

**STATE OF VERMONT  
PUBLIC UTILITY COMMISSION**

|                                                  |   |             |
|--------------------------------------------------|---|-------------|
| Petition of Norwich Upper Loveland Solar LLC     | ) |             |
| for a certificate of public good pursuant to 30  | ) |             |
| V.S.A. §§ 248 and 8010, authorizing installation | ) | 21-3587-NMP |
| and operation of a 500 kW (AC) photovoltaic      | ) |             |
| group net-metering system in Norwich, Vermont    | ) |             |

**REBUTTAL TESTIMONY OF  
DORI BARTON  
ON BEHALF OF PETITIONER**

January 17, 2023

Ms. Barton's rebuttal testimony responds to portions of the direct prefiled testimony and exhibits of landowner Jennifer Goulet and Stephen Gorman.

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## **EXHIBITS**

|                         |                                                                                          |
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| <b>Exhibit NUL DB-3</b> | <b>A:PET:Landowners.1-3 Attachment<br/>USACE_Goulet_2022 emails</b>                      |
| <b>Exhibit NUL DB-4</b> | <b>Petitioner A.NI-8.1 Attachment Email with Army Corps</b>                              |
| <b>Exhibit NUL DB-5</b> | <b>Petitioner A.NI-8.3 Attachment USACE 4.27.22<br/>Determination of No Jurisdiction</b> |
| <b>Exhibit NUL DB-6</b> | <b>VFW Conservation Design 2019 Presentation</b>                                         |
| <b>Exhibit NUL DB-7</b> | <b>A:PET:Landowners.1-13 - Admission of Mr.<br/>Gorman</b>                               |

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**REBUTTAL PREFILED TESTIMONY OF  
DORI BARTON  
ON BEHALF OF PETITIONER**

**1.     Introduction**

Q1.     Please state your name, occupation, and business address.

A1.     My name is Dori Barton. I am a Wetland Ecologist with Arrowwood Environmental  
("AE"). My business address is 950 Bert White Road in Huntington, Vermont. I submitted  
direct prefiled testimony and a natural resources assessment for the Norwich Upper  
Loveland Solar Project ("Project") on behalf of Norwich Upper Loveland Solar LLC (the  
"Petitioner").

Q2.     What is the purpose of your rebuttal prefiled testimony?

A2.     My rebuttal testimony rebuts the direct prefiled testimony and exhibits of Jennifer Goulet  
and Stephen Gorman regarding the Project's potential natural resource impacts.

**2.     Rebuttal Testimony**

Q3.     At page two of her testimony, Ms. Goulet states: "With regard to water resources, the AE  
report misidentified the location of the headwaters of the small watershed in which the

proposed project would be located. A second channel that drains the project area was overlooked entirely.” How do you respond?

A3. These statements are incorrect. Page 4 of our report very clearly states: “The Project is located in a headwater as it is located within a watershed with a drainage area less than 20 square miles and is characterized by steep slopes.” Exhibit NUL DB-2 at 4. Figure 1 at page 4 of our report, inserted below, correctly identifies the closest surface waters within 50 feet of the Project limit of disturbance (“LOD”):



Figure 1. Project Site and Nearby Natural Resources.

At page 5 of Exhibit NN-JG-2, Ms. Goulet presents as her Figure 3 the location of “Schmidt Bog” northwest of the proposed array and states that this bog is the origin of the headwater and then claims a second “headwater stream” flows through the Project staging area:

