Natural Diversity Data Base Areas

NORTH HAVEN, CT

December 2025

State and Federal Listed Species

Critical Habitat

Town Boundary

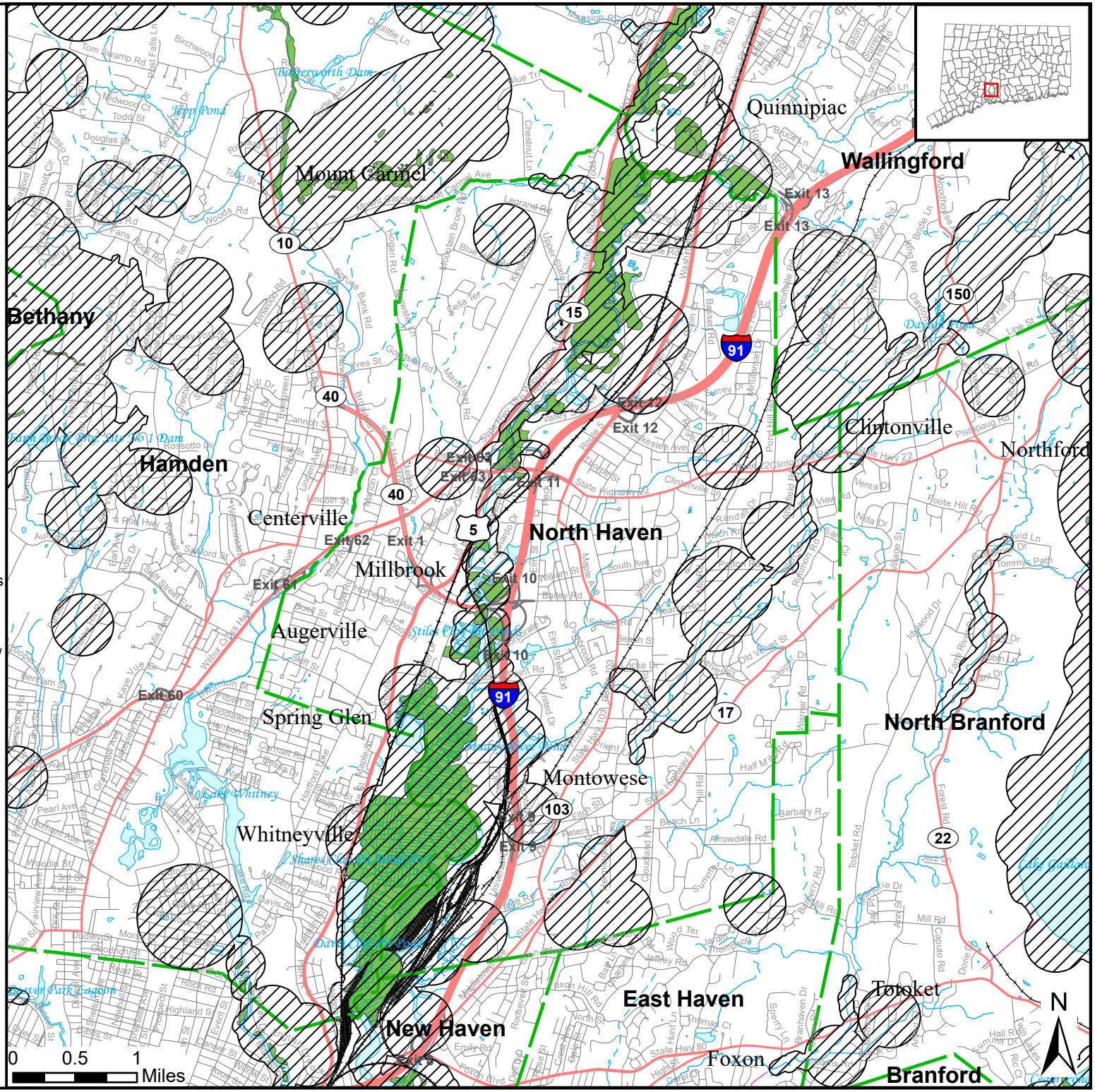
NOTE: This map shows known locations of State and Federal Listed Species and Critical Habitats. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a variety of data sources . Exact locations of species have been buffered to produce the generalized locations.

