

March 16, 2016 2016 MAR 16 PM 6 09

***By Hand Delivery and E-Mail***

Ms. Judith Whitney, Clerk  
Vermont Public Service Board  
112 State Street, Drawer 20  
Montpelier, VT 05620-2701

Re: Docket No. 7250 – Deerfield Wind Project  
Sixth Set of Post-CPG Compliance Filings

Dear Ms. Whitney,

On behalf of Petitioner Deerfield Wind, LLC (“Deerfield Wind”), we are pleased to submit the sixth set of compliance filings (an original plus six copies) pursuant to the Certificate of Public Good (“CPG”) issued for the Deerfield Wind Project (“Project”).

The attached compliance filings and their status under the CPG are as follows:

| Compliance Filing                                     | CPG Condition | CPG Language                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CPG Review Process                                   |
|-------------------------------------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Stipulation re Bear Habitat Mitigation                | 11            | <i>Deerfield shall file a proposal, for approval by the Board, for the land it proposes to conserve as a mitigation measure for the impact of the Project on bears. The proposal shall conserve at least 144 acres of land that is comparable to the remote, high elevation area of concentrated beech stands impacted by the Project. Deerfield may not commence site preparation or construction until the Board has approved the mitigation proposal, unless otherwise authorized by the Board.</i> | None specified; Deerfield Wind recommends two weeks. |
| Plan re Indirect Impacts to Bears                     | 13            | <i>Deerfield shall file a detailed proposal describing how it will minimize indirect impacts to bears. Such a proposal shall address, at a minimum, gating the access roads, utilizing remote cameras to deter illegal entry, patrols by law enforcement, limiting activity at the Project during certain time periods, and preserving bear crossing areas along the access roads.</i>                                                                                                                 | None specified; Deerfield Wind recommends two weeks. |
| Memoranda re May-June Construction and Breeding Birds | 14            | <i>Deerfield shall not undertake bulldozing, tree cutting, and blasting in areas proximate to breeding bird habitat during May and June to protect breeding birds. If Deerfield anticipates that construction will occur over the course of two seasons, Deerfield may propose that construction be allowed during May and June, but shall demonstrate that such permission will lessen the impact on breeding birds.</i>                                                                              | None specified; Deerfield Wind recommends two weeks. |

**1. CPG Condition 11 - Black Bear Habitat Mitigation**

Deerfield Wind submits the attached *Stipulation Between Deerfield Wind, LLC, the Agency of Natural Resources (“ANR”) and Vermont Natural Resources Council (“VNRC”) Regarding Mitigation for Black Bear Habitat* (“Bear Stipulation”) in satisfaction of CPG Condition 11. As detailed in the Bear



Stipulation, Deerfield Wind will pay \$1 million to be used by ANR to conserve the so-called MTL Stratton Parcel, to continue the ongoing bear study,<sup>1</sup> and to conserve other lands in the future that contain bear habitat. The \$1 million will be made in two \$500,000 payments into dedicated account(s) under the Species and Habitat Conservation Fund created by 10 V.S.A. § 4047(f).

The significant attributes of the Stratton Parcel are specifically enumerated in the Stipulation and its attachments. In addition, the Stipulation recognizes that continuing funding of the Bear Study for several years during Project operations will assist ANR in developing and implementing long-term strategies for the protection of black bear habitat, including informing future land purchases by revealing which habitats bears are actively using.

Deerfield Wind, ANR, and VNRC agree that the Bear Stipulation represents an outstanding approach to mitigating the Project's direct and indirect impacts to bears. As a result, Deerfield Wind respectfully submits that the Bear Habitat Stipulation satisfies CPG Condition 11.<sup>2</sup> If the Board accepts the Stipulation, Deerfield Wind will be committed to providing ANR the necessary funds to conserve appropriate lands. While the CPG condition is silent as to who would be the holder of the lands, ANR has conserved lands many times in the past, and has the requisite expertise, experience and institutional capacity to do so in this case. Indeed, the Species and Habitat Conservation Fund's authorizing language specifically provides that ANR "may accept mitigation payments directed toward fish and wildlife species and habitat conservation" and "may make expenditures from the Fund for purposes of species and habitat conservation."<sup>3</sup> ANR has been extensively involved in this Project from its inception, and was, along with VNRC, the driving force behind the CPG conditions protecting bears. Moreover, the Stipulation injects additional funding into ANR's ongoing efforts vis-à-vis the bear study, enhancing the implementation of CPG Condition 12.

The Bear Habitat Stipulation is the same approach that the Board approved with regard to CPG Condition 12, which provides that "Deerfield shall conduct a multi-year study on the impact of the Project on bears. Deerfield shall file a proposed study protocol for approval by the Board." In November 2010, Deerfield Wind and ANR executed a stipulation ("Bear Study Stipulation") much like the current one, under which Deerfield Wind provided ANR with \$500,000 to conduct a GPS-based study to evaluate the Project's indirect impacts on bear use of habitat near the Project site. The Board approved the Bear Study Stipulation, which provided that the study would be "designed, conducted, and managed by ANR or an agent of ANR," and that Deerfield Wind would have no obligations beyond its financial contribution. *See* Board Order re Bear Study (April 7, 2011).

Finally, Deerfield Wind would note that Condition 11 only requires Board approval of the *proposal* prior to commencement of construction, understanding that implementation will occur after Board approval and after the start of construction. The Bear Stipulation thus conforms to CPG Condition 11 in that regard.

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<sup>1</sup> The ongoing bear study was provided for under the 2010 Bear Study Stipulation, and approved by the Board by Order dated April 7, 2011.

<sup>2</sup> Should for any reason the Board determine that the Bear Stipulation cannot satisfy CPG Condition 11 because ANR would purchase the land rather than Deerfield Wind, Deerfield Wind respectfully moves the Board to amend Condition 11 to specifically allow ANR to conserve bear habitat with funds provided by Deerfield Wind, as reflected in the Bear Stipulation. Such an amended CPG Condition 11 will achieve the same result as the current language.

<sup>3</sup> Title 10 defines "mitigation" as "the acquisition of an interest in land, change in operation, or funds or other remuneration paid in order to compensate for the loss of habitat, plants, or animals required by a permitting or regulatory process." 10 V.S.A. § 4001(37).



## **2. Condition 13 – Bear Indirect Impact Plan**

Deerfield Wind submits the attached *Plan for Minimizing Project-Related Direct and Indirect Impacts on Bears* in satisfaction of CPG Condition 13. Deerfield Wind originally submitted the equivalent Plan to the United States Forest Service (“USFS”) as part of its review process, and it has now been incorporated into the USFS’s Special Use Permit (“SUP”).<sup>4</sup> The plan satisfied CPG Condition 13, in that it addresses gating the access roads, direct and remote surveillance, limiting activity at the Project during certain time periods, preserving bear crossings, and other measures if needed to deter unauthorized motorized access. In addition, the plan addresses measures to avoid an increase in authorized foot traffic by providing public information kiosks and warning signs.

Deerfield has consulted with ANR regarding this Bear Indirect Plan, and is authorized to represent that ANR deems it to be acceptable.