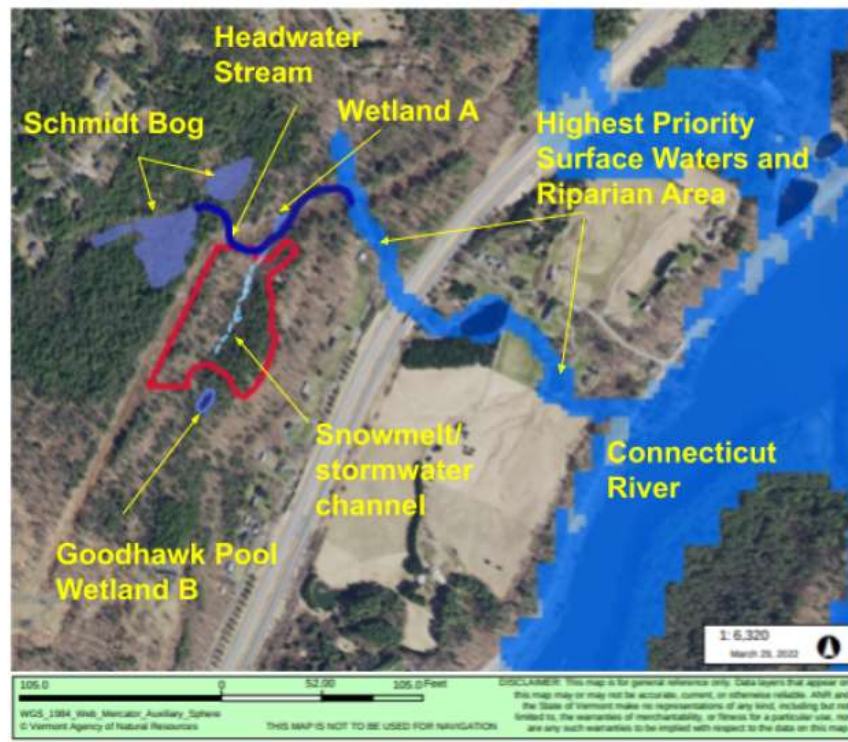


Figure 3. Location of Schmidt Bog, the origin of the headwater stream that intersects the project staging area (red outline). The headwater stream connects with an ephemeral snowmelt/stormwater channel north of the staging area. These combined waters eventually flow into the Connecticut River. Image created in Biofinder (VCGI 2022).

The snowmelt/stormwater channel Ms. Goulet points to as the light blue line within the Project limits of disturbance on her Figure 3 map is in fact not a stream or channel at all. Nor is the extent of dark blue line added by Ms. Goulet to the map to purportedly represent a headwater stream that extends from the Bog into the Project LOD. These facts were confirmed to Ms. Goulet by the U.S. Army Corps of Engineers (“USACE”)

1 who visited the site following a March 29, 2022 e-mail complaint of an alleged violation  
2 filed by Ms. Goulet. See Exh. NUL DB-3 (Goulet email complaint to the USACE). The  
3 USACE staff conducted a site visit on April 26, 2022, and on April 28, 2022 emailed me  
4 to confirm that they would not assert jurisdiction as to what Ms. Goulet had mis-  
5 identified as a stream. See Exhibit NUL DB-4. The USACE formal determination of no  
6 jurisdiction is included as my Exhibit NUL DB-5. Ms. Goulet's statements in her report  
7 and testimony that the Project will result in the discharge of dredged or fill material into  
8 all waters of the United States is inaccurate, as confirmed by the USACE's formal  
9 determination. Ms. Goulet failed to mention in either her testimony or report that  
10 Landowners had requested and Petitioner provided in discovery the USACE  
11 communications and final determination that are included in Exhibits NUL DB-4 and  
12 DB-5.

13  
14 Q4. Is the "headwater stream" or "snowmelt/stormwater channel" that are identified in Figure  
15 3 of Exhibit NN-JG-2 actually displayed in Biofinder?

16 A4. No. These appear to have been hand drawn over the Biofinder data print out by Ms.  
17 Goulet.

18  
19 Q5. Does the feature that has been labeled as "snowmelt/stormwater channel" within the  
20 project footprint meet the Agency of Natural Resources' ("ANR") definition of a stream?