This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas If the project is within a hatched area there may be a potential conflict with a listed species. For more information, use DEEP ezFile https://filings.deep.ct.gov/DEEPPortal/ to submit a Request for Natural Diversity Data Base State Listed Species Review or Site Assessment. More detailed instructions are provided along with the request form on our website. https://portal.ct.gov/deep-nddbrequest

Use the CTECO Interactive Map Viewers at http://cteco.uconn.edu to more precisely search for and locate a site and to view aerial imagery with NDDB Areas.

QUESTIONS: Department of Energy and Environmental Protection (DEEP)
79 Elm St, Hartford, CT 06106
email: deep.nddbrequest@ct.gov
Phone: (860) 424-3011

Connecticut Department of Energy & Environmental Protection



Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

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1/13/2026

Darius Baskys
VHB
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Wethersfield, CT 06109
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Subject: North Haven Solar Two
Filing # 139740
NDDB – New Determination Number: 202600390
Rimmon Rd
North Haven

Expiration Date: 1/13/2028

Current data maintained by the Natural Diversity Database (NDDB) and housed in the DEEP ezFile portal, indicates that populations of the following State Endangered, Threatened, or Special Concern species (RCA Sec. 26-306) have been documented within the project area or in close proximity to the proposed Energy and Utility Production Facilities and Distribution Infrastructure/Solar Energy, North Haven Solar Two.

Northern long-eared bat (*Myotis septentrionalis*)
Tri-colored bat (*Perimyotis subflavus*)
Wood turtle (*Glyptemys insculpta*)
Eastern box turtle (*Terrapene carolina carolina*)

In accordance with the project information provided in your request submittal, implementation of the following Best Management Practices will avoid negative impacts to listed species.

Common Name	Northern long-eared bat
Scientific Name	*Myotis septentrionalis*
Taxa	mammal
Status[1]	FE
General Ecology	The Northern long-eared bat is one of the species most impacted by White Nose Syndrome. Populations in Connecticut have declined by over 90%, and it has been Federally listed as Endangered. During the summer northern long-eared bats roost singly or in maternal colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). Males and non-reproductive females may also roost in cooler places, like caves and mines. Northern long-eared bats seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices. This bat has also been found rarely roosting in structures, like barns and sheds. Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. The presence of northern long-eared bat