## **3. Condition 14 – May-June Construction and Breeding Birds**

CPG Condition 14 provides as follows:

*Deerfield shall not undertake bulldozing, tree cutting, and blasting in areas proximate to breeding bird habitat during May and June to protect breeding birds. If Deerfield anticipates that construction will occur over the course of two seasons, Deerfield may propose that construction be allowed during May and June, but shall demonstrate that such permission will lessen the impact on breeding birds.*

Deerfield Wind submits the attached memoranda of Doren Emmett (Deerfield Wind) and Adam Gravel, CWB (Stantec) in connection with Condition 14.

Mr. Emmett indicates that construction of the Project will require two seasons if the May-June restriction remains in place. Due in part to efforts to avoid impacts to roosting bats in the summer and early fall in accordance with VTANR recommendations and U.S. Fish & Wildlife Service regulations regarding the protection of the northern long-eared bat (*Myotis septentrionalis*) (a federally- and state-listed species),<sup>5</sup> maintaining the May-June moratorium will effectively prohibit tree cutting for almost the entire construction season. As a result, Deerfield Wind would need to construct the Project over two years unless it is able to work during May and June.

Mr. Gravel, a Certified Wildlife Biologist with Stantec, provides his professional opinion that completing the Project in one season will lessen the impact on breeding birds, in several ways: (i) by lessening impacts to breeding that occurs later in the summer; (ii) by shortening the duration and therefore noise impacts of construction, and (iii) by allowing birds to return to a stabilized environment more quickly.

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<sup>4</sup> See Appendix C, Attachment 6 of the SUP for Construction, submitted to the Board on October 21, 2015. By Order dated February 11, 2016 the Board determined that the SUP partially fulfilled the requirements of CPG Condition 23 (subject to the submission of the operational phase SUP prior to Project operations).

<sup>5</sup> See 50 C.F.R. 17.40, <https://www.gpo.gov/fdsys/pkg/FR-2016-01-14/pdf/2016-00617.pdf> (4(d) Rule for the NLEB); [http://www.vtfishandwildlife.com/UserFiles/Servers/Server\\_73079/File/Learn%20More/Living%20with%20Wildlife\(Vermont\)/TE\\_Rule\\_2015.pdf](http://www.vtfishandwildlife.com/UserFiles/Servers/Server_73079/File/Learn%20More/Living%20with%20Wildlife(Vermont)/TE_Rule_2015.pdf). (Vermont Endangered and Threatened Species Rule).



Deerfield Wind has consulted with ANR concerning CPG Condition 14 and the circumstances described in the attached memoranda. We are authorized to report that ANR concurs with the following jointly-developed restrictions for construction activities in May and June:

- i. Tree Clearing: Prohibited.<sup>6</sup>
- ii. Bulldozing: Allowed.
- iii. Blasting: Allowed, subject to the following conditions:

Timing of Blasting (for purposes of these agreed to restrictions, "blasting" refers to the actual detonation of the charges, not to preparation and setup).

|                           |                                               |
|---------------------------|-----------------------------------------------|
| <i>May 1 – May 14:</i>    | <i>blasting only between 10 a.m. – 5 p.m.</i> |
| <i>May 15 – June 14:</i>  | <i>blasting only between 11 a.m. – 5 p.m.</i> |
| <i>June 15 – June 30:</i> | <i>blasting only between 10 a.m. – 5 p.m.</i> |

Blasting during May and June will be limited to days without rain, to avoid exposing eggs to wet and cold conditions in the event that any nesting birds are flushed from their nests.

- iv. Other Construction Activities: Allowed (as per the existing CPG condition)

### Conclusion

For the reasons provided herein, Deerfield Wind respectfully requests the Board to determine that it has complied with CPG Conditions 11 and 13, and to permit construction activities during May and June under CPG Condition 4, as specified above.

Thank you in advance for your consideration of the above, and please let us know if you have any questions.

Sincerely,



Andrew N. Raubvogel, Esq.  
Alexander "Sash" Lewis, Esq.  
DUNKIEL SAUNDERS ELLIOTT RAUBVOGEL & HAND, PLLC

Encls.

cc: Service List

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<sup>6</sup> Unless federal or state guidelines change to allow clearing in July, August, and September.





**STATE OF VERMONT  
PUBLIC SERVICE BOARD**

Docket No. 7250

Amended Petition of Deerfield Wind, LLC for a certificate )  
of public good authorizing it to construct and operate 17 turbine, )  
34 to 35.7 MW wind generation facility, and associated transmission )  
and interconnection facilities, on approximately 80 acres in the )  
Green Mountain National Forest, located in Searsburg and )  
Readsboro, Vermont, with 7 turbines to be placed on the east side )  
of Route 8 on the same ridgeline as the existing GMP Searsburg )  
wind facility (Eastern Project Area), and 10 turbines along the )  
ridgeline to the west of Route 8 in the northwesterly orientation )  
(Western Project Area) )

**CERTIFICATE OF SERVICE**

I, Gillian Bergeron, certify that on March 16, 2016, I forwarded copies of Deerfield Wind, LLC's *Letter to the Public Service Board re Sixth Set of Compliance Filings*, to the following service list by the delivery method noted:

**By Email and Hand Delivery:**

Ms. Judith Whitney, Clerk  
Vermont Public Service Board  
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Montpelier, VT 05620-2701

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Gerald DeGray  
P.O. Box 1717  
Wilmington, VT 05363-1717

Timothy Seck  
Iberdrola Renewables  
701 4th Ave. South, Suite 1010  
Minneapolis, MN 55415

Dated at Burlington, Vermont, this 16<sup>th</sup> day of March, 2016.

By:

A handwritten signature in black ink, appearing to read "Gillian Bergeron". The signature is fluid and cursive, with a large loop at the end.

Gillian Bergeron  
Paralegal

Amended Petition of Deerfield Wind, LLC for a )  
certificate of public good authorizing it to construct )  
and operate 17 turbine, 34 to 35.7 MW wind )  
generation facility, and associated transmission and )  
interconnection facilities, on approximately 80 acres )  
in the Green Mountain National Forest, located in )  
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the same ridgeline as the existing GMP Searsburg )  
wind facility (Eastern Project Area), and 10 turbines )  
along the ridgeline to the west of Route 8 in the )  
northwesterly orientation (Western Project Area) )

Docket No. 7250

**Stipulation Between Deerfield Wind, LLC, the Vermont Agency of Natural Resources, and the Vermont Natural Resources Council, Inc. Regarding Mitigation for Black Bear Habitat**

This Stipulation, dated this 14<sup>th</sup> day of March, 2016, is entered into between Deerfield Wind, LLC ("Deerfield"), the Vermont Agency of Natural Resources ("ANR"), and the Vermont Natural Resources Council, Inc. ("VNRC") in Public Service Board ("Board") Docket No. 7250. Deerfield, ANR, and VNRC are each sometimes referred to in this Stipulation as a "Party" and collectively as the "Parties."