21 A5. No. There are no streams within the project footprint. The closest streams have been  
22 correctly identified in Figure 1 above. The "snowmelt/stormwater channel" is not a

1 “channel” and does not meet ANR’s definition of stream. It is not a stream as defined by  
2 ANR because there is no identifiable defined “channel”. A stream is defined in ANR’s  
3 *Guidance for Agency Act 250 and Section 248 Comments Regarding Riparian Buffers* as:

4 The full length and width, including the bed and banks, of any watercourse,  
5 including, but not limited to, bodies named creek, brook, river, branch, and kill. A  
6 stream has a channel that periodically or continuously contains moving water, has  
7 a defined bed, and has banks that serve to confine water at low to moderate flows.  
8 Streams include intermittent streams that have a defined channel and evidence of  
9 sediment transport, even if such streams does not have surface water flow  
10 throughout the year and/or throughout the channel. For the purpose of this  
11 guidance, constructed drainageways including water bars, swales, and roadside  
12 ditches, are not considered streams.

13 [https://anr.vermont.gov/sites/anr/files/co/planning/documents/guidance/Guidance%20for](https://anr.vermont.gov/sites/anr/files/co/planning/documents/guidance/Guidance%20for%20Agency%20Act%20250%20and%20Section%20248%20Comments%20Regarding%20Riparian%20Buffers.pdf)  
14 [%20Agency%20Act%20250%20and%20Section%20248%20Comments%20Regarding%](https://anr.vermont.gov/sites/anr/files/co/planning/documents/guidance/Guidance%20for%20Agency%20Act%20250%20and%20Section%20248%20Comments%20Regarding%20Riparian%20Buffers.pdf)  
15 [20Riparian%20Buffers.pdf](https://anr.vermont.gov/sites/anr/files/co/planning/documents/guidance/Guidance%20for%20Agency%20Act%20250%20and%20Section%20248%20Comments%20Regarding%20Riparian%20Buffers.pdf).

16  
17 A6. Will the Project impact any streams?

18 A6. No. The Project improvements will not impact the stream adjacent to the access road as  
19 this is an already developed gravel road established for the existing cell tower.  
20

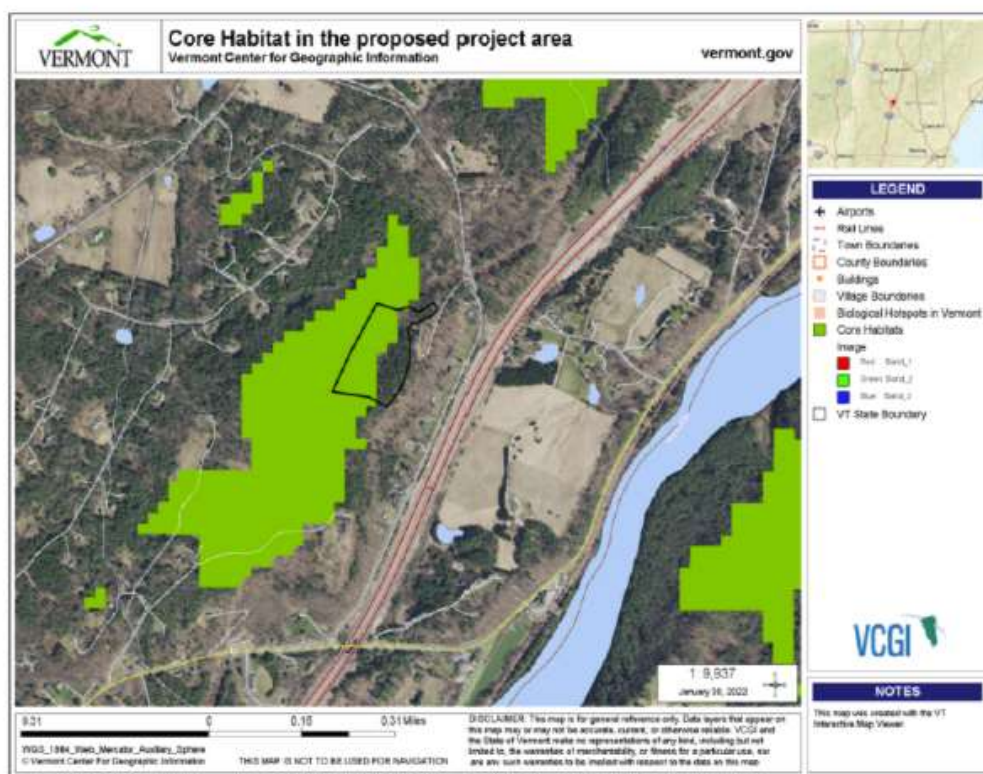
21 Q7. Exhibit NN-JG-2 at page 7 states that your report failed to mention that the Project is  
22 within an area mapped by ANR as “core habitat for wildlife.” Page 10 of Mr. Gorman’s  
23 report, Exhibit NN-SG-2, also claims: “The area is part of a core habitat block mapped by  
24 the Vermont Agency of Natural Resources.” How do you respond?

