

January 12, 2020

Mr. Eric Davison Davison Environmental 10 Maple Street Chester, CT 06412 eric@davisonenvironmental.com

Project: Preliminary Assessment for Burlington Solar One Located on Prospect Street in Burlington,

Connecticut

NDDB Preliminary Assessment No.: 201913067

Dear Eric Davison.

I have reviewed Natural Diversity Database maps and files regarding the area delineated on the map provided for Burlington Solar One located on Prospect Street in Burlington, Connecticut.

According to our records there are known extant populations of State Listed Species that occur within or close to the boundaries of this property. I have attached a list of species known from this area. Please be advised that this is a preliminary review and not a final determination. A more detailed review will be necessary to move forward with any environmental permit applications submitted to DEEP for the proposed project. This preliminary assessment letter cannot be used or submitted with permit applications at DEEP. This letter is valid for one year.

To prevent impacts to State-listed species, field surveys of the site should be performed by a qualified biologist with the appropriate scientific collecting permits at a time when these target species are identifiable. A report summarizing the results of such surveys should include:

- 1. Survey date(s) and duration.
- 2. Site descriptions and photographs.
- 3. List of component vascular plant and animal species within the survey area (including scientific binomials).
- 4. Data regarding population numbers and/or area occupied by State-listed species. Include special plant and/or animal forms found at:

https://www.ct.gov/deep/cwp/view.asp?a=2702&q=323460&deepNav GID=1628

- 5. Detailed maps of the area surveyed including the survey route and locations of State listed species.
- 6. <u>Conservation strategies or protection plans that indicate how impacts may be avoided for all state listed species present on the site.</u>
- 7. Statement/résumé indicating the biologist's qualifications. Please be sure when you hire a consulting qualified biologist to help conduct this site survey that they have the proper experience with target taxon and have a CT scientific collectors permit to work with state listed species for this specific project.

The site surveys report should be sent to our CT DEEP-NDDB Program (deep.nddbrequest@ct.gov) for further review by our program biologists <u>along with an updated request</u> for another NDDB review. Incomplete reports may not be accepted.

If you do not intend to do site surveys to determine the presence or absence of state-listed species, then you should presume species are present and let us know how you will protect the state-listed species from being impacted by this project. You may submit these best management practices or protection plans with your new request for an NDDB review. After reviewing your new NDDB request form and the documents describing how you will protect this species from project impacts we will make a final determination and provide you with a letter from our program to use with DEEP-Permits.

Natural Diversity Database information includes all information regarding critical biological resources 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, cooperating units of DEEP, landowners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substitutes for onsite surveys necessary for a thorough environmental impact assessment. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at (860) 424-3592, or deep.nddbrequest@ct.gov Thank you for consulting the Natural Diversity Data Base.

Sincerely,

Dawn M. McKay

Environmental Analyst 3

Species List for NDDB Request

	Scientific Name	Common Name	State Status
Freshwater Community - Other Classification			
	Medium fen		
Invertebrate Animal			
	Agonum darlingtoni	Ground beetle	SC
	Agonum mutatum	Ground beetle	SC
	Exyra fax	Pitcher plant moth	Т
	Leucorrhinia glacialis	Crimson-ringed whiteface	Т
	Margaritifera margaritifera	Eastern pearlshell	SC
Vascular Plant			
	Carex limosa	Mud sedge	Т
	Eriophorum vaginatum var. spissum	Hare's tail	Т
	Scheuchzeria palustris ssp. americana	Pod grass	Е
	Xyris montana	Northern yellow-eyed grass	Т
Vertebrate Animal			
	Botaurus lentiginosus	American bittern	Е
	Caprimulgus vociferus	Whip-poor-will	SC
	Cottus cognatus	Slimy sculpin	SC
	Heterodon platirhinos	Eastern hognose snake	SC
	Terrapene carolina carolina	Eastern box turtle	SC



January 7, 2021

Mr. Eric Davison
Davison Environmental
10 Maple Street
Chester, CT 06412
eric@davisonenvironmental.com

Project: Verogy Solar (aka Solar Burlington Solar One) a 3.5 Megawatt Solar Facility Located on Prospect Street in

Burlington, Connecticut

NDDB Final Determination No.: 201913067

Dear Eric Davison,

I have re-reviewed Natural Diversity Database maps and files regarding the area delineated on the map provided for Verogy Solar (aka Burlington Solar One) a 3.5 megawatt solar facility located on Prospect Street in Burlington, Connecticut.

According to our records there are known extant populations of State Listed Species that occur within or close to the boundaries of this property. A list of species known from this area was provided in our NDDB Program preliminary assessment letter dated January 13, 2020. The list included state listed plants, invertebrates, birds and reptiles.

I received a Natural Resource Assessment for the Proposed Solar Generating Facility Known as Verogy Solar/

<u>Burlington Solar</u> and dated September 28, 2020 by Eric Davison of Davison Environmental. The Natural Resource

<u>Assessment</u> addressed the list of species and significant natural habitats in the NDDB Preliminary Assessment letter.

<u>The Natural Resource Assessment</u> included a botanical assessment conducted by William Moorhead, an invertebrate habitat assessment conducted by Tanner Matson, a whip-poor-will survey by Hunter Brawley and an amphibian and reptile survey by Dennis Quinn. The only state listed species observed on the project site is State Special Concern eastern box turtle (*Terrapene c. carolina*). I concur with the findings in the <u>Natural Resource Assessment</u> and no further conservation action is required except for the additional protection strategies outlined below.

Protection for Eastern Box Turtle

I concur with the conservation plan submitted in Appendix E of that report: Box Turtle Protection Plan (attached) in order to keep the eastern box turtle safe during the construction phase of this project. However, habitat protection, management and enhancement should be the top priority for the continued conservation of Eastern Box Turtles after the solar facility has been constructed.

The property contains a diverse mosaic of forested uplands (deciduous or mixed) and disturbed or early-successional habitats that may be suitable for nesting (old fields, abandoned gravel pits, clearings with patches of bare soil) and habitat management and restoration guidelines should be developed and implemented to create and/or maintain consistent access to nesting and over-wintering habitat as key conservation goals.

In addition to the Box Turtle Protection Plan (attached) presented in <u>The Natural Resource Assessment</u> the additional protection/conservation actions are required to protect the eastern box turtle:

- Conduct one year of post-construction monitoring of box turtles that are captured and removed from the
 construction zone during the pre-construction sweeps outlined in the Appendix E Box Turtle Protection
 Plan.
- The monitoring period for the box turtles should cover one full growing season after the construction is completed.

- The goal of monitoring should focus on the identity of critical basking, nesting and hibernation sites relative to the new solar development area.
- The above monitoring of the box turtles should result in a final habitat management plan to advise the property owners on how best to manage vegetative areas of the solar facility to enhance and promote nesting, basking and hibernation habitat and to conserve the connectivity of the turtles using this property.
- The plan should also outline general maintenance activity (for example--Mowing Restrictions of this site to months when the turtles are dormant and to install the proper fencing around the facility to promote healthy mobility of the eastern box turtle on and off site).
- The data on the monitoring and final management plan will be shared with the DEEP NDDB Program as soon as it is available.

State Listed Fish Species

According to our information, there are records for State Special Concern *Cottus cognatus* (Slimy sculpin) in Wildcat Brook and Whigville Brook the vicinity of this project. Please be advised that a DEEP Fisheries Biologist will review the permit applications you may submit to DEEP regulatory programs to determine if your project could adversely affect slimy sculpin. DEEP Fisheries Biologists are routinely involved in pre-application consultations with regulatory staff and applicants in order to identify potential fisheries issues and work with applicants to mitigate negative effects, including to endangered species. If you have not already talked with a Fisheries Biologist about your project, you may contact the Permit Analyst assigned to process your application for further information, including the contact information for the Fisheries Biologist assigned to review your application.

This determination is good for two years. Please re-submit an NDDB Request for Review if the scope of work changes or if work has not begun on this project by January 9, 2023.

Natural Diversity Database information includes all information regarding critical biological resources 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, cooperating units of DEEP, landowners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substitutes for onsite surveys necessary for a thorough environmental impact assessment. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at (860) 424-3592, or <u>deep.nddbrequest@ct.gov</u> Thank you for consulting the Natural Diversity Data Base.

Sincerely,

Dawn M. McKay

Environmental Analyst 3

Dawn M. mokau

APPENDIX E: Box Turtle Protection Plan

Eastern Box Turtle Protection Plan

Eastern Box Turtle, a State Special Concern species afforded protection under the Connecticut Endangered Species Act and listed as a Greatest Conservation Need species in Connecticut's Comprehensive Wildlife Conservation Strategy (CT DEP 2005), is known to occur on the site. The following protective measures are recommended to satisfy requirements from the Connecticut Department of Energy & Environmental Protection ("CTDEEP") Wildlife Division and follow protocols developed from previous rare species consultations and state-approved protection plans. This plan is focused on preventing incidental mortality to eastern box turtle but will also serve to limit mortality to other herpetofauna located within the construction, including hognose snake, should they be present.

Davison Environmental, LLC will serve as the Environmental Monitor for this project to ensure that Eastern Box Turtle protection measures are implemented properly.

The Contractor shall contact Eric Davison at least 5 business days prior to the pre-construction meeting. Mr. Davison can be reached by phone at (860) 803-0938 or via email at eric@davisonenvironmental.com.

The recommended Eastern Box Turtle protection program consists of the following components:

- 1. Isolation of the project perimeter: fencing to be installed no later than April 1st, 2021
- 2. Targeted searches of the project area prior to construction: between April 1st and May 31st
- 3. Periodic inspection and maintenance of isolation structures: throughout construction period
- 4. Education of all contractors and sub-contractors prior to initiation of work on the site
- 5. Documentation and reporting: submitted to CSC and NDDB by December 31, 2021

1. Isolation Barrier (Erosion and Sedimentation Controls)

- a. Plastic netting used in a variety of erosion control products (i.e., erosion control blankets, fiber rolls [wattles], reinforced silt fence) has been found to entangle wildlife, including reptiles, amphibians, birds and small mammals. These products or reinforced silt fence should not be used on the project. Temporary erosion control products, either erosion control blankets, fiber rolls composed of processed fibers mechanically bound together to form a continuous matrix (netless) and/or netting composed of planar woven natural biodegradable fiber should be used to avoid/minimize wildlife entanglement.
- b. Installation of erosion and sedimentation controls (i.e., silt fencing), required for erosion control compliance and creation of a barrier to migrating/dispersing herpetofauna, should be installed by the Contractor prior to clearing activities or any earthwork, and prior to April 1, 2021. The intention is to install the barrier prior to box turtle emergence from hibernation.

- c. The barrier fencing should be installed with minimal ground disturbance and tree clearing, preferably using a single small backhoe or trenching equipment.
- d. The fencing will consist of non-reinforced conventional erosion control woven fabric, installed approximately six inches below surface grade and staked at seven to ten-foot intervals using four-foot oak stakes or approved equivalent. The Contractor is responsible for daily inspections of the fencing for tears or breeches in the fabric and accumulation levels of sediment, particularly following storm events of 0.25 inch or greater. Davison Environmental will provide periodic inspections of the fencing throughout the duration of construction activities, generally on a biweekly frequency or more frequently if site conditions warrant.
- e. The barrier fencing should extend into the existing quarry, to create a zone of early-successional habitat between the forest and the barrier fencing to aid in box turtle location and capture.
- f. The Environmental Monitor will inspect the work zone following erosion control barrier installation to ensure the barrier is satisfactorily installed.
- g. All openings in the isolation barrier, used during the work day for accessibility, should be closed with hay bales at the completion of each day.
- h. The extent of the barrier fencing will be as shown on the site plans. The Contractor should have available additional barrier fencing should field conditions warrant extending the fencing as directed by Davison Environmental.
- i. No equipment, vehicles or construction materials shall be stored outside of the isolation barrier fencing.
- j. All silt fencing shall be removed within 30 days of completion of work and permanent stabilization of site soils.

2. Targeted Searches – Pre-Construction

- a. Upon completion of the barrier fence installation, the project limits will be searched for eastern box turtle from April 1st through May 30th. The purpose of this work is to locate and remove all box turtles from within the construction zone. This time period coincides with the period of highest activity and movement for box turtle just prior to the nesting period.
- b. All turtles observed will removed from the project area to the identified *Relocation Zone* that is located immediately southwest of the project limits.
- c. The time of day, frequency and intensity of the pre-construction searches should be determined by the Environmental Monitor based on weather conditions and success of relocation progression. It is anticipated that searches will be conducted once per week at a minimum, with more intensive and frequent searches conducted during periods of high activity

which would increase the likelihood of captures.

- d. The *Relocation Zone* consists of an area of mixed hardwood forest/old field transition zone at the edge of the active quarry. This is the area where all (5) turtles were observed. All existing mining and stockpiling activity within this zone should temporarily cease while relocation is underway.
- e. The *Relocation Zone* should also be searched from April 1st through May 30th, to relocate the (5) observed box turtle, along with others that may be present onsite. Should any turtles be observed/relocated in this zone, it would indicate that the subject turtle did not hibernate within the project limits. Any turtles found within the *Relocation Zone* will be documented and left *in situ*.

3. Contractor Education

- a. Prior to the start of construction, the Contractor shall attend an educational session at the preconstruction meeting with Davison Environmental. This orientation and educational session will consist of an introductory meeting with Davison Environmental providing photos of herpetofauna that may be encountered during construction activities, including eastern box turtles, emphasizing the non-aggressive nature of these species, the absence of need to destroy wildlife that might be encountered and the need to follow the prescribed protection measures.
- b. The Contractor will be provided with cell phone and email contacts for Davison Environmental to immediately report encounters with any turtles or other herpetofauna. Educational poster materials will be provided by Davison Environmental and displayed on the job site to maintain worker awareness as the project progresses.

4. Turtle Protective Measures – During Construction

- a. Prior to the start of construction each day, the Contractor shall search the entire work area for turtles. The Environmental Monitor will also conduct periodic inspections of the work area depending upon weather conditions, observed turtle activity, or other factors.
- b. If a turtle is found, it shall be immediately moved by carefully grasped in both hands, one on each side of the shell, between the turtle's forelimbs and the hind limbs, and placed just outside of the isolation barrier closest to where it was encountered. The Environmental Monitor should be notified of any observed eastern box turtle.
- c. Special care shall be taken by the Contractor during early morning and evening hours and on overcast rainy days so that possible basking or foraging turtles are not harmed by construction activities.

5. Reporting

- a. Following completion of the construction project, Davison Environmental will provide a summary report to the Connecticut Siting Council and CTDEEP documenting the monitoring and maintenance of the barrier fence and erosion control measures.
- b. Any observations of eastern box turtle or other state listed species will be reported to CTDEEP by Davison Environmental with photo-documentation (if possible) and with specific information on the location and disposition of the animal.