanent Effect	Mitigation	Permanent Effect	Mitigation
Ecological Communities	▪ Approximately 38 acres of land would be affected in the study area ▪ The conversion of currently disturbed ecological communities from one community type to another would not result in adverse effects	▪ Areas disturbed during construction that are not part of the permanent project footprint would be revegetated, in accordance with a Landscape Restoration Plan, to the greatest extent practicable with plant species indigenous to Western New York	▪ Approximately 38 acres of land would be affected in the study area ▪ The conversion of currently disturbed ecological communities from one community type to another would not result in adverse effects	▪ Areas disturbed during construction that are not part of the permanent project footprint would be revegetated, in accordance with a Landscape Restoration Plan, to the greatest extent practicable with plant species indigenous to Western New York.

Resource	LRT Build Alternative		BRT Build Alternative	
	Permanent Effect	**Mitigation**	**Permanent Effect**	**Mitigation**
Wildlife	▪ Wildlife in study area would not be expected to be displaced or otherwise affected by the operation of the LRT Build Alternative ▪ Existing species would be allowed to naturally re-populate the corridor and adjacent areas once construction has been completed. ▪ New Bizer Creek bridge will result in a localized change in the aquatic flora and fauna species composition (under the bridge). In addition, the vegetated stream banks will be converted to developed land.	▪ Areas disturbed during construction that are not part of the permanent project footprint would be revegetated, in accordance with a Landscape Restoration Plan, to the greatest extent practicable with plant species indigenous to Western New York	▪ Wildlife in study area would not be expected to be displaced or otherwise affected by the operation of the BRT Build Alternative ▪ Existing species would be allowed to naturally re-populate the corridor and adjacent areas once construction has been completed.	▪ Areas disturbed during construction that are not part of the permanent project footprint would be revegetated, in accordance with a Landscape Restoration Plan, to the greatest extent practicable with plant species indigenous to Western New York
Invasive Species	▪ Net benefit by the removal of existing invasive species and replacement with native species whenever possible.	▪ NYSDOT policy would be followed; design and construction would include specifications to address the management of invasive species	▪ Net benefit by the removal of existing invasive species and replacement with native species whenever possible.	▪ NYSDOT policy would be followed; design and construction would include specifications to address the management of invasive species
Threatened and Endangered Species	▪ The Project would remove approximately 60 trees during construction ▪ Northern long-eared bat preliminary finding of May Affect, Not Likely to Adversely Effect ▪ Peregrine Falcon – no effect	▪ The removal of trees would be limited to the winter hibernation period (November 1 to March 31) when northern long-eared bats would not be present ▪ Mitigation may be required for tree cutting in northern long-eared bat habitat ▪ As design advances and scheduling for tree cutting is planned, any mitigation required would be developed in coordination with FHWA, USFWS, and NYSDEC	▪ The Project would remove approximately 60 trees during construction ▪ Northern long-eared bat preliminary finding of May Affect, Not Likely to Adversely Effect ▪ Peregrine Falcon – no effect	▪ The removal of trees would be limited to the winter hibernation period (November 1 to March 31) when northern long-eared bats would not be present ▪ Mitigation may be required for tree cutting in northern long-eared bat habitat ▪ As design advances and scheduling for tree cutting is planned, any mitigation required would be developed in coordination with FHWA, USFWS, and NYSDEC

4.9.1 No Build Alternative

The No Build Alternative would consist of a future scenario with no changes to the Project study area beyond those incurred by projects that are already committed and planned by others. Most wildlife in the study area is limited to urban-adapted, disturbance-tolerant generalist species. Therefore, no adverse impacts to plant communities, wildlife, forests, and protected species would occur under the No Build Alternative.

4.9.2 Build Alternatives

4.9.2.1 Ecological Communities

The Build Alternatives would be constructed primarily within existing transportation right-of-way. However, portions of the Build Alternatives would be constructed in areas where there is insufficient right-of-way width. Both Build Alternatives would affect approximately 38 acres of land in the study area. Table 4.9-2 presents the Project effects by ecological community for each of the Build Alternatives. Within the study area, these communities represent fragmented habitat as they are limited to maintained transportation right-of-way and are generally characterized by disturbance and non-native or invasive species.