25 A7. Petitioner requested Mr. Gorman in discovery to “produce all documents that support  
26 your claim that the Project area is part of a core habitat block mapped by the Vermont  
27 Agency of Natural Resources.” In his discovery response, Mr. Gorman stated:

**ANSWER:** The habitat blocks are publicly available data, developed by the Vermont Agency of Natural Resources.

The map below was made here:

Vermont Center for Geographic Information (VCGI).  
2022. Interactive Map Viewer v.11. Geocortex Viewer  
HTML54.13.3. Available  
at: <https://maps.vermont.gov/vcgi/html5viewer/?viewer=vtmapviewer>



See Exhibit NUL DB-7.

In fact, the Agency of Natural Resources did not produce the data displayed in the image above. This was developed by the University of Vermont Spatial Analyst Lab in approximately the year 2000, and derived from 1992 Landsat landcover classifications as part of a Vermont Biodiversity Project. The intention of this portion of this larger

1 academic project was to conceptually explore the general conditions of forest  
2 fragmentation across the entire State of Vermont at the time. The metadata notes from  
3 this dataset state:

4 Various datasets were used to generate this data layer-- Landsat Thematic Mapper  
5 imagery of 1992 and 1993, USGS digital line graphs (RF 1/100,000), USGS 7.5  
6 minute digital elevation models, National Wetlands Inventory data of the  
7 USFWS. ***Accuracy may vary across the data area. No accuracy testing was***  
8 ***performed. It probably need not be said that the whole idea of "core habitat" is***  
9 ***a great generalization-- that what may function as core habitat for one species***  
10 ***may serve no such function for another. The role this dataset served was***  
11 ***correspondingly general-- as a tool to help evaluate level of landscape***  
12 ***fragmentation and ecological integrity.***  
13

14 It is an outdated data source, uses outdated methodologies, was not developed by ANR,  
15 and is not used by ANR or environmental experts today as a regulatory or analysis tool.  
16