**Whereas**, Condition 11 of Deerfield's Certificate of Public Good ("CPG") to construct and operate a 30 MW wind electric generation facility along two ridgelines in the Towns of Searsburg and Readsboro, Vermont (the "Project") (issued on April 14, 2009, amended on July 17, 2009) requires Deerfield to file a proposal for approval by the Board. Condition 11 states that the Deerfield proposal shall be:

*for the land it proposes to conserve as a mitigation measure for the impact of the Project on bears. The proposal shall conserve at least 144 acres of land that is comparable to the remote, high elevation area of concentrated beech stands impacted by the Project. Deerfield may not commence site preparation or construction until the Board has approved the mitigation proposal, unless otherwise authorized by the Board;*

**Whereas**, the Board's Order of July 17, 2009 required Deerfield Wind to work with ANR and VNRC in developing bear habitat mitigation and indirect impact study proposals; and

**Whereas**, ANR Fish and Wildlife Department ("FWD") has expertise and experience in the areas of wildlife habitat and land conservation and is therefore well situated to identify and conserve appropriate land to mitigate the Project's direct impacts on black bear habitat; and

**Whereas**, the ANR Department of Forests, Parks and Recreation ("FPR") has identified a parcel of approximately 637-acres located in Stratton and Jamaica, Vermont ("the Stratton Parcel"), currently owned by Meadowsend Timberlands Limited Partnership ("MTL"), for potential conservation through the federal U.S. Forest Service Forest Legacy Program; and

**Whereas**, partial funding from the U.S. Forest Service Forest Legacy Program in the amount of up to 75% of the appraised fair market value, pursuant to 16 U.S.C. § 2103c(j)(2), is allocated to acquire a Forest Legacy conservation easement on the Stratton Parcel (“the Stratton Conservation Easement”), with the remaining 25% match to be provided by other sources; and

**Whereas**, the Stratton parcel contains productive rich northern hardwoods, diverse forest stands and resources conducive to future forest management, and meets the purposes of the U.S. Forest Service Legacy Program; and

**Whereas** the Stratton Parcel contains a documented black bear habitat corridor, is surrounded by conserved lands with documented high-quality black bear habitat and bear road crossings, and contains approximately 57 acres of remote, high-elevation, concentrated bear-scarred beech habitat, and approximately 43 acres of less concentrated beech mast habitat; and

**Whereas**, the Stratton Parcel includes valuable natural resources, including 55 acres of Class 2 wetlands (including ecologically-significant boggy beaver wetlands), rare and uncommon plants, and headwater streams; and

**Whereas**, the Stratton Parcel ranks high for concentrations of ecological and habitat components, provides excellent habitat and forest block connectivity between large conserved parcels, and contains multiple indications of high biodiversity; and

**Whereas**, the Stratton Parcel is attractive to developers, as it is located near a major ski resort and has extensive road frontage, and has previously been the subject of a development proposal, which ANR and others successfully opposed on the ground that the Stratton Parcel constitutes critical bear habitat; and

**Whereas**, the Stratton Parcel and its significant attributes are more particularly shown and described in Attachment A to this Stipulation; and

**Whereas**, the Parties propose to contribute the Forest Legacy required match of 25% of the fair market value of the Stratton Parcel, provided black bear habitat mitigation provisions are approved for inclusion in the Stratton Conservation Easement to protect the bear-scarred beech and beech mast habitat areas under the U.S. Forest Legacy Program, subject to the requirements of the U.S. Forest Legacy Program and the approval of the U.S. Forest Service (“USFS”), FPR, MTL and FWD; and

**Whereas**, pursuant to a prior stipulation executed between Deerfield, ANR and VNRC on November 10, 2010, and approved by the Board on April 7, 2011 (“the 2010 Bear Study Stipulation”), Deerfield is currently funding a multi-year bear study in the Project area (“the Bear Study”) to satisfy Conditions 10 and 12 of the CPG; and

**Whereas**, the 2010 Bear Study Stipulation stated that Deerfield would provide \$500,000 to ANR or an agent designated by ANR to fund the Bear Study (the “Initial Bear Study Funds”), which

Initial Bear Study Funds were to be released to ANR or its agent in installments based on a timetable set forth in the 2010 Bear Study Stipulation; and

**Whereas**, as of the date of this Stipulation, ANR (through FWD) has received \$350,000 of the Initial Bear Study Funds and the Parties wish to accelerate the payment of the remaining \$150,000 of the Initial Bear Study Funds, as specified in this Stipulation; and

**Whereas**, continuation of the Bear Study while the Project operates will assist ANR (through FWD) in developing and implementing long-term strategies for the protection of black bear habitat, including identifying high quality black bear habitat and informing future land purchases. Accordingly, the Parties wish to provide for additional funding for continuation of the Bear Study and other black bear habitat mitigation efforts, as described herein; and

**Whereas**, the Parties are confident that ANR will succeed in identifying and conserving other appropriate land, in addition to the Stratton Parcel, to mitigate the Project's direct, and also potential indirect impacts, on black bear habitat, through the use of the Mitigation Funds provided under this Stipulation; and

**Whereas**, while the Parties recognize that the Board did not require off-site mitigation for indirect impacts to critical bear habitat beyond the Bear Study, the Parties believe this Stipulation, when fully implemented, will exceed what is required in CPG Condition 11 by conserving additional black bear habitat beyond the required 144 acres of off-site mitigation; and

**Whereas**, the Parties recognize that this Stipulation, when fully implemented, will provide an outstanding approach to mitigating the Project's direct and any potential indirect impacts on black bears pursuant to CPG Condition 11, by facilitating the conservation of a parcel of land that includes critical black bear habitat, by funding ANR's ongoing bear study in the Project area, and by providing ANR funds to conserve additional black bear habitat;

**Therefore**, in consideration of the mutual understandings reached herein, the Parties hereby agree as follows:

#### **STIPULATIONS**

1. **Mitigation.** Deerfield shall pay a total of One Million Dollars (\$1,000,000.00) (the "Mitigation Funds") in mitigation of the Project's direct and indirect impacts on Black Bear habitat, as follows:
  - a. Five Hundred Thousand Dollars (\$500,000.00) within thirty days after the Board approves this Stipulation or within thirty days after the closing of the purchase and sale of the Stratton Conservation Easement, provided it contains approved black bear habitat mitigation provisions, whichever is later. However, in the event that the Stratton Conservation Easement does not contain black bear habitat mitigation provisions, the funds under this subsection shall be conveyed to ANR for additional habitat conservation under sections 2b and 4 below, within thirty days after

commencement of Project operation, unless ANR timely notifies Deerfield that the funds are required to be paid at an earlier specified date in order to avoid gaps in the funding of the Bear Study or to execute section 4 below, but in no event earlier than sixty days after the Board approves this Stipulation.

- b. Five Hundred Thousand Dollars (\$500,000.00) within thirty days after commencement of Project construction, unless ANR timely notifies Deerfield that the funds are required to be paid at an earlier specified date in order to avoid gaps in the funding of the Bear Study or to execute section 4 below, but in no event no earlier than sixty days after the Board approves this Stipulation.
- c. Deerfield shall make such payments in a manner to be prescribed by ANR. ANR shall deposit the Mitigation Funds into a dedicated account or accounts of the Species and Habitat Conservation Fund created within the Fish and Wildlife Fund pursuant to 10 V.S.A. § 4047(f). ANR may elect to establish separate accounts for the different uses of the Mitigation Funds described in Section 2 below.
- d. ANR shall use the Mitigation Funds solely for the purposes specified in Sections 2, 3 and 4 below. In the event ANR or any other governmental entity utilizes any Mitigation Funds for any other purpose, Deerfield shall not be required to make additional payments under this Stipulation.