They are common throughout the region and are of low ecological value due to low species diversity, high level of anthropogenic activities, and dominance of non-native and invasive vegetation. In addition, the Project would result in the conversion of one terrestrial cultural community type (e.g., urban vacant lot) to another terrestrial cultural community type (e.g., paved roads, maintained right-of-way), and therefore would not result in any loss of terrestrial cultural community type overall. Therefore, the conversion of the 38 acres of currently disturbed ecological communities of the study area from one community type to another would not result in adverse permanent/operational effects to ecological communities throughout the region. Temporary effects of the Project in ecological communities are discussed in Section 4.17, "Construction Effects." The Project would result in the removal of approximately 60 trees in terrestrial cultural community adjacent to transportation right-of-way.

The disturbed areas not used for transportation infrastructure would be revegetated with species indigenous to Western New York to the extent practicable in accordance with a landscape plan developed for the Project. In addition to the use of native species as part of the planting palate (where reasonable), non-native and invasive species would not be included in the landscape plan. Therefore, the operation of either Build Alternative would be in compliance with EO 13112, "Safeguarding the Nation from the Impacts of Invasive Species" and NYCRR Part 575 "Invasive Species Regulations."

Table 4.9-2. Approximate Ecological Communities Operational Effects within the Study Area

Ecological Community	Approximate Acreage within the Study Area	Approximate Total Effects LRT Build Alternative	Approximate Total Effects BRT Build Alternative
Terrestrial Cultural	263 acres	37.1	37.3
Successional Old Field	3.8 acres	0.5	0.6
Successional Shrubland	3.7 acres	0.9	0.9
Upland Forest	1.9 acres	-	-
Aquatic	1.5 acres	0.2	0.2
Palustrine Forested Wetlands	0.6 acres	-	-
Floodplain Forests	0.5 acres	-	-

4.9.2.2 Wildlife

The Build Alternatives would be constructed within the existing transportation right-of-way and in a heavily urbanized area dominated by buildings, transportation infrastructure, and other impervious surfaces. Levels of human activity and disturbance in the area are high, which further degrades habitat conditions for wildlife and limits the wildlife community to the most disturbance-tolerant species. The small and degraded fragments of habitat within the study area would support the same assemblage of species.

The Project would not result in higher levels of human activity and disturbance as compared to the No Build Alternative to the extent that there would be significant adverse impacts to wildlife in the area, or in the composition of the wildlife community. Therefore, no significant adverse impacts to birds, mammals, reptiles, or amphibians would result from the Build Alternatives.

The Project would have the potential to have adverse impacts on vegetation and wildlife habitat during construction due to the removal of approximately 60 trees. However, with the implementation of mitigation measures outlined below, potential impacts would not be adverse. Mitigation measures would be required for compliance with the Migratory Bird Treaty Act, for consistency with local tree protection ordinances, and to reduce potential impacts on wildlife habitat. Bird species may use trees that could be removed or disturbed during construction and could be affected. Potential mitigation measures would include the following:

- Tree removal would be timed as much as possible to occur outside the migratory bird nesting season, which occurs generally from April 1–September 15 and as early as March 1 for some species.
- If tree removal must occur during the nesting season, two biological surveys would be conducted: one 15 days before and a second 72 hours before the construction that would remove or disturb suitable nesting habitat. The surveys would be performed by a biologist with experience conducting breeding bird surveys. The biologist would prepare survey reports documenting the presence or absence of any protected bird in the habitat to be removed and any other such habitat within 300 feet of the construction work area. If a protected bird were found, surveys would be continued to locate any nests. If an active nest were located, construction within 300 feet of the nest would be postponed until the nest is

vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.

- Avoidance measures would be incorporated into the design of the Project during preliminary engineering where feasible; however, if construction of the Project were to require removal of a protected tree, a permit would be required in accordance with applicable codes and ordinances. Tree removal permits may require replanting of protected trees within the study area or at another location to mitigate for the removal of these trees. Replanting would be done according to the ratios required by tree removal permits and in a size that is appropriate for the species and setting as determined by an arborist. In addition, planted trees would be maintained such that 90 percent are in good condition after 6 months and irrigation would be carried out until the tree is established.

As described in Section 4.17, Construction Effects, anticipated in-stream impacts would take place across Bizer Creek, where an approximately 225 foot wide and 35-foot-span bridge would be constructed across the creek for the Project. Bizer Creek is dominated by non-native (including invasive) plants and the creek has been straightened and armored by the construction of concrete walls and concrete/stone creek bed, it does not reflect a native habitat.