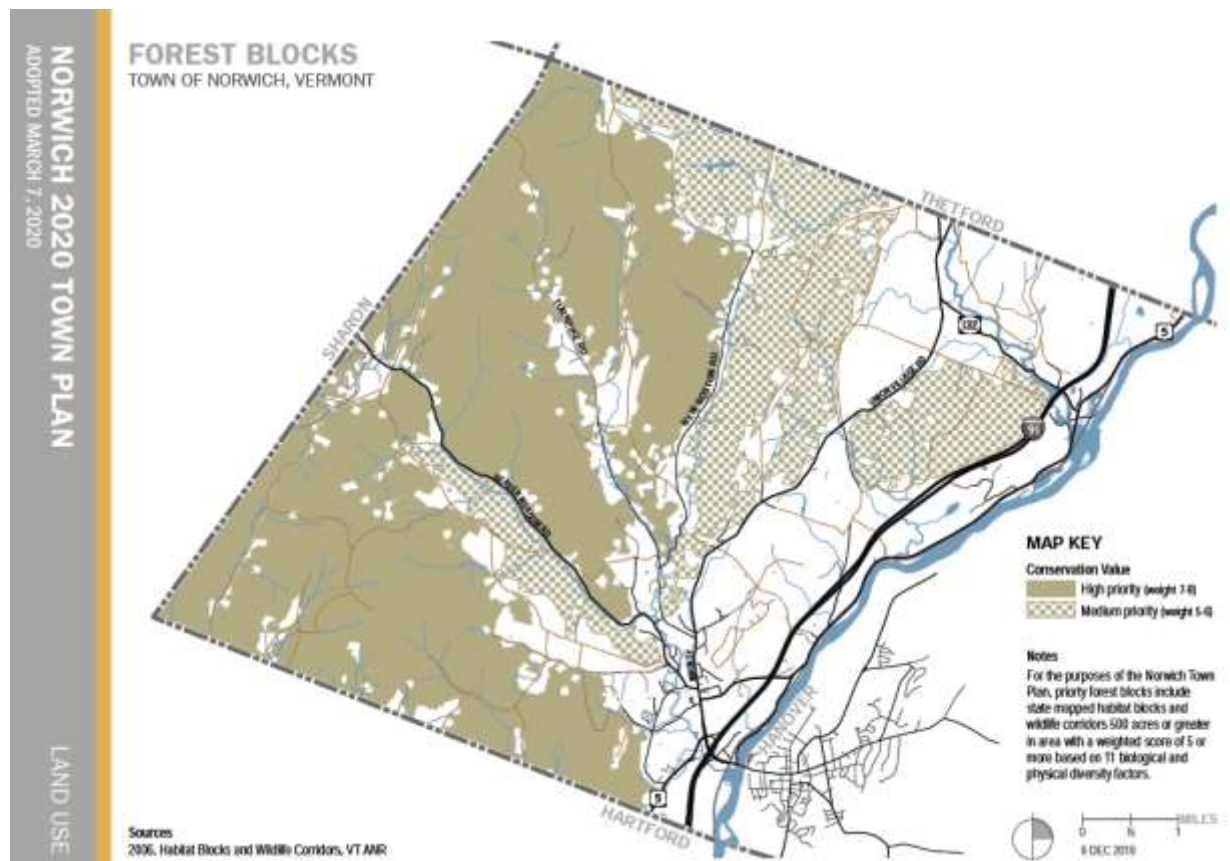
17 The Vermont Department of Fish and Wildlife Department ("VFW") has conducted a  
18 state-wide mapping and assessment of forest blocks, or contiguous forest areas, using two  
19 approaches. The first effort, referred to as Habitat Blocks developed initially in 2011 and  
20 available for viewing in the ANR Atlas, ranked the habitat and connectivity value of a  
21 total of 4,055 forest blocks in the state.<sup>1</sup> Habitat blocks are identified as high-priority or  
22 priority blocks based on the size of the block and the ranking assigned. The ANR Atlas  
23 shows the 750-acre forest block at this site with a rank of only 4 out of 10, which is a  
24 moderately low rank in terms of ecological importance. The block at this location does  
25 not make a significant contribution to regional or statewide landscape connectivity

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<sup>1</sup> *Petitions of Otter Creek Solar LLC*, Dockets Nos. 8797 & 8798, Order of 2/27/18 at 28.

1 because it is in an area that is already highly fragmented by roads, a utility line corridor,  
2 and other existing development. VFW's second and more recent forest block assessment,  
3 which is now ANR's primary forest block review tool, is termed the Vermont  
4 Conservation Design and can be viewed using the ANR online tool "BioFinder".  
5 Vermont Conservation Design identifies forest blocks as features of the landscape that  
6 are most important to maintain and enhance an ecologically functional landscape into the  
7 future. Importantly, VFW has clarified that the Vermont Conservation Design Maps  
8 "[A]re Not Effective as a regulatory jurisdictional trigger as the Highest Priority areas  
9 cover 67 percent of Vermont." See Exhibit NUL DB-6 at 15.