	(Myotis septentrionalis), a federally endangered and state endangered species, may require consultation with the US Fish and Wildlife Service Ecological Field Office in order to be in compliance with the Federal Endangered Species Act if the proposed project requires federal permits or uses federal funds. For more information on federal requirements as well as guidance on the latest management recommendations including development projects, wind energy development, sustainable forest management, and other tools and FAQs, please visit: https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis
Best Management Practice	**If your project includes tree clearing in suitable habitat, to avoid impacts to federally listed breeding bats, including pregnant females, non-volant pups, and sensitive pre and post hibernation times:** **• Do not conduct tree clearing between April 15- October 31** **This Time of Year Restriction (TOYR) is very effective to minimize risk, however, NDDB will defer to the latest federal guidance for your project specifics. You can evaluate your project using the USFWS Determination Key (D-Key). If your project is classified as "No Effect," "Not Likely to Adversely Affect" (NLAA) or "take is not reasonably certain to occur" you can reduce or remove this TOYR as you indicated in your D-Key evaluation.** **• Information about the D-Key: Northern long-eared bat and Tricolored bat Range-wide Determination Key - Supplementary Information | U.S. Fish & Wildlife Service** **• To evaluate your project using the D-Key use the USFWS Information for Planning and Consultation (IPAC) website: https://ipac.ecosphere.fws.gov/** **You can also reduce or remove the TOYR if you demonstrate absence of bats in your project work area. Bat surveys conducted according to the latest USFWS Guidance may be submitted to NDDB to demonstrate absence. See the following reference:** **• U.S. Fish and Wildlife Service (FWS). 2024. Range-wide Indiana bat & northern long-eared bat survey guidelines. <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.** **There is a documented breeding season record within 3 miles or a known hibernaculum within 5 miles of your project boundaries as entered in your project application.**
Common Name	Tri-colored bat
Scientific Name	*Perimyotis subflavus*
Taxa	mammal
Status[1]	E
General Ecology	Populations of Tri-colored bats have declined over 90% as a result of White Nose Syndrome. This bat is associated with forested edges and open forested landscapes with water features. Maternity colonies will form in tree cavities of mature trees in a variety of tree species, especially oaks (Quercus spp.). They often select roosts in tall, large-diameter trees, but will roost in smaller diameter trees when potential roost substrate (e.g., leaf clusters, Spanish moss) is present. They will occasionally roost on man-made structures. They are among the most sensitive bats to cold temperatures and in winter they hibernate in caves and abandoned mines where temperatures and humidity levels are stable. Tri-colored bats have been proposed to be listed as Federally Endangered. For more information and any federal requirements or guidance on the latest management recommendations for development projects, wind energy development, sustainable forest management, as well as other tools and FAQs, please visit: https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus
Best Management Practice	**If your project includes tree clearing in suitable habitat, to avoid impacts to pregnant females and non-volant pups:** **• Do not conduct tree clearing between May 15- August 15.**

	• Use soft start techniques on cold mornings with < 50 degree F overnight temp (particularly if operations occur in late spring/early summer or in late Fall). This will help allow torpid bats to rouse and escape. **• Heavy equipment activity shall be introduced with a short initial representative action, the activity should then pause for 3-5 min to allow animals to leave the area before activity resumes. Repeat this soft start cycle for at least 20 mins.** **The Time of Year Restriction (TOYR) is very effective to minimize risk, however, NDDB will defer to the latest federal guidance for your project specifics. You can evaluate your project using the USFWS Determination Key (D-Key). If your project is classified as "No Effect," "Not Likely to Adversely Affect" (NLAA) or "take is not reasonably certain to occur" you can reduce or remove this TOYR as you indicated in your D-Key evaluation.** **• Information about the D-Key: Northern long-eared bat and Tricolored bat Range-wide Determination Key - Supplementary Information | U.S. Fish & Wildlife Service** **• To evaluate your project using the D-Key use the USFWS Information for Planning and Consultation (IPAC) website: https://ipac.ecosphere.fws.gov/** **You can also reduce or remove the TOYR if you demonstrate absence of bats in your project work area. Bat surveys conducted according to the latest USFWS Guidance may be submitted to NDDB to demonstrate absence. See the following reference:** **• U.S. Fish and Wildlife Service (FWS). 2024. Range-wide Indiana bat & northern long-eared bat survey guidelines. <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.** **There is a documented breeding season or known hibernaculum within 3 miles of your project boundaries as entered in your project application.**
Common Name	Wood turtle
Scientific Name	*Glyptemys insculpta*
Taxa	reptile
Status[1]	SC
General Ecology	Individuals of this species are riverine and riparian obligates, overwintering and mating in clear, cold, primarily sand-gravel and rock bottomed streams and foraging in riparian zones, fields and upland forests during the late spring and summer. They hibernate in the banks of the river in submerged tree roots between November 1 and March 31. Their summer habitat focuses within 90m (300ft of rivers) and they regularly travel 300m (0.2 mile) from rivers during this time. During summer they seek out early successional habitat: pastures, old fields, woodlands, powerline cuts and railroad beds bordering or adjacent to streams and rivers. Their habitat in Connecticut is already severely threatened by fragmentation of riverine, instream, riparian, and upland habitats, but is exacerbated by heavy adult mortality from machinery, cars, and collection. This is compounded by the species late maturity, low reproductive potential, and high nest and hatchling depredation rates.
Best Management Practice	**Work with biologists to plan your development to protect (buffer) and connect critical habitat. Presence of bird seed, pet food, and garbage in and around residential areas can increase the threat of predators. Predation activity from species like raccoons and skunks can destroy the majority of this species reproductive output each year.** **Any fragmentation of habitat within 300m (0.2mile) of occupied streams has been demonstrated to reduce wood turtle survival through crushing of turtles under cars or mowers, collection of turtles by public, introduced predators (raccoons, skunks, chipmunks etc) that increase with housing development. New development, increased traffic, new agricultural practice that will use motorized vehicles, new or enhance recreational trails, or other removal or fragmentation of habitat within 90m buffer of occupied streams will cause increased adult mortality.**

	Land disturbance activities need to consider local habitat features and apply fencing and/or time of year restrictions as appropriate. We recommend you consult with a herpetologist familiar with preferred habitats to assist you with proper techniques to ensure the best protection strategies are employed for your site and the scope of your project. **• Land disturbance and excavation confined to the upland can be done without risk for impact to wood turtle if work is restricted to the dormant season (November 1-March 31).** **If land disturbance activity will include significant areas within and around rivers and streams, you will need to take precautions to avoid impacting hibernating adults. Consult with a qualified herpetologist to assess your work impact zone for the potential to impact overwintering wood turtle.** **• Do not begin instream activity and bank disturbance in suitable overwintering habitat within a river or stream during the turtle's dormant period (November 1-March 31).** **To prevent turtle access and entry into your upland work zone between April 1-October 31:** **• Exclusionary practices will be required to prevent any turtle access into construction areas. These measures will need to be installed at the limits of disturbance as shown on the plans, or be specifically designated by a qualified herpetologist.** **• Exclusionary fencing be at least 20 inches tall and must be secured to and remain in contact with the ground and be regularly maintained (at least bi-weekly and after major weather events) to secure any gaps or openings at ground level that may let animal pass through.** **• Prior to construction, all turtles occurring within fencing work area will be relocated to suitable habitat outside disturbance area. This should be performed by a qualified professional familiar with habitat requirements and behavior of the species.** **• The Contractor must search the work area each morning prior to any work being done.** **• All construction personnel working within the turtle habitat must be apprised of the species description and the possible presence of a listed species.** **• Any turtles encountered within the immediate work area shall be carefully moved to an adjacent area outside of the excluded area and fencing should be inspected to identify and remove access point. These animals are protected by law and no turtles should be relocated from the site.** **• In areas where silt fence is used for exclusion, it shall be removed as soon as the area is stable to allow for reptile and amphibian passage to resume.** **• Special precautions must be taken to avoid degradation of wetland habitats including any wet meadows and seasonal pools.** **If land disturbance will occur in potential nesting areas designated by a qualified herpetologist, you will need to take precautions to prevent female turtles from entering work area and setting up nests. This fencing would need to be in place before May 15. Potential nesting areas may include open fields, early successional habitat, sandy open patches nearby wetland features, and sandy roads and roadsides.**
Common Name	Eastern box turtle
Scientific Name	*Terrapene carolina carolina*

Taxa	reptile
Status[1]	SC
General Ecology	In Connecticut, these turtles are found in well-drained forest bottomlands and a matrix of open deciduous forests, early successional habitat, fields, gravel pits, and or powerlines. Turtles are dormant between November 1 and April 1 and hibernate in only a few inches from the surface in forested habitat. The greatest threat to this species is habitat loss, fragmentation, and degradation due to development. This species is very sensitive to adult mortality because of late maturity (10 years old) and long life span (50-100years). Vehicular traffic, heavy equipment used for farming, and ATV use in natural areas are implicated specifically in adult mortality through collisions. Illegal collection by the pet trade and unknowing public for home pets exacerbates mortality rates and removes important individuals from the population. Predation rates are also unnaturally high because of increased predator populations (e.g. skunks, foxes, raccoons, and crows) that surround developed areas.
Best Management Practice	**Early successional habitat is important for this species and maintenance by mowing is essential. Unfortunately, mowing is major source of human induced adult turtle mortality.** **• Avoid mowing or vehicular traffic during peak use by this species (May 15-Sept 15)** **Use these additional techniques to minimize impact, especially if you need to mow during peak use times:** **• Mow on multiyear rotation, combine with chemical control of woody plants.** **• For grasslands >10acres, limit total mowing to 50% each year. If mowing during active season, limit to 25% of area. If mowing during inactive season limit to 50% of area.** **• Mowing style: Avoid flail mower heads with guide bars that ride along the ground. Sickle bar mowers will have the least impact if mowing every 1-5 years. In areas with more woody vegetation >1-2" diameter Brontosaurus-style mower will likely have the least impact on turtles.** **• Mowing height: If mowing during active season, retention of mowing stubble to 7-12 inches will reduce mortality, reduce blade wear, and will leave important cover for animals.** **• Directionality - If mowing during the active season is necessary, start mowing from the center of the field and use a back-and-forth approach, or large circular pattern, to avoid concentrating fleeing animals where they may be killed or stranded. In addition, leave an unmowed 30 ft strip around the perimeter of the field and mow this area last. Most turtles are found in these areas and this provides time for them to react to the mowing activity and move out of the area.** **o If field is near stream: start mowing the side furthest from stream and work towards stream.** **o If field is bordered by woodland: start mowing side furthest from woodland and work towards woodland.** **o If field is bordered by road, start mowing next to the road and work your way across field.** **• Mower Speed – Mowing in low gear or at slow speeds will allow turtles to react and move out of the field.** **• Unmowed Edge - Leaving an unmowed field edge in high turtle use areas until after September 15th. Eastern box turtles are usually along field edges adjacent to forest and wood turtle are often in field edges closest to nearby streams.** **(source: MA Natural Heritage & Endangered Species Program)**

	Land disturbance activities need to consider local habitat features and apply fencing and/or time of year restrictions as appropriate. We recommend you consult with a herpetologist familiar with preferred habitats to assist you with proper techniques to ensure the best protection strategies are employed for your site and the scope of your project. **To prevent turtle access and entry into your work zone between April 1- November 1:** **• Exclusionary practices will be used to prevent any turtle access into disturbance areas. These measures will need to be installed at the limits of disturbance as shown on the plans, or specifically designated by a herpetologist who can assess the conditions at your site.** **• Exclusionary fencing be at least 20 in tall and must be secured to and remain in contact with the ground and be regularly maintained (at least bi-weekly and after major weather events) to secure any gaps or openings at ground level that may let animal pass through.** **• All staging and storage areas, outside of previously paved locations, regardless of the duration of time they will be utilized, must be reviewed to remove individuals and exclude them from re-entry.** **• All construction personnel working within the turtle habitat must be apprised of the species description and the possible presence of a listed species.** **• The Contractor search the work area each morning prior to any work being done.** **• Any turtles encountered within the immediate work area shall be carefully moved to an adjacent area outside of the excluded area and fencing should be inspected to identify and remove access point. This animal is protected by law and should not be relocated off-site.** **• In areas where silt fence is used for exclusion, it shall be removed as soon as the area is stable and disturbance is finished to allow for reptile and amphibian passage to resume.** **If land disturbance will occur in suitable overwintering forested habitat you will need to take precautions to avoid mortality of hibernating adults. If practicable, small projects, under the supervision of a qualified herpetologist, may be able to utilize a combination of exclusionary fencing installed before October 15, combined with and surveys to ensure that no turtles are within the enclosed fencing. Work can then be conducted within the fenced area at any time of year as long as the fencing is maintained. Projects that will impact large blocks of forest or significant overwintering habitat may need to restrict your land disturbance activities in forested habitat to the turtle active season. These projects would need to restrict land disturbance activities to occur only between April 1- October 31.** **• Landscape Planning: Use partnerships and landscape scale planning to protect important conservation areas for this species** **• Nesting Area Management: identify and protect nesting areas for this species. Work with biologists to plan your site use and nesting site management.**

[1]E = State Endangered, T = State Threatened, SC = State Special Concern, FE = Federally Endangered, FT = Federally Threatened, NA = Not applicable.

Your submission information indicates that your project requires a state permit, license, registration, or authorization, or utilizes state funding or involves state agency action. This NDDB – New determination may be utilized to fulfill the Endangered and Threatened Species requirements for state-issued permit applications, licenses, registration submissions, and authorizations.

Please be aware of the following limitations and conditions:
Natural Diversity Database information includes all information regarding listed species available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, land owners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as enhance existing data. Such new information is incorporated into the Database and accessed through the ezFile portal as it becomes available. New information may result in additional review, and new or modified restrictions or conditions may be necessary to remain in compliance with certain state permits.

- Each state agency is required to conserve endangered and threatened species and their essential habitats, and ensure that any action authorized, funded or performed by such agency does not threaten the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat designated as essential to such species (CGS 26-310). Therefore, the restrictions and conditions outlined above for Endangered and Threatened species **MUST** be implemented and abided by in order to utilize this NDDB – New Determination in securing any state permit, license, authorization, or registration or for any actions performed or funded by state agencies.
- During your work listed species may be encountered on site. A report must be submitted by the observer to the Natural Diversity Database promptly and additional review and restrictions or conditions may be necessary to remain in compliance with certain state permits. Please fill out the appropriate survey form and follow the instructions for submittal.
- Your project involves the state permit application process or other state involvement, including state funding or state agency actions; please note that consultations with your permit analyst or the agency may result in additional requirements. In this situation, additional evaluation of the proposal by the DEEP Wildlife Division may be necessary and additional information, including but not limited to species-specific site surveys, may be required. Any additional review may result in specific restrictions or conditions relating to listed species that may be found at or in the vicinity of the site.
- If your project involves preparing an Environmental Impact Assessment, this NDDB consultation and determination should not be substituted for conducting biological field surveys assessing on-site habitat and species presence.
- This determination applies only to the project as described in the submission and summarized at the end of this letter. Please re-submit an updated Request for Review if the project's scope of work and/or timeframe changes, including if work has not begun by 1/13/2028.
- If biological surveys have been conducted in accordance with Best Management Practices provided, please forward a copy of the results to the address listed at the end of this letter. Include the Project Name and Determination Number on all correspondence.

The NDDB – New determination for the North Haven Solar Two at Rimmon Rd, North Haven, as described in the submitted information and summarized at the end of this document is valid until 1/13/2028.This determination applies only to the project as described in the submission and summarized at the end of this letter. Please re-submit an updated Request for Review if the project's scope of work and/or timeframe changes, including if work has not begun by 1/13/2028.

This letter is computer generated and carries no signature. If however, any clarification is needed, or, if you have further questions, please contact the following:

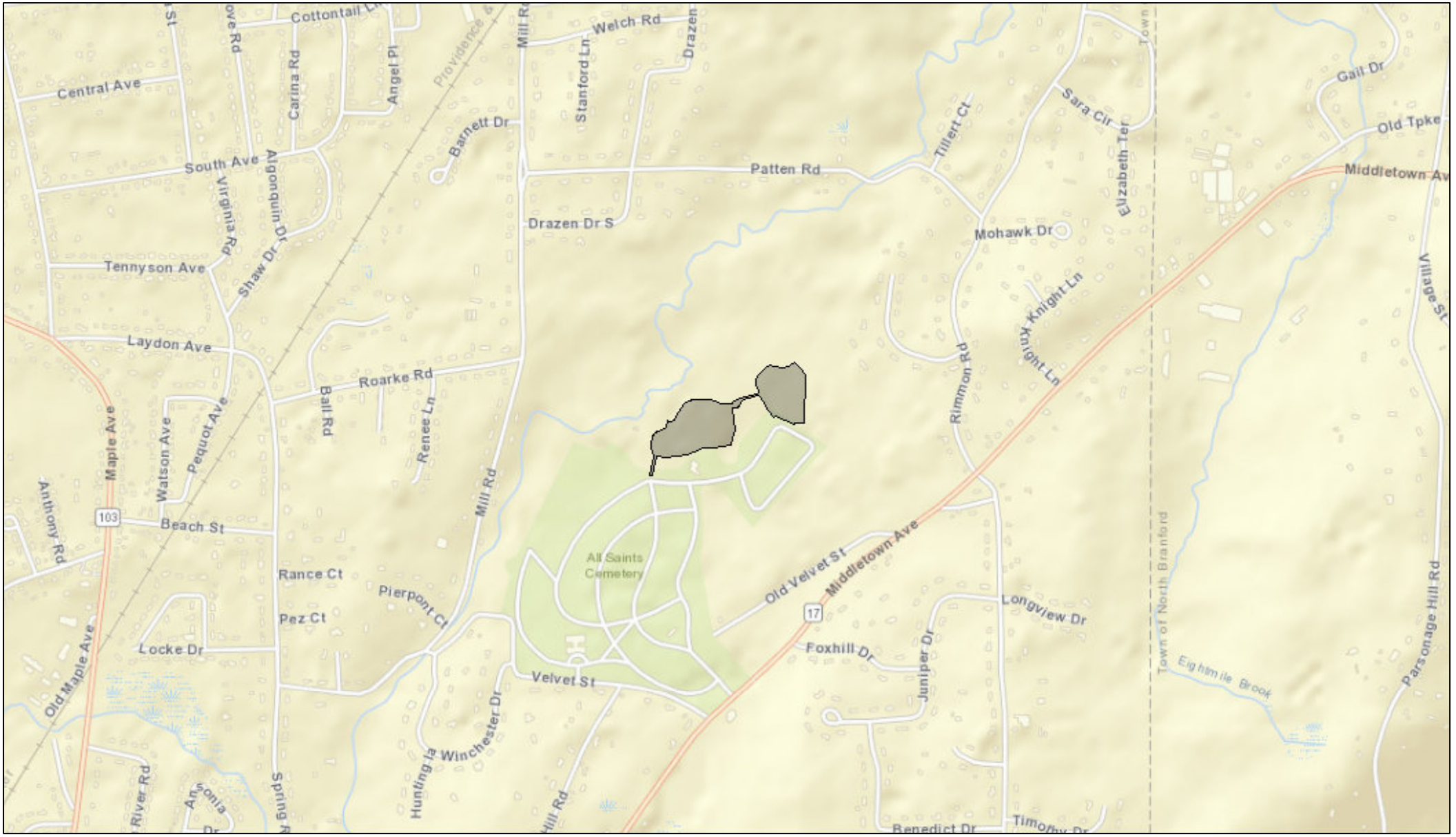
CT DEEP Bureau of Natural Resources
Wildlife Division
Natural Diversity Database
79 Elm Street, 6th floor
Hartford, CT 06106-5127
(860) 424-3011
deep.nddbrequest@ct.gov

Please reference the NDDB – New number provided in this letter when you e-mail or write. Thank you for submitting your project through DEEP's ezFile portal for Natural Diversity Database reviews.

Application Details:

Project involves federal funds or federal permit:	No
Project involves state funds, state agency action, or relates to CEPA request:	No
Project requires state permit, license, registration, or authorization:	Yes
DEEP enforcement action related to project:	
Project Type:	Energy and Utility Production Facilities and Distribution Infrastructure
Project Sub-type:	Solar Energy
Project Name:	North Haven Solar Two
Project Description:	

North Haven Solar Two Map



January 13, 2026

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