United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

RECEIVED
FEB 1 2005
Lawler, Matusky & Skelly Engineers LLP

January 26, 2005

Mr. Steve M. Seymour
Project Manager
Lawler, Matusky & Skelly Engineers, LLP
P.O. Box 1509
Pearl River, NY 10965

Dear Mr. Seymour:

This responds to your November 5, 2004, letter requesting information on the presence of endangered or threatened species in the vicinity of the Legacy Ridge Property on Mineral Spring Road in the Town of Woodbury, Orange County, New York.

There is potential for the Federally- and State-listed endangered Indiana bat (*Myotis sodalis*) to occur within the proposed project area. The Indiana bat is known to winter in six counties in New York State. While the U.S. Fish and Wildlife Service (Service) has learned a great deal about the wintering population with standardized biennial counts organized by the New York State Department of Environmental Conservation (NYSDEC) Endangered Species Unit, we are continuing to study Indiana bat migratory patterns and summer habitat use within the State. Previous research has documented Indiana bat movements of up to 330 miles between hibernacula and summer habitats (Kurta and Murray 2002). However, that study, as well as the majority of research on Indiana bats, took place in the Midwest.

In the Northeast, multiple State and Federal agencies are investigating Indiana bat movements and the most recent studies of bats from hibernacula in Essex and Ulster Counties, New York, provide additional information. In the spring of 2002 through 2004, the NYSDEC successfully tracked female Indiana bats from their hibernacula in Essex and Ulster Counties to their spring roosts, distances up to approximately 30 miles. From the Ulster County study, multiple roosts were located on both sides of the Hudson River in the Towns of Crawford, Wallkill, Hamptonburgh, and New Windsor, Orange County, and near the City of Poughkeepsie and in the Towns of Beekman, East Fishkill, and LaGrange, Dutchess County. The closest observed roost trees were within approximately 7 miles from the proposed project and the Ulster County hibernacula are approximately 34 miles from the proposed project. Based on the proximity of the proposed project site to both the hibernacula and known spring roost locations, the Indiana bat may be using the proposed project site if suitable roosting or foraging habitat is present.

The Indiana bat is typically associated with cave habitats for hibernacula and trees with exfoliating bark for roosting. Suitable potential summer roosting habitat is characterized by trees (dead, dying, or alive) or snags, greater than or equal to 5 inches diameter breast height (d.b.h.) with exfoliating or defoliating bark, or containing cracks, crevices, or holes that could potentially

be used by Indiana bats as a roost. However, maternity colonies generally use trees greater than or equal to 9 inches d.b.h. Overall, structure appears to be more important than a particular tree species or habitat type. The growing body of information, including ongoing studies in New York, indicates usage of numerous species of trees that contain suitable structure. Only site-specific information can lead to habitat suitability determinations. Additional information on potentially suitable summer habitat can be found on our website at http://nyfo.fws.gov/es/ibatdraft99.pdf.

Streams, associated floodplain forests, and impounded water bodies (ponds, wetlands, reservoirs, etc.) provide preferred foraging habitat for pregnant and lactating Indiana bats, some of which may fly up to 1.5 miles from upland roosts. Indiana bats also forage within the canopy of upland forests, over clearings with early successional vegetation (*e.g.* old fields), along the borders of croplands, along wooded fencerows, and over farm ponds in pastures (U.S. Fish and Wildlife Service 1999).

The project site should be evaluated and described by a qualified person as to the presence, amount, and distribution of suitable summer roosting/maternity and foraging habitat, and the presence of any mine(s)/cave(s) that could serve as a hibernacula that would be disturbed by the proposed project. Please contact us to discuss this evaluation in greater detail. Staff from our office may be available to assist with an initial site visit to determine whether additional detailed habitat analyses or surveys for Indiana bats will continue to be recommended.

In addition to the Indiana bat, the proposed project is less than 5 miles from historic bog turtle (*Clemmys muhlenbergii*) sites and approximately 10 miles from an extant bog turtle site. The bog turtle is Federally-listed as threatened and State-listed as endangered. The Service recommends that an evaluation be completed of any existing habitat that would be disturbed (directly or indirectly) by the project, and its potential to support the bog turtle (Phase I survey). Bog turtles prefer open canopy wetlands with soft, saturated soils such as fens or sedge meadows fed by seeps and springs of cold groundwater that has been in contact with calcium-rich bedrock or soils. In New York, bog turtles are very often found in or near rivulets having deep mucky substrate, but where above-surface water depths are very shallow - usually only a few inches deep at most. Plant species commonly associated with bog turtle habitats include tamarack (*Larix laricina*), cinquefoil (*Potentilla* spp.), alders (*Alnus* sp.), willows (*Salix* sp.), sedges (*Carex* sp.), sphagnum moss (*Sphagnum* sp.), jewelweed (*Impatiens capensis*), rice cut-grass (*Leersia oryzoides*), tearthumb (*Polygonum sagittatum*), arrow arum (*Peltandra virginica*), red maple (*Acer rubrum*), skunk cabbage (*Symplocarpus foetidus*), rushes (*Juncus* sp.), and bulrushes (*Scirpus* sp.). If the evaluation indicates that the site has the potential to support the bog turtle, it should be surveyed by a qualified person to determine the presence or absence of this species (Phase II surveys). Service guidelines for bog turtle surveys* are available for your information. Please contact this office before conducting any Phase II surveys.

The project's environmental documents should identify project activities that might result in adverse impacts to the Indiana bat, bog turtle, or their habitat. Information to assist with the evaluation of potential impacts on bog turtles can be found in Appendix A - Bog Turtle Conservation Zones of the Bog Turtle (*Clemmys muhlenbergii*) Northern Population Recovery Plan (U.S. Fish and Wildlife Service 2001) which can be found at http://nyfo.fws.gov/es/btconszone.pdf. Information on any potential impacts and the results of any recommended habitat analyses or surveys for the Indiana bat and bog turtle should be provided to this office and they will be used to evaluate potential impacts to the Indiana bat, bog

turtle, or their habitat, and to determine the need for further coordination or consultation pursuant to the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Except for the potential for Indiana bat, bog turtle, and occasional transient individuals, no other Federally-listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact areas. In addition, no habitat in the project impact areas are 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. If the proposed project is not completed within one year from the date of this letter, we recommend that you contact us to ensure that the listed species presence/absence information for the proposed project is current.

The above comments pertaining to endangered species under our jurisdiction are provided as technical assistance pursuant to the ESA. This response does not preclude additional Service comments under other legislation.

The NYSDEC requests that you be advised that the timber rattlesnake (*Crotalus horridus*) occurs in the vicinity of the proposed project. The timber rattlesnake is listed as threatened by the State of New York. In addition, as stated above, the Indiana bat and bog turtle are listed as endangered by the State of New York. Therefore, the information requested above should be coordinated with both this office and with the 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:

New York State Department of Environmental Conservation
New York Natural Heritage Program Information Services
625 Broadway
Albany, NY 12233-4757
(518) 402-8935

Since wetlands may be present, you are advised that National Wetlands Inventory (NWI) maps* may or may not be available for the project area. However, while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes.

Work in certain waters of the United States, including wetlands, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act, the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).* In addition, should any part of the proposed project be authorized, funded, or carried out, in whole or in part, by a Federal agency, such as the Corps, further consultation between the Service and that Federal agency pursuant to the ESA may be necessary.

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

Sincerely,

David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at: http://nyfo.fws.gov/es/section7.htm

References:

Kurta, A., and S.W. Murray. 2002. Philopatry and migration of banded Indiana bats (*Myotis sodalis*) and effects of radio transmitters. Journal of Mammalogy 83(2):585-589.

U.S. Fish and Wildlife Service. 1999. Agency Draft Indiana Bat (*Myotis sodalis*) Revised Recovery Plan. Fort Snelling, MN: U.S. Department of the Interior, Fish and Wildlife Service, Region 3. 53 p.

U.S. Fish and Wildlife Service. 2001. Bog Turtle (*Clemmys muhlenbergii*), Northern Population, Recovery Plan. Hadley, Massachusetts. 103 pp.

cc: NYSDEC, New Paltz, NY (Attn: S. Joule)
NYSDEC, Albany, NY (Endangered Species; Attn: P. Nye/A. Hicks/A. Breisch)
NYSDEC, Albany, NY (Natural Heritage)
COE, New York, NY

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **FAX:** (518) 402-8925
Website: www.dec.state.ny.

Erin M. Crotty
Commissioner

November 22, 2004

Stephen M. Seymour
Lawler, Matusky & Skelly Engineers
1 Blue Hill Pl, Box 1509
Pearl River, NY 10965

Dear Mr. Seymour:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the Legacy Ridge Property, area as indicated on the map you provided, located in the Town of Popolopen Lake, Orange County.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered sensitive and may not be released to the public without permission from the New York Natural Heritage Program.

The presence of rare species may result in this project requiring additional permits, permit conditions, or review. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environment impact assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Charlene Houle

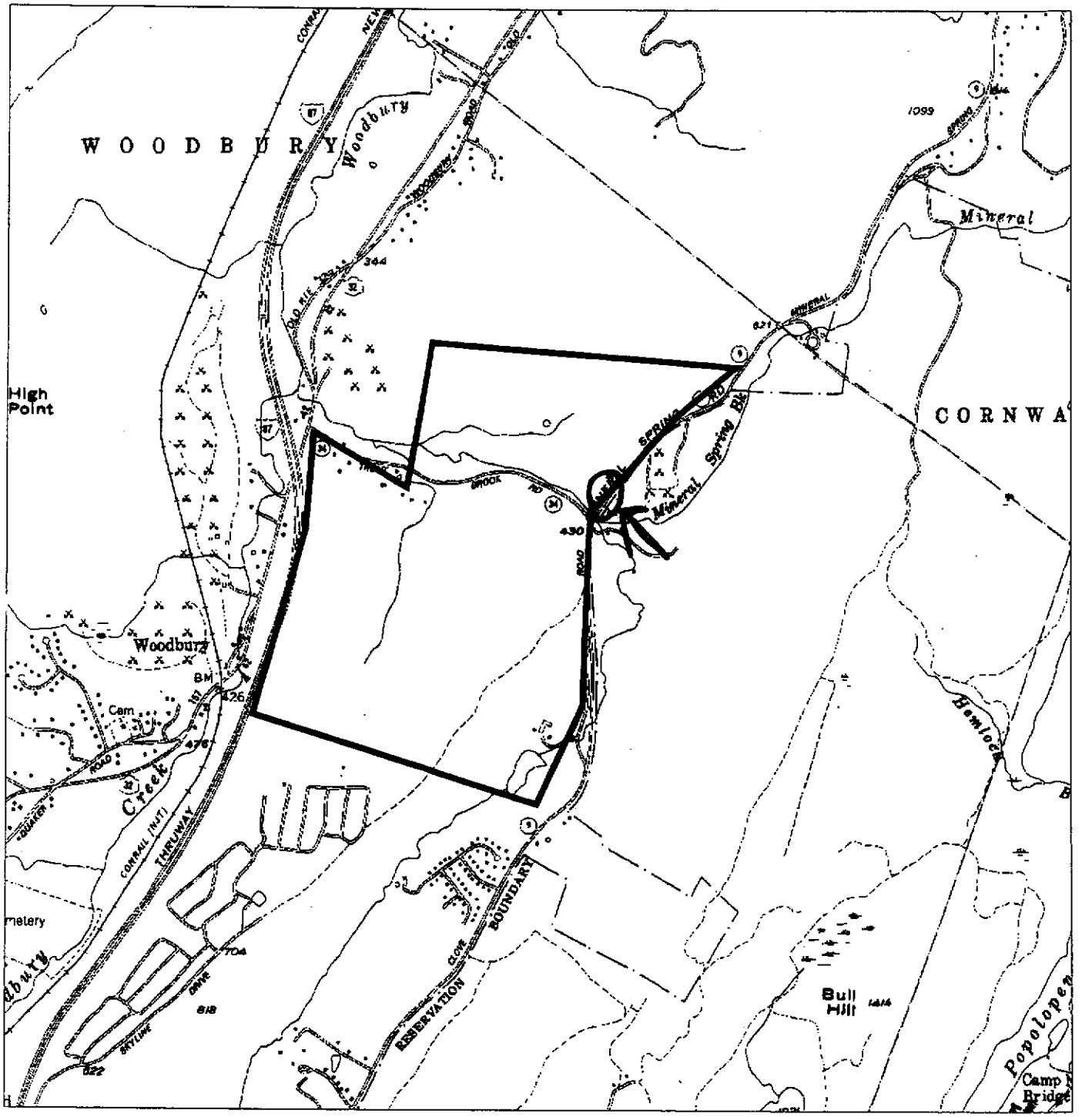
Charlene Houle, Information Services
NY Natural Heritage Program

Encs.

cc: Reg. 3, Wildlife Mgr.
Reg. 3, Fisheries Mgr.
Peter Nye, Endangered Species Unit, Albany

Natural Heritage Map of Rare Species and Ecological Communities

Prepared November 22, 2004 by the NY Natural Heritage Program, NYS DEC, Albany, NY



Map Overview

N

Scale: 1:24,000

0.3 0 0.3 0.6 Miles

Project

New York Natural Heritage Program Database Records

- Animal
- Community
- Plant

*The locations that are displayed are considered sensitve and cannot be released to the public without permission. We do not provide map locations for all records. Please see report for details.

Lawler, Matusky & Skelly Engineers LLP
Environmental Science & Engineering Consultants

May 17, 2005
File No. 997-004

Mr. Wayne Elliott
Regional Fisheries Manager - NYSDEC Region 3
21 South Putt Corners Road
New Paltz, New York 12561-1696

Re: Fisheries Information for Mineral Spring Brook, Town of Woodbury, Orange County, New York

Dear Mr. Elliott:

On behalf of Legacy Ridge at Highland Mills LLC, HDR/LMS Engineers is seeking fisheries information on a portion of Mineral Spring Brook (Waters Index Number 89 – 7 – 4), a tributary of Woodbury Creek, in the Town of Woodbury, Orange County, New York. We are seeking information on the portion of Mineral Spring Brook from the confluence with Woodbury Creek upstream to the confluence of Tributary 1, and any information on the northward-flowing Tributary 1. This stream is listed as Waters Index Number 89 – 7 – 4 - 1 and is classified as a Class C watercourse (Page 16,073 of Chapter 10). A manmade pond (P 227) on Tributary 1 is listed as a Class B waterbody.

This information we be used in the preparation of SEQR documents (Town of Woodbury Planning Board as SEQR Lead Agency) associated with a proposed housing development. A copy of the waters index map with the highlighted areas of interest is enclosed.

If you have any questions or need more information, please contact me at 845 – 735 – 8300 ext. 240. Thank you for your time and attention to this matter,

Sincerely,

Stephen M. Seymour
Project Scientist

Attachments

cc: Mr. Alec Ciesluk, Deputy Regional Permit Administrator

ONE BLUE HILL PLAZA - P.O. BOX 1509 - PEARL RIVER, NY 10965
(845) 735-8300 - FACSIMILE (845) 735-7466 - WEBSITE: WWW.LMSENG.COM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FISH COLLECTION OR SMALL STREAM SURVEY

Trib. 1 to Mineral Spring Br.

Survey Lower Hudson Date 7/11/86 Authority Laura A. Kinney

Name and key LH 89-7-4-1 Quad Popolopen L.

Station location immediately above mouth (6 ft avg) County Orange

Length 45 ft Width 2 ft-12 ft Depth 0.5 ft avg 1.3 ft max Acres

Flow about 2 cfs Temp: A 82°F W 67°F Time (EST) 2:30 PM

Gear D. C. Backpack Shocker Efficiency (by trout)

Young trout per acre (adjusted total)

Factors: W N H F Total

General notes:

Substrate: 70% gravel, 15% rubble, 15% boulder
Habitat: Shading, pool to riff ratio, and instream cover all excellent.
Insects: fair diversity, excellent biomass
Gradient: moderately steep

Conductivity - 228 µm
pH - 7.8

Name of species	Abundance	Number and description
Catostomus commersoni	C.	1(5.7")
Rhinichthys atratulus	A	8(2.1-2.7")
Rhinichthys cataractae	C	2(3.0"-3.33")
Notropis cornutus	P	1(3.3)
Notemigonus crysoleucas	P	1(3.3)

Stocking policy:

94-14-7 (5/76)
Formerly FW-62

11184

Mineral spring Br.

Name of species	Abundance	Number and description
Rhinichthys atratulus	A	10(1.2-2.4)
Catostomus commersoni	P	2(4.6-6.3)
Salmo trutta	C to A	2.3,2.5,2.7,5.6,6.3,7.2 Total 7
Anguilla rostrata	P	Observed

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FISH COLLECTION OR SMALL STREAM SURVEY

Survey Lower Hudson Date 7/11/86 Authority Laura A. Kinney

Name and key Mineral Springs Bk LB 89-7-4 Quad Popolopen Lake

Station location 1.1 mile above mouth County Orange

Length 35' Width 8 ft avg 6-12 ft Depth 0.75 avg 2.0 max Acres

Flow 1-1.25 cfs Temp: A 82°F W 63°F Time (EST) 1:45 PM

Gear D. C. Backpack Shocker Efficiency (yg trout) 25%

Young trout per acre (adjusted total)

Factors: W N H F Total

General notes: on USMA at West Point property
Substrate: Gravel 60%; Rubble 10%; Boulder 30%
Gradient: moderately steep
Habitat: Excellent shading - flows through forested area
good riff to pool ratio
excellent in-stream cover
Insects: Abundance and diversity good - excellent

Stream is an excellent spawning/nursery stream, with overwintering sites available. Could support moderate fishing in a pastoral setting.

Conductivity - 114 μmhos
pH - 7.3

Stocking policy:

34-14-7 (5/76)
Formerly FW-88

New York State Department of Environmental Conservation
21 South Putt Corners Road, New Paltz, NY 12561-1696
Office of Natural Resources
(845) 256-3000 FAX (845) 255-4659

Fax Cover Sheet

TO: [redacted]

FROM: Leslie Surprenant

DATE: 6/7/05

# of pages: 3 + cover sheet

MESSAGE: Steve - here are our most recent data from our data files for Mineral Spring Br + trib (89-7-4 & trib). Mineral spring br. supports trout spawning. No spawning trout (or any trout) found in trib. Any questions - give me a call - 256-3070 or email: ljsurpre@gw.dec.state.ny.us

New Paltz Fax Machines:

(845) 255-4659	***Lands & Forests; Fish, Wildlife & Marine; Forest Rangers***
(845) 255-3042	*Director, Legal, Permits, Operations, Pub. Affairs*
(845) 255-0714	*Regional Administration*
(845) 255-0716	*Air, Water*
(845) 255-9249	*Law Enforcement*
(845) 255-2987	*Spills Management*
(845) 255-3414	*Solid Waste, Hazardous Substance Regulation*
(845) 255-4238	*Hazardous Waste Remediation*
(845) 255-9219	*Sportsman Education & Wildlife*