2. Stratton Parcel.

- a. Provided that the purchase of the Stratton Conservation Easement includes black bear habitat mitigation provisions, is consistent with the Forest Legacy Program, and is approved by the USFS, FPR, MTL and FWD, the Mitigation Funds shall be used by ANR to cover 25% of the fair market value of the Stratton Conservation Easement. FPR will be the easement holder, in accordance with the requirements of the Forest Legacy Program, upon the closing of the purchase and sale of the easement.
- b. To the extent that ANR has established a separate account under Section 1.c. above for the Stratton Parcel, ANR shall utilize any unexpended funds remaining after the closing of the Stratton Conservation Easement purchase, provided it includes bear habitat mitigation provisions, solely for establishing a stewardship endowment to fund monitoring and stewardship of the Stratton Conservation Easement by FPR and for the purposes identified in sections 3 and 4 below. In the event that the Stratton Conservation Easement is not acquired, or the easement is acquired by FPR but it does not include bear habitat mitigation provisions, ANR shall utilize the funds solely for the purposes identified in sections 3 and 4 below.
- c. In order to satisfy the CPG Condition 11 mitigation requirements, the Stratton Conservation Easement shall include appropriate measures to manage and maintain critical bear habitat. If the bear habitat mitigation provisions are not approved by any one of the USFS, FPR, MTL or FWD, the Stratton Conservation Easement may

proceed as a Forest Legacy Project without bear habitat mitigation provisions and this Stipulation shall be not be interpreted as requiring FPR to only accept a Forest Legacy Easement on the Stratton Parcel that includes bear habitat mitigation provisions.

- d. ANR shall file a copy of the Stratton Conservation Easement with the Board within thirty days after the closing of the purchase of the Stratton Conservation Easement, provided the Stratton Conservation Easement includes bear habitat mitigation provisions. In the alternative, if it becomes apparent that the Stratton Conservation Easement for the Stratton Parcel will not be executed, or that the Stratton Conservation Easement will not include bear habitat mitigation provisions, ANR shall, after consulting with the Parties, file a letter with the Board outlining next steps for conserving high quality black bear habitat as described in section 4 below.

3. Continuation of Bear Study.

- a. Mitigation Funds shall be used by ANR (through FWD) for the continuation of the Bear Study during construction and operation of the Project. The Bear Study shall assist ANR (through FWD) in developing and implementing long-term strategies for the protection of black bear habitat, including informing additional land purchases (by fee or easement) of black bear habitat.
- b. The provisions of the 2010 Bear Study Stipulation, other than provisions setting forth the timing of payments, shall apply with regard to the use of any Mitigation Funds for the continuation of the Bear Study.
- c. ANR (through FWD) shall file a copy of the final Bear Study report with the Board within thirty days after its completion.
- d. In the event that ANR (through FWD) secures additional funding that is unrelated to this Stipulation to continue the Bear Study, Mitigation Funds that were contemplated under this section may be used to implement section 4 below.

4. Additional Habitat Conservation.

- a. Mitigation Funds shall be used by ANR for the purchase by fee or easement of land (in addition to the contribution of 25% of fair market value as match for the Stratton Parcel) to conserve additional high quality bear mast stand habitat consistent with an outstanding mitigation approach described in this Stipulation, which will provide any remaining mitigation that is required under CPG Condition 11. Such land shall contain habitat value comparable to the beech stands impacted by the Project. ANR shall consult with VNRC in identifying mitigation lands as part of this section.
- b. Within thirty days after the closing of any such additional land purchases, ANR shall file with the Board a description of the land and a copy of the deed or conservation easement, as the case may be.

5. Accelerated Payment of Remaining Initial Bear Study Funds to ANR. The Parties acknowledge that pursuant to the 2010 Bear Stipulation, Deerfield has paid to ANR or its agent \$350,000 to fund the Bear Study. Under the terms of the 2010 Bear Stipulation, Deerfield is not required to pay the remaining \$150,000 until after Deerfield commences construction of the Project. The Parties agree to accelerate the payment of the remaining \$150,000 of Initial Bear Study Funds so that Deerfield shall pay such amount to ANR no later than July 1, 2016. To the extent that there is any conflict between this section and Section 3 of the 2010 Bear Stipulation, the terms of this section shall prevail. The Parties agree that the terms and conditions of the 2010 Bear Stipulation that have not been expressly modified by this section shall continue in full force and effect.
6. Satisfaction of CPG Condition 11.
  - a. Provided Deerfield fulfills its obligations under this Stipulation, and based upon the expectation that ANR will fulfill its commitments hereunder, the Parties agree that the Stipulation satisfies CPG Condition 11.
  - b. The Parties request that the Board approve the Stipulation in all material respects and deem the Stipulation sufficient to satisfy the requirements of CPG Condition 11.
  - c. The Parties agree that all requirements in the Stipulation shall be included in any Board order concerning the Project.
7. Entire Stipulation. This Stipulation represents the entire Stipulation between the Parties with respect to the Project. It may be modified only upon mutual written Stipulation by the Parties and is subject to any necessary Board approvals.
8. No Precedential Effect. Other than as may be specifically provided herein, this Stipulation shall not constitute an admission of any fact or law by any Party concerning the Project or any impacts related to the Project. This Stipulation shall not be construed as having precedential impact in any future section 248 proceeding concerning this or any other Project, except as necessary to implement this Stipulation or to enforce an order of the Board resulting from this Stipulation.
9. Conditions Precedent. This Stipulation is expressly conditioned upon the satisfaction of all Conditions Precedent, as defined in this Section 9. If all Conditions Precedent are not satisfied, the Stipulation shall, at the option of any Party, be deemed to be null and void and without effect, and shall not constitute any part of the record in this proceeding and shall not be used for any other purpose. In the event that a Party exercises its option to void the Stipulation, each Party shall be placed in the position that it enjoyed in this proceeding before entering into the Stipulation. Exercise of the option to terminate this Stipulation shall be by written notice delivered to the Board and the Department. For purposes of this Section, "Conditions Precedent" shall include only the following:
  - a. The Parties filing this Stipulation with the Board.



- b. The Board approving all of the provisions of this Stipulation, without material change or condition. In the event the Board materially changes or conditions the Stipulation, and a Party exercises its option to void the Stipulation solely due to a failure of this Condition Precedent, the Party shall provide written notice to the Board and the Parties no later than ten business (10) days after issuance of a Board Order triggering the option.
  - c. Deerfield obtaining all approvals, permits, consents and authorizations required for construction of the Project.
  - d. Deerfield electing, in its sole discretion, to move forward with constructing the Project.
10. Counterparts. This Stipulation may be executed and delivered by the parties hereto in any number of counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument. A PDF, facsimile or electronic signature page to this Agreement shall be treated as an original.
11. Choice of Law. Any disputes arising under this Stipulation shall be resolved by the Board under Vermont Law.

*[End of Stipulation. Signature pages follow]*

*The Parties hereto have executed this Stipulation effective as of the date first set forth above.*

**DEERFIELD WIND, LLC**

By:   
\_\_\_\_\_  
Geoffrey H. Hand, Esq.  
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By: \_\_\_\_\_  
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**VERMONT AGENCY OF NATURAL RESOURCES**

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Catherine Gjessing, Esq.  
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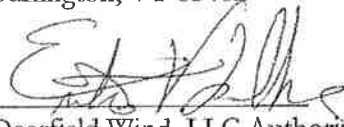
**VERMONT NATURAL RESOURCES COUNCIL, INC.**

By: \_\_\_\_\_  
Jamey D. Fidel, Esq.  
General Counsel  
Vermont Natural Resources Council, Inc.  
9 Bailey Avenue  
Montpelier, VT 05602

*The Parties hereto have executed this Stipulation effective as of the date first set forth above.*

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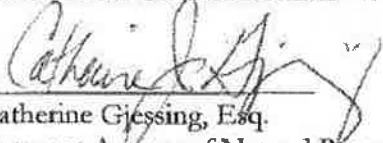
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## **ATTACHMENT A TO DEERFIELD WIND BEAR STIPULATION (MARCH 14, 2016)**

### **Stratton/MTL Parcel Wildlife Attributes**

- The VT Department of Fish and Wildlife (VTDFW) identified a stand of 57 acres of High Concentration of Bear Scarred Beech (BSB) trees, and a stand of 43 acres of BSB of Lower Concentration on the Stratton/MTL Property through a field trip conducted on February 2, 2016. The stand is part of a larger stand of concentrated beech on an adjacent conserved property. See *Figures 1 - 2*.
- *Vermont Conservation Design: Maintaining & Enhancing Ecologically Functional Landscape* (VTDFW, 2015) identifies the Stratton/MTL parcel as part of both a "highest priority interior forest block" and a "highest priority connectivity block." Highest priority forest blocks are the largest and/or highest ranked forest blocks from all biophysical regions in Vermont that provide the foundation for interior forest habitat and associated ecological functions. The primary goal is to maintain the interior forest conditions that forest blocks provide by avoiding permanent interior forest fragmentation resulting from development. In regards to highest priority connectivity blocks, it is critically important to maintain or enhance the structural and functional connectivity that occurs on the margins of these blocks where they border other blocks. This can be accomplished by maintaining forest cover along the margins and by limiting development in these areas of block-to-block connectivity. All sections of Mountain Rd and West Jamaica Rd associated with the 679 acre property are identified as "highest priority wildlife road crossings" in the Report. Maintaining the connectivity function across these segments of road for black bears and other species is a key goal of the VT Conservation Design. See *Figures 3-5*.
- Over 25 years ago, the Stratton/MTL Property was part of the proposed 1,700 acre "Tamarack" residential resort development in the Towns of Stratton, Jamaica and Wardsboro. The whole acreage, including the subject property, was designated as "necessary wildlife habitat" for black bears under Criterion 8(A) by the Act 250 District II Environmental Commission in a decision denying a permit for the project (see Findings of Fact and Conclusions of Law, #2W0771, April 10, 1991).
- The Stratton/MTL parcel is part of The Conservation Fund's county-wide landscape conservation project -- the Windham Region Working Forest Initiative (WRWFI), in collaboration with the VTDFW, the Windham Regional Commission and other federal, state and local agencies and organizations. The subject parcel (#13 IN PURPLE IN FIGURE 8) is a critical link in this larger initiative and its importance as critical habitat with concentrated beech feeding areas, reproductive home range and travel corridor is corroborated with an independent Natural Resource Inventory. See *Figure 6*.

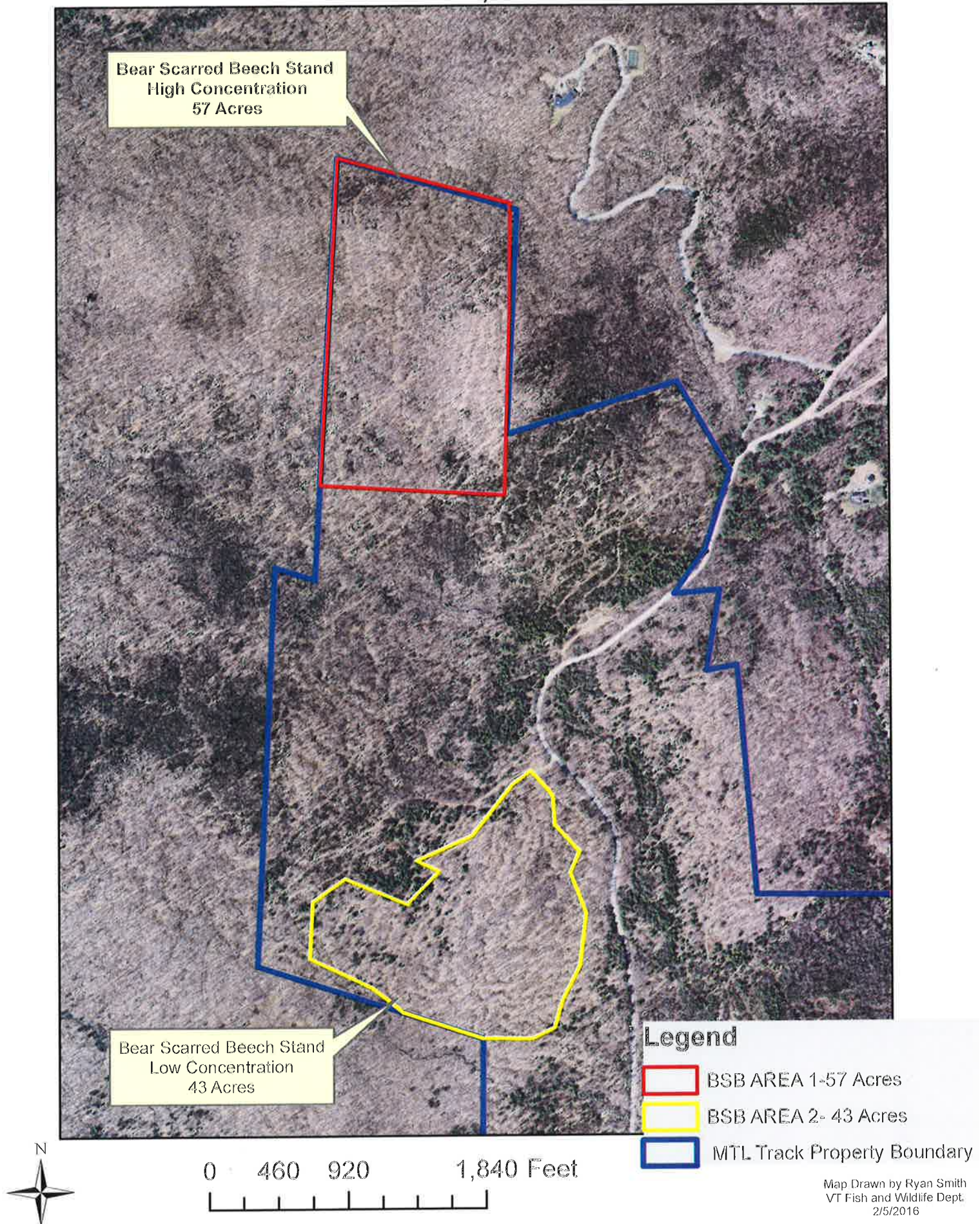
Encompassing 9,263 acres, the focus for this project is to protect working forest lands with the highest ecological, wildlife habitat and connectivity values across the landscape linking the Green Mountain National Forest with contiguous forest blocks to the Connecticut River Valley. Black bears are the focal free ranging wildlife species for which the protection of core habitat and connectivity was designed in this project. See *Figures 7 and 8*.

### List of Figures

1. Bear Scarred Beech Stands – MTL Stratton Parcel (VTDFW, 2/5/16)
2. Map of Stratton MTL Parcel (WRWFI)
3. VT Conservation Design: Priority Forest Blocks (VTDFW)
4. VT Conservation Design: Priority Connectivity (VTDFW)
5. VT Conservation Design: Priority Road Crossings (VTDFW)
6. Stratton MTL parcel – bear significance
7. Habitat Block Linkage Map (WRWFI)
8. Windham Region Working Forest Map (WRWFI)

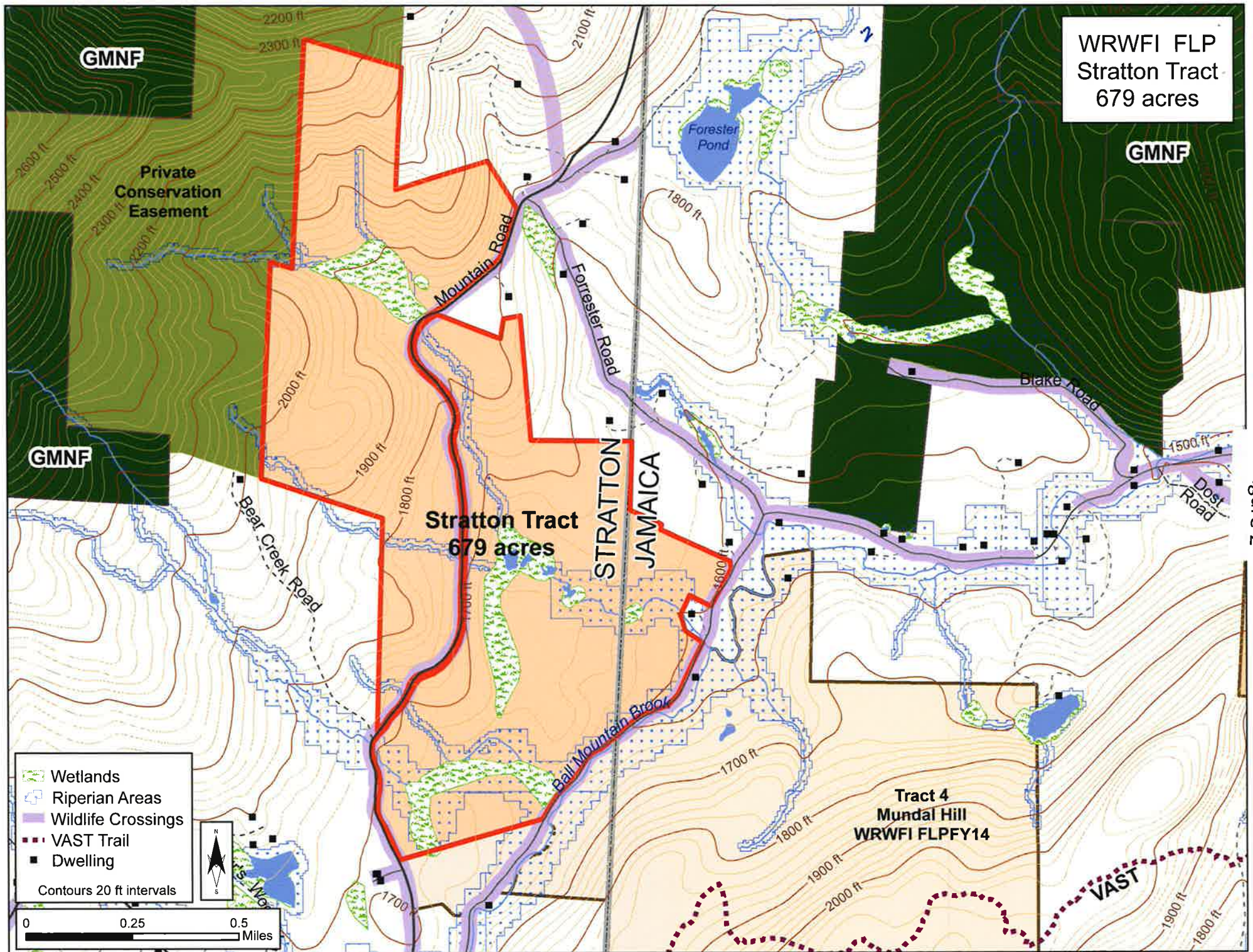


Figure 1  
MTL Track Bear Scarred Beech Stands  
Stratton, VT









WRWFI FLP  
Stratton Tract  
679 acres

Figure 2



Figure 3

# Stratton Tract . Priority Forest Blocks and Surface Waters

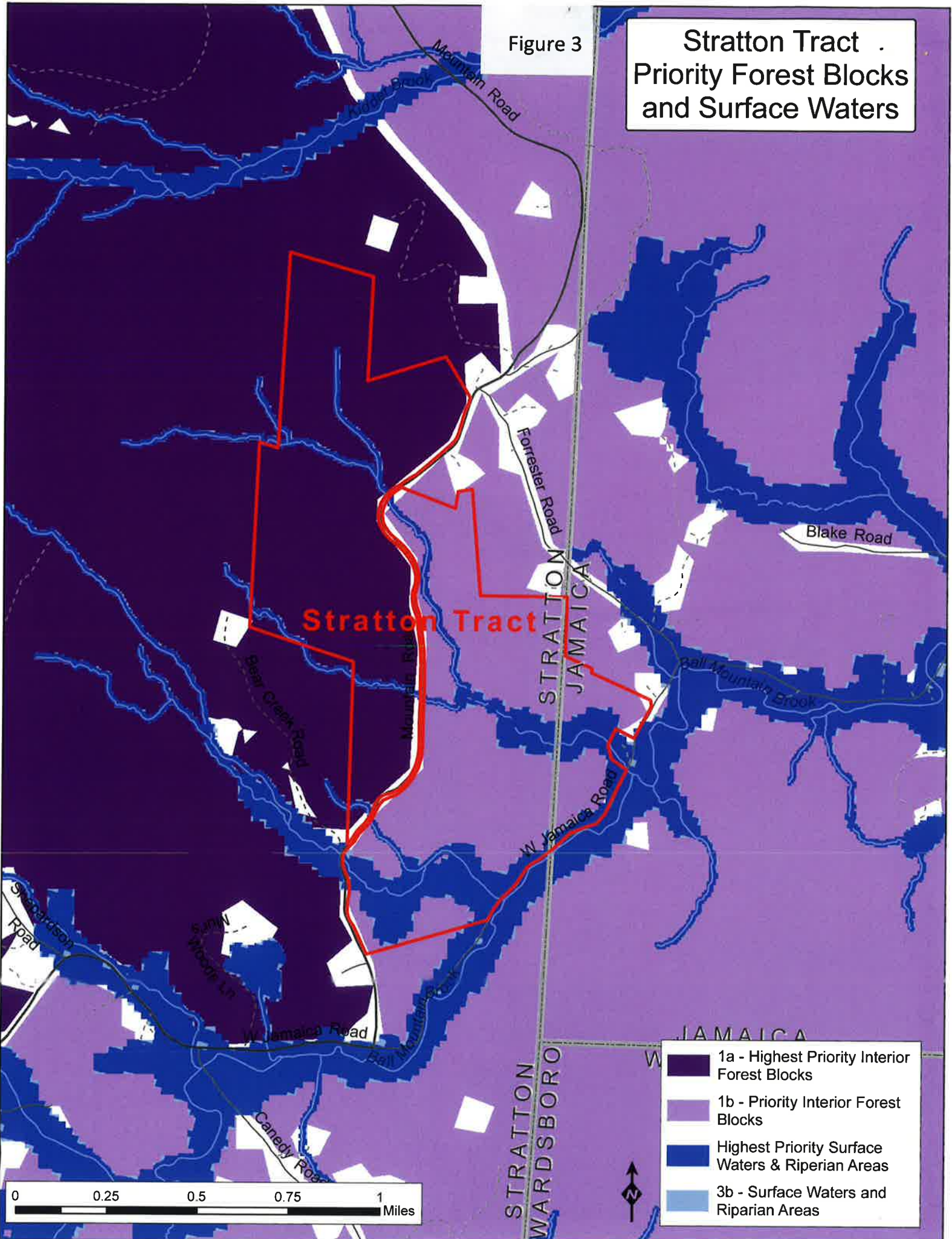




Figure 4

# Stratton Tract Priority Connectivity Blocks and Surface Waters

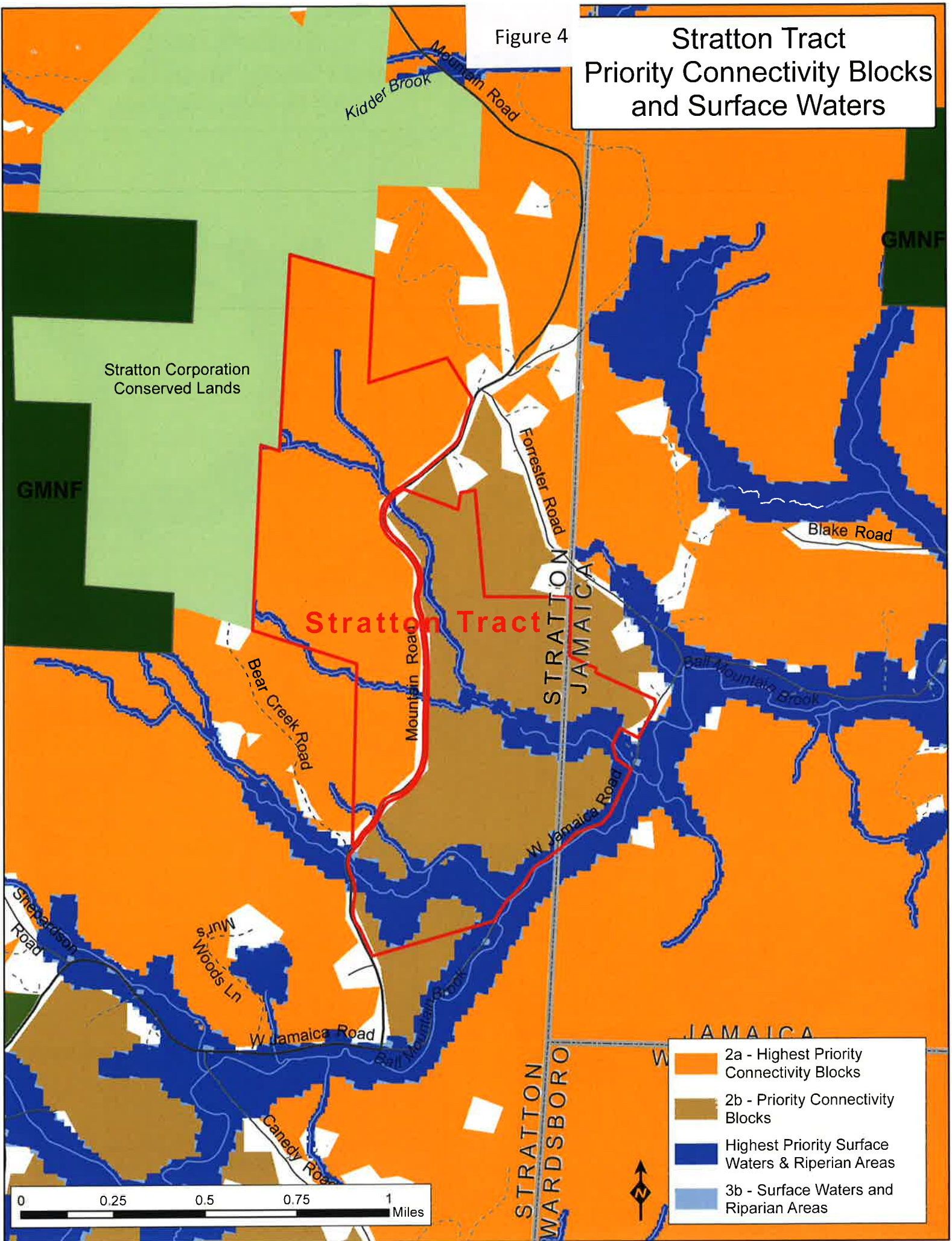
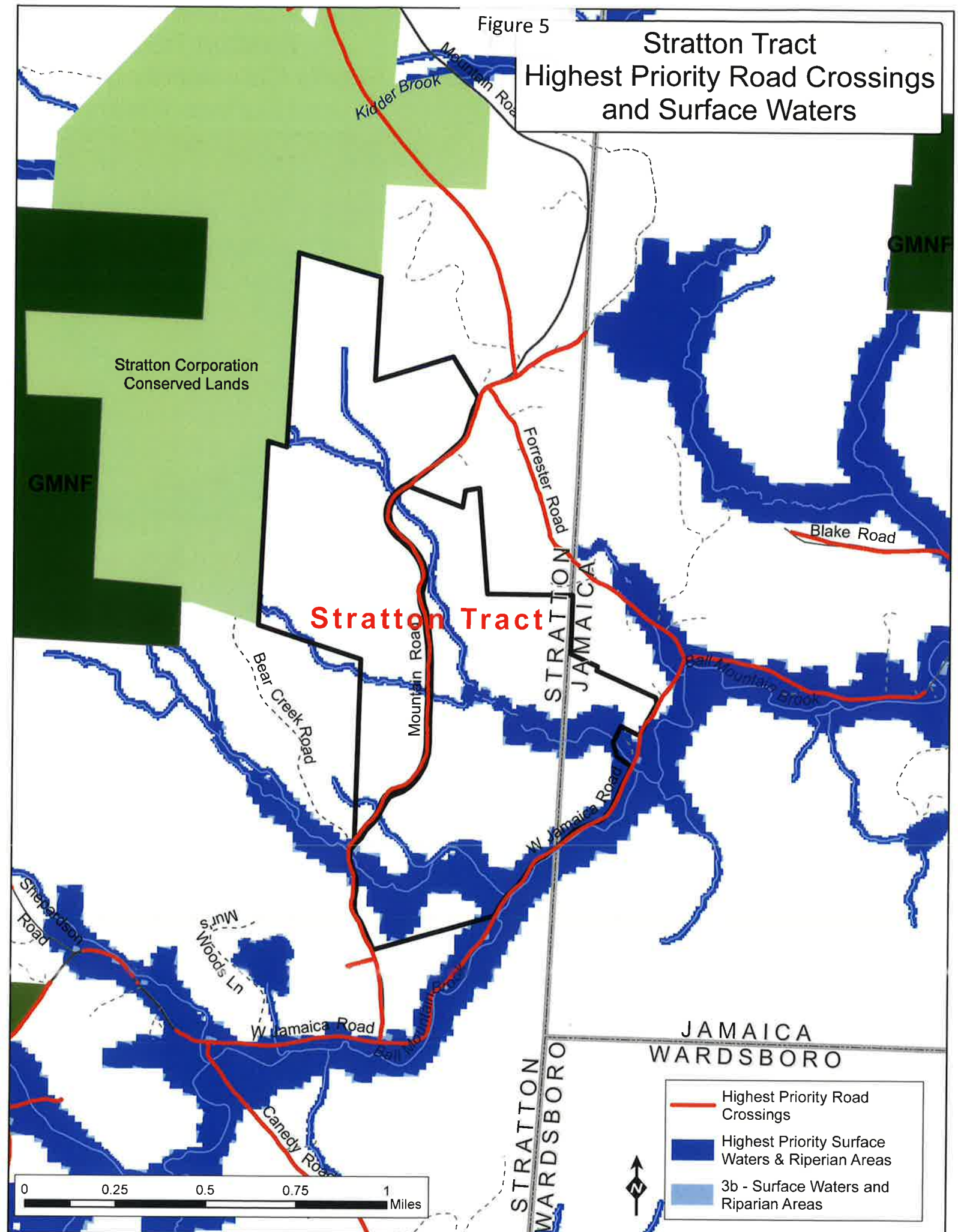


