



Connecticut Department of  
**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

November 17, 2020

Mr. Jeffrey Shamas  
Vanasse Hangen Brustlin, Inc.  
100 Great Meadow Road, Suite 200  
Wethersfield, CT 06109-2355  
[jshamas@vhb.com](mailto:jshamas@vhb.com)

Project: Greenskies Clean Energy, LLC Installation of 5MW Solar Facility on 30 acres Located at 361 Old Tavern Road in Orange, Connecticut  
NDDDB Determination No.: 202077976

Dear Jeffrey Shamas,

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed Greenskies Clean Energy, LLC Installation of 5MW Solar Facility on 30 acres Located at 361 Old Tavern Road in Orange, Connecticut. According to our records we have known extant populations of State Special Concern *Terrapene carolina carolina* (eastern box turtle), *Glyptemys insculpta* (wood turtle) and *Toxostoma rufum* (brown thrasher) in the vicinity of this project site.

**Eastern Box Turtle (*Terrapene c. carolina*):** Eastern box turtles inhabit old fields and deciduous forests, which can include power lines and logged woodlands. They are often found near small streams and ponds. The adults are completely terrestrial but the young may be semiaquatic, and hibernate on land by digging down in the soil from October to April. They have an extremely small home range and can usually be found in the same area year after year. Eastern box turtles have been negatively impacted by the loss of suitable habitat. Some turtles may be killed directly by construction activities, but many more are lost when important habitat areas for shelter, feeding, hibernation, or nesting are destroyed. As remaining habitat is fragmented into smaller pieces, turtle populations can become small and isolated. Reducing the frequency that motorized vehicles enter box turtle habitat would be beneficial in minimizing direct mortality of adults.

**Wood turtle:** Wood turtles require riparian habitats bordered by floodplain, woodland or meadows. They hibernate in the banks of the river in submerged tree roots. Their summer habitat includes pastures, old fields, woodlands, powerline cuts and railroad beds bordering or adjacent to streams and rivers. This species has been negatively impacted by the loss of suitable habitat.

**Recommended Protection Strategies for Turtles:**

Work normally should occur when these turtles are active (April 1st to October 30<sup>th</sup>). Conducting work while the turtle is active will allow the animal to move out of harm's way and minimize mortality to hibernating individuals. I recommend the additional following protection strategies in order to protect these turtles:

- Have a biologist familiar with turtles on site to ensure these protection guidelines remain in effect and prevent turtles from being run over when moving heavy equipment. This is especially important in the month of June when turtles are selecting nesting sites.
- 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.
- Exclusionary fencing must 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. Do not use plastic or netted silt-fence.
- 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, and instructed to relocate turtles found inside work areas or notify the appropriate authorities to relocate individuals.
- 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.
- 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.
- No heavy machinery or vehicles may be parked in any turtle habitat.
- Special precautions must be taken to avoid degradation of wetland habitats including any wet meadows and seasonal pools.
- The Contractor and consulting biologist must search the work area each morning prior to any work being done.
- When felling trees adjacent to brooks and streams please cut them to fall away from the waterway and do not drag trees across the waterway or remove stumps from banks.
- Avoid and limit any equipment use within 50 feet of streams and brooks.
- Any confirmed sightings of box, wood or spotted turtles should be reported and documented with the NDDB ([nddbrequestdep@ct.gov](mailto:nddbrequestdep@ct.gov)) on the appropriate special animal form found at ([http://www.ct.gov/deep/cwp/view.asp?a=2702&q=323460&depNav\\_GID=1641](http://www.ct.gov/deep/cwp/view.asp?a=2702&q=323460&depNav_GID=1641))

**Protection for *Toxostoma rufum* (brown thrasher)**

The State Special Concern brown thrasher nests in shrubs, thickets, and brush, especially hedgerows adjacent to open fields. The American kestrel is a bird of prey that hunts over open areas, such as pastures, parks, and other open field habitats. The breeding season for both of these species is approximately from March through August and it is during this period that the species is most susceptible to disturbances in its feeding or nesting habitat. This bird is known from the Great Marsh (Beaver Dam Marsh) area of the transmission right of way in East Granby.

**Recommended Protection Strategies for Brown Thrasher**

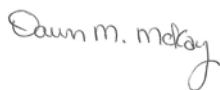
- Do not disturb shrubby habitat, hedge rows or open fields between March 1<sup>st</sup> and August 30th.

If these protection strategies are followed then the proposed activities will lessen the impact on these state-listed species. 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 November 17, 2020.

Natural Diversity Data Base 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 and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. 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 Data Base as it becomes available.

Please contact me if you have further questions at (860) 424-3592, or [dawn.mckay@ct.gov](mailto:dawn.mckay@ct.gov) . Thank you for consulting the Natural Diversity Data Base. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEEP for the proposed site.

Sincerely,



Dawn M. McKay  
Environmental Analyst 3