18. **Endangered Species**

18.1. **Chapter Overview**

18.1.1. **Introduction**

This chapter discusses the changes to the potential for project improvements to adversely affect threatened and endangered species, as well as state-listed Species of Concern, resulting from the modification of the Preferred Alternative as presented in the Northern Branch DEIS. The revisions specifically affecting endangered and threatened species include:

- **Change in project terminus:** the Preferred Alternative ends in Englewood; consequently, there would be no adverse effects to endangered and threatened species or habitat areas in Tenafly.
- **West Side Avenue alignment:** a portion of the alignment would be located adjacent to habitat common to threatened (R3) species.
- **Relocation of Leonia Station parking deck:** a parking deck is proposed to be developed within Overpeck County Park, a portion of which has minimum species habitat suitability to endangered (R4) and threatened (R3) species.

NJDEP submitted comments on the DEIS expressing general support for the continued conservation of endangered and threatened species, but also raised concerns about the potential decline of the Indiana bat and the cattle egret. NJDEP does not anticipate that the project would result in adverse effects to sensitive species.

18.1.2. **Summary of Findings of the DEIS and the SDEIS**

Review of the United States Fish and Wildlife Service (USFWS) and New Jersey Department of Environmental Protection (NJDEP) Division of Fish and Wildlife (DFW) data, and correspondence with the NJDEP Natural Heritage Program (NHP) and Endangered and Nongame Species Program (ENSP) identified the potential for Indiana bat, bald eagle, black crown night heron, brown thrasher, cattle egret, eastern box turtle, glossy ibis, Henslow’s sparrow, little blue heron, northern harrier, peregrine falcon, snowy egret, and yellow-crowned night-heron habitat to occur within one-half mile of the project corridor (refer to Table 18-1). Based on this information, a series of species habitat surveys were conducted along the existing right-of-way and at station locations during the DEIS phase to determine the presence or absence of suitable habitat for these species. The habitat surveys indicated that the existing habitat proximate to the railroad right-of-way is not suitable to support threatened and endangered species. Minimal forest habitat was identified for the Indiana bat adjacent to the right-of-way due to its presence in a highly-developed urban area.

Changes to the Preferred Alternative included potential habitat by NJDEP’s updated Landscape Project (Version 3.1) data; however, the specific sites identified are either urban in use or otherwise disturbed or built. Therefore, while these improvements occur in areas generally identified as supporting habitat, it is unlikely that these improvements would have an adverse effect on sensitive species. Figures 18-1 through 18-9 illustrate the Preferred Alternative’s endangered and threatened species impacts for each project element.
<table>
<thead>
<tr>
<th>Species Common Name</th>
<th>Species Scientific Name</th>
<th>Federal Status</th>
<th>State Status</th>
<th>Agency Record Review</th>
<th>Habitat Survey</th>
<th>Revised Between the DEIS and SDEIS</th>
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</thead>
<tbody>
<tr>
<td>USFWS List</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Indiana bat</td>
<td><em>Myotis sodalis</em></td>
<td><strong>E</strong></td>
<td><strong>E/R4</strong></td>
<td>Potentially within corridor (seasonal restriction)</td>
<td>No favorable habitat was observed in project corridor</td>
<td>No</td>
</tr>
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<td><strong>NJDEP NHP List</strong></td>
<td></td>
<td><strong>E/R4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>bald eagle</td>
<td><em>Haliaeetus leucocephalus</em></td>
<td>-</td>
<td><strong>E/R4</strong></td>
<td>Potentially within ½ mile of project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>Yes</td>
</tr>
<tr>
<td>black crowned night heron</td>
<td><em>Nycticorax nycticorax</em></td>
<td>-</td>
<td><strong>T/R3</strong></td>
<td>Potentially within ½ mile of project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>Yes</td>
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<tr>
<td>brown thrasher</td>
<td><em>Toxostoma rufum</em></td>
<td>-</td>
<td><strong>SC</strong></td>
<td>Potentially within ½ mile of project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>Yes</td>
</tr>
<tr>
<td>cattle egret</td>
<td><em>Bubulcus ibis</em></td>
<td><strong>S</strong></td>
<td><strong>T/R3</strong></td>
<td>Potentially within ½ mile of project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
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<td>eastern box turtle</td>
<td><em>Terrapane carolina-carolina</em></td>
<td>-</td>
<td><strong>SC</strong></td>
<td>Potentially within ½ mile of project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>No</td>
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<tr>
<td>glossy ibis</td>
<td><em>Plegadis falcinellus</em></td>
<td>-</td>
<td><strong>SC</strong></td>
<td>Potentially within ½ mile of project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>No</td>
</tr>
<tr>
<td>Henslow’s sparrow</td>
<td><em>Ammodramus henslowii</em></td>
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<td><strong>E/R4</strong></td>
<td>Potentially within ½ mile of project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>Yes</td>
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<tr>
<td>little blue heron</td>
<td><em>Egretta caerulea</em></td>
<td>-</td>
<td><strong>SC</strong></td>
<td>Potentially within ½ mile of project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>No</td>
</tr>
<tr>
<td>northern harrier</td>
<td><em>Circus cyaneus</em></td>
<td>-</td>
<td><strong>SC</strong></td>
<td>Potentially within ½ mile project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>Yes</td>
</tr>
<tr>
<td>peregrine falcon</td>
<td><em>Falco peregrinus</em></td>
<td>-</td>
<td><strong>E/R4</strong></td>
<td>Potentially within ½ mile project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>Yes</td>
</tr>
<tr>
<td>snowy egret</td>
<td><em>Egretta thula</em></td>
<td>-</td>
<td><strong>SC</strong></td>
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<td>No favorable habitat was observed in project corridor</td>
<td>No</td>
</tr>
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<td>yellow crowned night heron</td>
<td><em>Nyctanassa violacea</em></td>
<td>-</td>
<td><strong>T/R3</strong></td>
<td>Potentially within ½ mile of project corridor</td>
<td>No favorable habitat was observed in project corridor</td>
<td>No</td>
</tr>
</tbody>
</table>

R3 = State Threatened; R4 = State Endangered; R5 = Federal Endangered /Threatened
T = Threatened; E = Endangered; SC = Species of Special Concern; S = Stable

Source: NJDEP Division of Fish and Wildlife, Natural Heritage Program, Endangered and Nongame Species Program, 2014.
Northern Branch Endangered Species Habitats

Figure 18-1

Source: NJ Department of Environmental Protection and Jacobs
Northern Branch Endangered Species: West Side Avenue

Figure 18-2

Half-Mile Study Area
HBLR Stations
Proposed Alignment
At Grade
Viaduct
Hudson Bergen Light Rail
RANK
3 - State Threatened
4 - State Endangered

Source: NJ Department of Environmental Protection and Jacobs
Northern Branch Endangered Species: 91st Street Station

Figure 18-3

Half-Mile Study Area
Proposed Stations
Proposed Alignment
At Grade
Viaduct
RANK
3 - State Threatened
4 - State Endangered

Source: NJ Department of Environmental Protection and Jacobs

NJTRANSIT
The Way To Go.

JACOBS
Northern Branch Endangered Species: Ridgefield Station

Figure 18-4

Half-Mile Study Area
- Proposed Stations

Proposed Alignment
- At Grade
- Underpass

RANK
- 3 - State Threatened
- 4 - State Endangered

Source: NJ Department of Environmental Protection and Jacobs

NJ TRANSIT
The Way To Go.
Northern Branch Endangered Species: Leonia Station

Figure 18-6

Half-Mile Study Area
Proposed Stations
Proposed Alignment
At Grade
Underpass
RANK
3 - State Threatened
4 - State Endangered

Source: NJ Department of Environmental Protection and Jacobs

NJ TRANSIT
The Way To Go.

JACOBS
Northern Branch Endangered Species: Englewood Route 4 Station

Figure 18-7

- Half-Mile Study Area
- Proposed Stations
- Proposed Alignment
  - At Grade
  - Underpass

RANK
- 4 - State Endangered

Source: NJ Department of Environmental Protection and Jacobs
Northern Branch Endangered Species: Englewood Town Center Station

Figure 18-8

Half-Mile Study Area
Proposed Stations
Proposed Alignment
- At Grade
- Underpass

RANK
- 3 - State Threatened
- 4 - State Endangered

Source: NJ Department of Environmental Protection and Jacobs
Northern Branch Endangered Species: Englewood Hospital & Medical Center Station

Figure 18-9

Half-Mile Study Area

Proposed Stations

Proposed Alignment

At Grade

Source: NJ Department of Environmental Protection and Jacobs
18.2. Methodology

Information on endangered and threatened species in the Northern Branch study corridor was obtained from the USFWS website, NJDEP DFW NHP, and ENSP resource listings and GIS datasets produced by the NJDEP Landscape Project (Version 3.1). The reassessment was conducted in compliance with the Federal Endangered Species Act, the Freshwater Wetlands Protection Act, and the NJDEP NHP. Additionally, the NJDEP Landscape Project (Version 3.1) has been updated to display wildlife habitat ranked according to the rarity of the species which occur in specific patches of habitat. While habitat patches could have multiple species present, they are given the rank associated with the most sensitive species documented to have occurred at some point in that habitat. The highest, Rank 5, is used to indicate habitat for those species which are federally endangered or threatened. Rank 4 is used for state endangered species, and Rank 3 for state threatened species. The NJDEP Landscape Project takes into account the new species’ statuses, and implements a new, more precise scientific methodology used previously only in the Highlands region.

18.3. Environmental Review

18.3.1. Existing Conditions

No changes were made to the list of federally-listed threatened or endangered species within the study area. However, the updated NJDEP NHP and DFW reclassified the cattle egret from Special Concern to threatened, and identified six additional state species that would have the potential of being located within the one-half mile study area. Following is a description of each of these species.

*Bald Eagle (Haliaeetus leucocephalus)*
The bald eagle is classified by the NJDEP NHP as an endangered species. The bald eagle usually builds large stick nests close to water in trees taller than the forest canopy. They begin nest building in early January, adding to their existing nest. Nesting pairs lay one to three eggs in mid-January to early March, and incubate for about 35 days. Bald eagles are sensitive to human disturbance and would abandon their nest sites if people encroach on the area during the nesting season.

*Henslow’s Sparrow (Ammodramus henslowii)*
The Henslow’s sparrow is classified by the NJDEP NHP as an endangered species. Henslow’s sparrows prefer concealed lush habitats dominated by high and dense herbaceous vegetation containing a thick layer of ground litter. Henslow’s sparrows are tolerant of a variety of moisture regimes and thus would occupy both wet and dry habitats.

*Peregrine Falcon (Falco peregrinus)*
The peregrine falcon is classified by the NJDEP NHP as an endangered species. The peregrine falcon is a large bird with gray to bluish backs, light-colored breasts, and a dark crown and flight feathers. Peregrine falcons have superior wing speed and can attain dive speeds up to 200 mph. Traditionally peregrine falcons’ nest sites were restricted to cliffs and rock outcrops. However, as habitat areas became built-up, the birds took to nesting on buildings and bridges. Today, peregrines continue to nest on these man-made structures, although there are no remaining cliff nests in New Jersey. During the peregrine falcon’s population recovery two decades ago, artificial nesting platforms were erected in coastal marshes. Peregrine falcons continue to nest on these platforms today and also favor open areas for foraging and often hunt over coastal marshes, beaches, or open water.

*Black-Crowned Night-Heron (Nycticorax nycticorax)*
The black-crowned night-heron is classified by the NJDEP NHP as a threatened species. The black-crowned night-heron is a stocky, medium sized black, gray, and white wading bird having a grayish hind
Black-crowned night-herons nest on dredge spoil islands, wooded swamps and coastal dune forests that contain scrub thickets or mixed phragmites (*Phragmites communis*) marshes that are in close proximity to water. Colonies may be located in densely concealed scrubby thickets and forests with vegetation of various heights. Black-crowned night-herons hunt along the edges of ponds and creeks within shallow tide pools, tidal channels, and mudflats.

*Brown Thrasher (Toxostoma rufum)*
The brown thrasher is classified by the NJDEP NHP as a species of special concern. Brown thrashers breed in dry, open country, especially in thickets and scrubby fields and brushy hillsides covered with hawthorn. They only occasionally breed in urban settings, such as yards, gardens, and fencerows. Although this species uses a wide variety of habitats, highest densities are obtained in shrub or mid-successional stages of forests. Habitat is most suitable when density of woody stems and portions of closed-canopy forest and agriculture are likely to be found within 200 meters of the forest edge.

*Northern Harrier (Circus cyaneus)*
The northern harrier is classified by the NJDEP NHP as a species of special concern. The northern harrier is found primarily in open coastal marshes, emergent wetlands, fallow fields, grasslands, meadows, airports, and agricultural areas. Within these areas, harriers nest in the drier areas of high marsh that are dominated by salt hay, marsh elder, or reed grass. Harriers may also nest in freshwater tidal marshes that contain phragmites, sedges, or other emergent wetland plants. Inland breeding sites may be located in managed, fallow, or low-intensity agricultural fields that contain tall grasses and herbaceous vegetation.

**18.3.2. Potential Impacts and Mitigation**

**18.3.2.1. No Build Alternative**

There are no changes to the impacts associated with the No Build Alternative as compared with the DEIS.

**18.3.2.2. Preferred Alternative**

Following is a description of how the revisions to the Preferred Alternative and the revised data affect threatened and endangered species, followed by a description of the mitigation that is applicable to all of the impacted species. There are no changes to the potential for impacts at the 91st Street Station, Ridgefield Station, Palisades Park Station, Englewood Route 4 Station, Englewood Town Center Station, or the Englewood Hospital and Medical Center Station.

**West Side Avenue Alignment**

Although NJDEP NHP correspondence and NJDEP GIS Landscape Data Version 3.1 identified threatened (yellow-crowned night-heron – Rank 3), endangered species (bald eagle, Henslow’s sparrow, and peregrine falcon – Rank 4) and species of concern (glossy ibis) on site and within a half-mile adjacent to the proposed alignment, no adverse impacts are anticipated to occur because the alignment would be located on an existing paved roadway (refer to Figure 18-2). New structures and utilities along West Side Avenue near 69th Street would be designed in an already densely developed urban corridor where there is minimal or insufficient habitat to support the above mentioned species. There are no species identified in the undeveloped area near 85th Street, where the 85th Street Viaduct and the 85th Street Extension would be constructed above and under the CSX railroad, respectively.

**Leonia Station**
The four-story parking deck is proposed to be located within the Leonia South Area of Overpeck County Park that the NJDEP Landscape 3.1 maps shows as supportive of R3 (threatened) species (refer to Figure
18-3). However, Leonia Station improvements would occur in areas that are already disturbed. The parking deck would be constructed on a paved abandoned basketball court, the site of an existing comfort building, and some areas of maintained lawn. The station platforms would be constructed within the maintained railroad right-of-way, which is cleared of vegetation as a matter of proper trackway maintenance. Therefore, Leonia Station and its supportive parking deck would not result in additional threatened or endangered species habitat impacts.

**Mitigation**

The implementation of the Preferred Alternative is not expected to adversely impact threatened or endangered species habitat along the project corridor or at station sites; therefore, mitigation for operational impacts is not required. Should tree clearing during construction activities be required, NJ TRANSIT would consult with the USFWS, and seasonal restrictions would likely be implemented (prohibiting tree clearing between April 1 and September 30). Additionally, NJ TRANSIT would consult with NJDEP DFW to conduct field surveys to assess whether tree removal during construction would have adverse impacts on the bald eagle species.

**18.4. Summary of Potential Environmental Effects of the DEIS and the SDEIS**

Although the Northern Branch Study Area includes areas mapped by NJDEP Landscape 3.1 data as supportive of threatened and endangered species and correspondence with the respective wildlife agencies indicated the potential for threatened or endangered species to occur within the Northern Branch study area, project improvements are confined to land that is either already built upon, disturbed, or otherwise maintained in a way that substantially limits its value as habitat for sensitive species. A field survey and subsequent correspondence with the USFWS and NJDEP DFW confirmed that the study area corridor is unlikely to support communities of the identified species.