During construction, measures (e.g., cleaning of construction equipment and proper transportation/disposal of soils containing invasive species) would be implemented to avoid the spread of invasive plant species that may occur in the disturbed ecological communities of the Bizer Creek construction. In addition, temporary activities associated with stormwater management and trench dewatering will be managed with BMPs to avoid stream scour/erosion at new and/or existing outfalls and to minimize potential impacts to the water quality of local waterbodies. In addition, any groundwater collected during construction will be properly treated, managed, and discharged in accordance to state and federal regulations.

Operation of the LRT Alternative would result in the long-term loss of daylight exposure to approximately 225 linear feet of Bizer Creek. This loss of daylight is likely to result in a change in the aquatic flora and fauna species composition in the immediate area (under the bridge) and potentially downstream as a result of the potential for a change in water temperature due to shading. In addition, the vegetated stream banks will be converted to developed land in the area of the bridge.

Following construction, ecological communities would be restored to existing conditions and would adapt to their localized habitat changes. Therefore, it is not anticipated that the temporary loss and long-term conversion of the ecological communities in the study area due to construction and operation of the project would not result in significant adverse effects to the overall diversity and abundance of the currently present species.

4.9.2.3 Invasive Species

Under the executive order, Federal agencies cannot authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the U.S.

or elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered.[1] Design and construction of either Build Alternative will include specifications to address the management of invasive species.

Metro will follow NYSDOT policy that is aimed to manage and reduce the spread of invasive plant species. The NYSDOT policy states that a transportation project shall consider and address, to the extent practicable, the effects of invasive species in all aspects of project scoping, planning, design, construction and maintenance for all projects and appropriate activities as detailed in the following guidance:

- Prevent the introduction of invasive species;
- Provide for their control; and
- Minimize the economic, ecologic and human health effects that invasive species cause.

Under the executive order, Federal agencies cannot authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the U.S. or elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered.[2]

4.9.2.4 Threatened or Endangered Species

Metro has made a preliminary effects determination for Federally listed and State listed species with the potential to occur in the study area of both Build Alternatives. A summary of this preliminary effect determination is described in Table 4.9-3 and described below. Coordination among FTA, USFWS and NYSDEC regarding Federally and State listed species is ongoing and will be confirmed and included within the Final EIS.

Table 4.9-3. Preliminary Threatened and Endangered Species Effect Determinations for both Build Alternatives

Common Name	Scientific Name	Preliminary State Effect Determination	Preliminary Federal Effect Determination
Northern Long-Eared Bat	*Myotis septentrionalis*	▪ May Affect, Not Likely to Adversely Effect.	▪ May Affect, Not Likely to Adversely Effect.
Peregrine Falcon	*Falco peregrinus*	▪ No Effect.	▪ N/A

NORTHERN LONG-EARED BAT

An IPaC review for the Project made under the Programmatic Biological Opinion (PBO) for Transportation Projects within the range of the northern long-eared bat was initially conducted on September 30, 2023, and updated on March 27, 2024, and September 15, 2024. This review resulted in a "may affect, and is not likely to adversely affect" determination. This determination becomes effective when the lead Federal action agency or designated non-federal representative

[1] New York State Department of Transportation. Environmental Procedures Manual. 2009. EPM 4.4.9.4 Invasive Species. Accessed September 21, 2022.

[3] Cade, T.J, M. Martell, P. Redig, G. Septon, and H. Tordoff. 1996. "Peregrine Falcons in urban North America." In *Raptors in human landscapes: adaptations to built and cultivated environments.*, by D.M., D. Varland, and J. Negro (eds) Bird. San Diego, CA: Academic Press.

requests the USFWS to rely on the PBO to satisfy the agency's consultation requirements for this project.

During construction of either Build Alternative, removal of approximately 60 trees is expected. Tree removals within the Town of Amherst will be obtained locally, per the town's code chapter 179, to comply with the State and Federal requirements for the timing of tree removal. The removal of these trees would be limited to the winter hibernation period (November 1 to March 31) when northern long-eared bats would not be present. If required, a formal consultation will be conducted when Project construction effects are finalized. There would be no permanent adverse effects to the northern long-eared bat as a result of either Build Alternative, based on Metro's adherence to the timing restrictions.

PEREGRINE FALCON

Tree removal would not have the potential to affect this species, and due to their high tolerance for human activity, effects are not anticipated.[3,4,5,6] There would be no permanent adverse effects to the peregrine falcon as a result of either Build Alternative.

FEDERALLY PROPOSED OR CANDIDATE THREATENED OR ENDANGERED SPECIES

The hibernation period of the tricolor bat overlaps with the northern long-eared bat. The same protective measures described above would be in place to avoid impacts to this species. As currently designed, construction of the LRT Build Alternative and BRT Build Alternative would take place on already constructed in-stream piers, and new piers would not be constructed in Ellicott Creek. Therefore, impacts to the salamander mussel are not likely to occur as a result of either of the Build Alternatives. However, if the design plans change and in-stream activities are required, appropriate mitigation measures will be developed, in consultation with the regulatory agencies, and implemented to ensure the mussel species is protected. Therefore, no permanent adverse effects to proposed threatened or endangered species are expected to result from either Build Alternative.

SPECIES OF SPECIAL CONCERN AND IMPERILED IN NEW YORK STATE

As currently designed, project construction in the vicinity of Ellicott Creek would occur on existing in-stream piers and avoid affecting the floodplain, stream banks, and substrate. In addition, adverse water quality impacts will be minimized with implementation of construction best management practices, erosion control methods, and stormwater pollution plans. Therefore, adverse impacts to the spiny softshell turtle are not anticipated as a result of either Build Alternative. However, if the design plans change and in-stream activities are required, appropriate mitigation measures will be developed, in consultation with the regulatory agencies,

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3 Cade, T.J, M. Martell, P. Redig, G. Septon, and H. Tordoff. 1996. "Peregrine Falcons in urban North America." In *Raptors in human landscapes: adaptations to built and cultivated environments.*, by D.M., D. Varland, and J. Negro (eds) Bird. San Diego, CA: Academic Press.

4 White, C.M., N.J. Clum, T.J. Cade, and W.G. Hunt. 2002. "Peregrine Falcon (Falco peregrinus), version 2.0." Cornell Lab of Ornithology - The Birds of North America. Accessed July 2022. *https://birdsna.org/Species-Account/bna/species/perfal/introduction*.

5 Frank, S. 1994. C*ity Peregrines: A Ten-Year Saga of New York City Falcons.* Blaine, WA: Hancock House Pub Ltd.

6 Loucks, B.A., and C. Nadareski. 2005. "Back from the Brink." New York State Conservationist, 59:19-23.

and implemented to ensure the spiny softshell turtle is protected. Therefore, no permanent adverse effects to listed species are expected to result from either Build Alternative.

Metro has made a preliminary effect determination for species of special concern and imperiled in New York State with the potential to occur in the study area of both Build Alternatives. A summary of this preliminary effect determination is presented in Table 4.9-4.

Table 4.9-4. Preliminary Species of Special Concern and Imperiled in New York State Effect Determinations for both Build Alternatives

Common Name	Scientific Name	Preliminary State Effect Determination	Preliminary Federal Effect Determination
Spiny Softshell Turtle	*Apalone spinifera*	▪ No Effect	▪ N/A

VULNERABLE, IMPERILED, AND OR CRITICALLY IMPERILED SPECIES IN NEW YORK STATE

As currently designed, construction of the LRT Build Alternative and BRT Build Alternative would take place on already constructed in-stream piers in Ellicott Creek, and new piers would not be constructed in the area where mussels are documented to occur. However, if the design plans change and in-stream activities are required, appropriate mitigation measures will be developed, in consultation with the regulatory agencies, and implemented to ensure the mussel species are protected. Therefore, no permanent adverse effects to vulnerable, imperiled, and/or critically imperiled species are expected to result from either Build Alternative.

4.9.3 Potential Mitigation Strategies

Areas disturbed during construction that are not part of the permanent Project footprint would be revegetated to the greatest extent practicable with a restoration seed mix plant and species indigenous to Western New York. These efforts would be conducted in accordance with a Landscape Restoration Plan.

Mitigation may be required for tree cutting in northern long-eared bat habitat. As design advances and scheduling for tree cutting is planned, any mitigation required would be developed in coordination with FHWA, USFWS, and NYSDEC. In addition, any potential stream impacts resulting from a design change will be addressed and mitigated in accordance with state and federal requirements.