10  
11 The Project is neither within a mapped interior forest block nor connectivity block within  
12 the Biofinder and Vermont Conservation Design. Similarly, I would note that the Project  
13 is not within a high or medium priority forest block according to the Town of Norwich as  
14 illustrated in their Town Plan Land Use/Forest Blocks map. See Exhibit NN-JK-6 at 18,  
15 inserted, below:



Q8. Is the Project within a mapped connectivity block within the Biofinder?

A8. No, it is not.

Q9. Will the Project have an undue adverse impact on the forest block?

A9. No. The most important connectivity function of the forest block that contains the site is associated with the tributary stream riparian corridor adjacent to the access, and this stream and corridor will not be disturbed by the Project. There is no evidence of any substantial wildlife corridors on the Site. The Site is also not located between significant

1 natural areas or critical habitat features that would indicate that the Site functions as a  
2 corridor.

3  
4 Q10. Will there be an adverse impact on wildlife in general as a result of the Project?

5 A10. No. The general movement patterns of local wildlife, such as skunk, racoon, and deer will  
6 likely be changed to some degree, but not adversely so. The array equipment will be  
7 surrounded by a wildlife fence 8-foot high, with mesh size no smaller than 6 inches by 6  
8 inches extending from the ground level up to 3 feet or higher and secured by a locked  
9 gate. The creatures will develop new routes to traverse across the landscape. Any  
10 impacts to these general movements will not be unduly adverse. When we look at undue  
11 adverse impacts we are usually looking at those habitat elements that are critical to the  
12 survival of a species. Changes in the general movements of wildlife across the landscape  
13 are not critical to the survival of the species.

14  
15 Q11. Will there be an adverse impact on black bear habitat?

16 A11. No. The wildlife assessment and conclusions in our report are based upon and consistent  
17 with accepted standards established under Act 250 and Section 248, and based upon those  
18 standards, the Project site does not contain necessary black bear habitat. Criterion 8(A),  
19 which addresses necessary wildlife habitat, requires a determination (1) that the habitat  
20 constitutes “necessary wildlife habitat” and (2) if so, that the Project “will destroy or  
21 significantly imperil” such habitat. A “necessary wildlife habitat” means concentrated

1 habitat which is identifiable and is demonstrated as being decisive to the survival of a  
2 species of wildlife. 10 V.S.A 6001 (12).

3  
4 The type of concentrated and identifiable habitat that would be decisive to the survival of  
5 black bear species would include stands of scarred beech and oak trees, and spring  
6 feeding wetlands. While there are components of beech and oak within the Project area,  
7 there are no stands evidencing use by bears in the Project limit of disturbance. The  
8 wetlands within the vicinity of the Project are not of a size and location to be considered  
9 necessary bear habitat and furthermore will not be destroyed or significantly imperiled by  
10 the Project. In fact, the wetlands will not be impacted at all. To the extent black bears  
11 visit the wetlands, they will continue to have access after the solar array is installed.  
12 There are no wetlands/seeps/streams within the limits of disturbance.

13  
14 Q12. Will there be an adverse impact on Jefferson Salamander species?

15 A12. No. The Project will have no impact on the vernal pool to the west of the Project area,  
16 which provides necessary breeding habitat for amphibian species. The Project has  
17 provided an undisturbed 100-foot pool envelop as recommended for protection by ANR.  
18 In addition, the wildlife fence with no smaller than 6 inch by 6 inch mesh size at the  
19 ground surface will not preclude ground movement of amphibians in the project area.

20  
21 Q13. Is Norwich agreeing to all the conditions filed by ANR in this case?

22 A13. Yes.

1

2           **3.     Conclusion**

3    Q14.   Does this conclude your testimony?

4    A14.   Yes.

5    8749882\_13: