RARE, THREATENED, AND ENDANGERED SPECIES

The only rare, threatened or endangered (RTE) species that has been identified in the vicinity of the pipeline relocation is the Indiana bat. The identification of that species in the area is based on the mist net capture of a single bat (a non-reproductive female) in June 2006 at approximately 2,000 feet from the nearest section of relocated pipeline. During the permitting of the landfill expansion, a Biological Assessment of the potential project impacts (including utilities relocations) on the bat was prepared for U.S. Fish & Wildlife Service (USFWS) review. In a December 13, 2006 letter, the USFWS concurred with the Biological Assessment, stating that "all effects to the Indiana bat are anticipated to be insignificant (effects which are unable to be meaningfully measured, detected, or evaluated) or discountable (effects extremely unlikely to occur)." A copy of the USFWS letter is attached.

The protective, mitigative measures that have been taken with respect to the Indiana bat are described in Section 3.3 of the Biological Assessment (also attached) and include a preconstruction survey of potential roost trees, a seasonal restriction on tree clearing, habitat creation (by creating one snag for every roost tree removed), and a conservation easement. Two potential roost trees were identified in the area required to be cleared for the pipeline relocation, and the compensating snags already have been created.

Faxed 12/13/06

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

December 13, 2006

Ms. Margaret Crawford
Biologist
Auburn Field Office
U.S. Army Corps of Engineers
7413 County House Road
Auburn, NY 13021

Dear Ms. Crawford:

This is in regards to the proposed Seneca Meadows Landfill expansion project located in the Town of Seneca Falls, Seneca County, New York. The applicant, Seneca Meadows, Inc., proposes a 178-acre landfill expansion adjacent to its existing solid waste landfill. Seneca Meadows, Inc., has applied for a Department of the Army permit to fill approximately 71 acres of wetland and 3,800 linear feet of Black Brook, temporarily impact 19-23 acres of wetlands associated with the relocation of Black Brook, and temporarily impact 1.67 acres of wetland for relocation of utilities. Pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the U.S. Army Corps of Engineers (Corps) has determined the proposed project may affect, but is not likely to adversely affect, the Federally-listed endangered Indiana bat (*Myotis sodalis*).

Based on the information provided in your December 8, 2006, letter and the Final Biological Assessment, Effect to Indiana Bats (*Myotis sodalis*) from the Proposed Seneca Meadows Landfill Expansion, Seneca County, New York (BHE Environmental, Inc. 2006), we concur with your determination, as all effects to the Indiana bat are anticipated to be either insignificant (effects which are unable to be meaningfully measured, detected, or evaluated) or discountable (effects extremely unlikely to occur).

Except for the potential for Indiana bat and occasional transient individuals, no other Federally-listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project action area. In addition, no habitat in the project area is currently designated or proposed "critical habitat" in accordance with provisions of the ESA. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of Federally-listed and proposed endangered and threatened species in New York is available for your information.* Until the proposed project is complete, we recommend that you check our website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.*

The above comments pertaining to endangered species under our jurisdiction are provided as pursuant to the ESA. As you are aware, the Service previously provided comments pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) in our April 7, 2006, letter to the Corps.

The Indiana bat is listed as endangered by the State of New York. Any additional information regarding the proposed project and its potential to impact Indiana bats should be coordinated with both this office and with the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC contact for the Endangered Species Program is Mr. Peter Nye, Endangered Species Unit, 625 Broadway, Albany, NY 12233 (telephone: [518] 402-8859).

For additional information on fish and wildlife resources or State-listed species, we suggest you contact the appropriate NYSDEC regional office(s) and the New York Natural Heritage Program Information Services.*

Thank you for your time. If you require additional information please contact Robyn Niver at (607) 753-9334.

Sincerely,

David A. Stilwell
Field Supervisor

References Cited:

BHE Environmental, Inc. November 30, 2006. Final Biological Assessment, Effect to Indiana Bats (*Myotis sodalis*) from the Proposed Seneca Meadows Landfill Expansion, Seneca County, New York. BHE Environmental, Inc., Cincinnati, Ohio.

cc: Seneca Meadows, Inc., Waterloo, NY (T. Hasek)
BHE Environmental, Inc., Cincinnati, OH (R. Romme)
NYSDEC, Avon, NY (K. Mercant, S. Jones)
NYSDEC, Albany, NY (Endangered Species; Attn: P. Nye)
EPA, New York, NY (J. Cantilli)

PN: 1735.002-001

November 30, 2006

FINAL BIOLOGICAL ASSESSMENT

EFFECTS TO INDIANA BATS (*MYOTIS SODALIS*) FROM THE PROPOSED SENECA MEADOWS LANDFILL EXPANSION SENECA COUNTY, NEW YORK

Prepared for:
U.S. Army Corps of Engineers
Buffalo District
1776 Niagara Street
Buffalo, New York 14207

Prepared by:
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, Ohio 45246-4131
Phone: 513.326.1500
www.bheenvironmental.com

and

Seneca Meadows, Inc.
1786 Salcman Road
Waterloo, New York 13165

of oaks or hickory seedlings, saplings, or trees will occur other than where unavoidable.

Additional and detailed information on the Wetland Mitigation Project can be found in the Mitigation/Enhancement Report.

3.3 PROJECT DESIGN FEATURES

The following aspects of the Project and the Wetland Mitigation Project are designed to limit effects to Indiana bats, to conserve habitat or otherwise to assist in the recovery of the species.

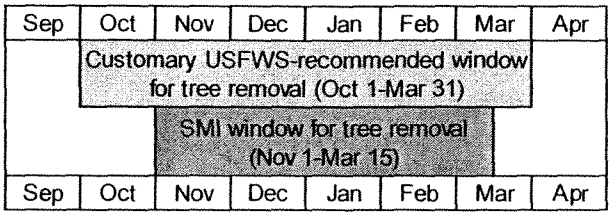
Although SMI was initially advised that no federally listed species were expected to occur in the Action Area, SMI, after informal discussions with the USFWS, considered it prudent to assume presence of the Indiana bat because of the existence of the Jamesville Quarry Cave hibernaculum approximately 41 miles (66 km) east of the center of the Project. Accordingly, SMI's DGEIS and Natural Resources Report assumed Indiana bat presence during spring, summer, and/or fall, and proposed proactive approaches of placing seasonal limits on tree clearing and providing roosting substrate to avoid, minimize, and compensate for potential impacts to Indiana bat habitat. Since preparation of the DGEIS and Natural Resources Report, additional project design features have been developed to avoid, minimize, and compensate for potential impacts to Indiana bat habitat. The project design features are described below.

3.3.1 Preconstruction Survey for Potential Roost Trees

Prior to the initiation of tree clearing, SMI will enumerate potential roost trees (PRTs) in portions of the Action Area where forest will be removed. For purposes of this assessment, roost trees will have the following characteristics:

- ≥22 cm (9 inches) dbh,
- ≥3 m (10 feet) in height,
- no overarching canopy directly above the tree trunk,
- no understory canopy within 2 m (6.6 feet) of at least one-half of the trunk of the tree,
- ≥25 percent of the tree covered by exfoliating bark, and
- at least one half of the bole of tree will be free of obstructing vines.
- During tree clearing, PRTs will be avoided to the maximum extent practicable. SMI anticipates that it will be necessary to remove some PRTs within the landfill footprint (84 acres of trees to be removed), for relocation of third-party owned utilities (2.1 acres), and, in limited instances, for the realignment of Black Brook (10.6 acres), construction of the feeder channel (0.1 acres), and for construction of temporary construction access routes (7.5 acres),

3.3.2 Seasonal Restrictions on Tree Clearing



Pursuant to consultation with the USFWS, coordination with NYSDEC and species experts, and SMI's desire to assist recovery of the species, no trees will be removed in the Action Area between March 15 and November 1, inclusive. This seasonal restriction is more conservative (to the benefit of Indiana bats) than the seasonal window typically recommended by the USFWS (March 31 to October 1).

3.3.3 Habitat Creation

For each PRT that cannot be avoided during construction (and must be removed), SMI will create one snag in the Black Brook enhancement corridor or the Wetland Mitigation Project area or elsewhere in the Action Area. These snags will be created by girdling deciduous trees other than American beech, American sycamore, basswood, black cherry, box elder, or willows. Girdled trees will be at least 3 meters (10 feet) in height with a dbh of at least 22 cm (9 inches). The created snag will be located as close as possible to the tree removed, but in no case greater than 1,000 meters (3,280 feet), and will be selected so that at least one-half of the resulting snag will be exposed to direct sunlight (e.g., substantial canopy gap, or with southern or western exposure). We anticipate exfoliating bark on girdled trees will be available in the year following girdling. Trees selected for girdling will have no understory canopy within 2 meters (7 feet) of at least one-half of the trunk of the tree, and any obstructing vines on the tree trunk will be cut at ground level.

Girdling is an effective method to increase the number of snags in the Acton Area, and is the best technique to quickly (within a year) provide potential roost habitat beneath exfoliating bark. Whether natural or artificially created, snags are an ephemeral resource likely to provide suitable roost habitat for a period less than 10 years in duration. Bark remains tightly adhered to the tree trunk early in this period, and within six to ten years completely falls off the tree. With conditions like those present in much of the Action Area, in which there is an abundance of mid-sized trees, girdling provides an effective means to generate potential roost sites without jeopardizing the availability of trees that would otherwise soon grow into large trees or snags greater than 9 inches (22 cm) dbh. It is snags of this size and larger that appear to be used preferentially by Indiana bat maternity colonies, and may be a limiting factor throughout much of the species' summer range.

In addition to the creation of PRTs, SMI will enhance foraging and roosting habitat through removal and/or thinning of subcanopy herbaceous and woody vegetation (including trees). This silvicultural treatment will occur within the Black Brook realignment and enhancement corridor and within the Wetland Mitigation Project area. Information describing this understory removal/thinning is provided in the Wetland Mitigation/Enhancement Report, Appendix C, Section II. No trees over 6 inches (15 cm) dbh will be removed in this process.

3.3.4 Conservation Easement

SMI will establish an approximately 987-acre Conservation Easement, the approximate boundaries of which are depicted in Figure 9. Activities within the Conservation Easement will be limited to reserved uses as described in the Deed of Conservation Easement (Appendix D). Prohibited activities include construction and alteration of lands or waters except as necessary to implement mitigation and enhancement projects (i.e., vegetation removal, replanting, salvage and other replacement techniques, dredging and/or excavating, and other construction and related activities)(see Appendix D, Recitals, Section 3). Pursuant to the Deed of Conservation Easement, SMI will make sufficient funds available to ensure perpetual care and maintenance of the property within the Conservation Easement.

4.0 ENVIRONMENTAL BASELINE

The Action Area is located in a mixed-use area of Seneca County, New York, and is currently bordered by Route 414, forested areas, and agricultural areas (Figure 2). The Action Area is zoned for industrial use, is partially developed, and encompasses approximately 1,718 acres of land. Review of historical photographs indicates the area was substantially devoid of forest cover in a photograph dated 1938. Based upon the Land Use and Land Cover (LULC) database maintained by the U.S. Geological Survey (USGS), approximately 681 acres (40 percent) of the Action Area are forested.

The Action Area is centrally located within the glacial lake plain area of Seneca County and is within the Erie-Ontario physiographic province. The glacial lake plain is a low-lying, flat area. As a result, the topography in the Action Area is generally flat, with a minor localized southward slope (DGEIS). Current elevations of the Action Area range from 480 feet to 490 feet (146 meters to 149 meters) above msl. As discussed in detail in the DGEIS and Natural Resources Report, the majority of the Action Area is dominated by hydric soils and soils with the potential to contain hydric inclusions.

4.1 VEGETATIVE COMMUNITIES

The Action Area was previously assessed for land cover and/or community types during two natural resources inventories described in detail in the Natural Resources and Mitigation/Enhancement reports. Descriptions of forested community types, which provide potentially suitable Indiana bat roosting and foraging habitat, are described briefly below. Greater detail about each community type can be found in the Natural Resources and Mitigation/Enhancement reports.

- **Red Maple Hardwood Swamp**. Dominant overstory tree species are red maple, ash, elm, yellow birch, and swamp white oak. Dominant understory species are winterberry, spicebush, and alder. The understory layer is dense in red maple hardwood swamps.
- **Successional-Disturbed Substrate Forest.** These areas are indicative of previous disturbance and are characterized by cottonwood, quaking aspen, gray birch, silver maple, red maple, and hickory spp.