Figure 5

# Stratton Tract Highest Priority Road Crossings and Surface Waters





Stratton MTL parcel (transparent yellow) in relation to GMNF blocks and bear mast (red stars), and beech with bear claw marks (red dots), and bear crossing sightings (yellow Xs). The bear mast and crossing data from VT F&W GIS courtesy VCGI. Stratton Mountain summit and ski slopes in upper left corner. GMNF block east of MTL property is on Sage Hill. F. Brett Engstrom, Natural Resource Inventory for The Conservation Fund 9/19/2012 Based on landscape analysis (GIS sources, VT F&W and Vermont Natural Heritage Program data), and June 12 and August 7, 2012, field inventory.

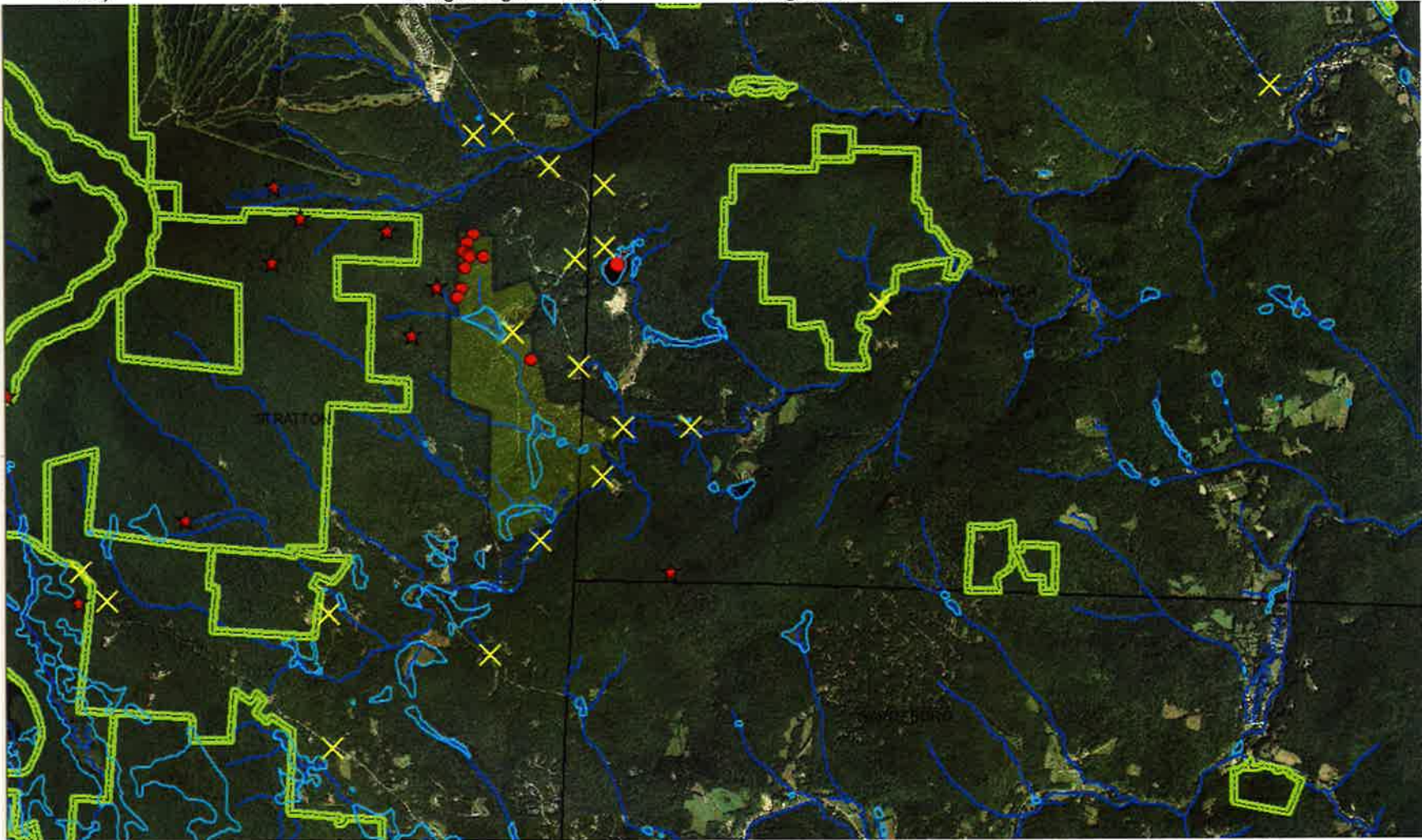
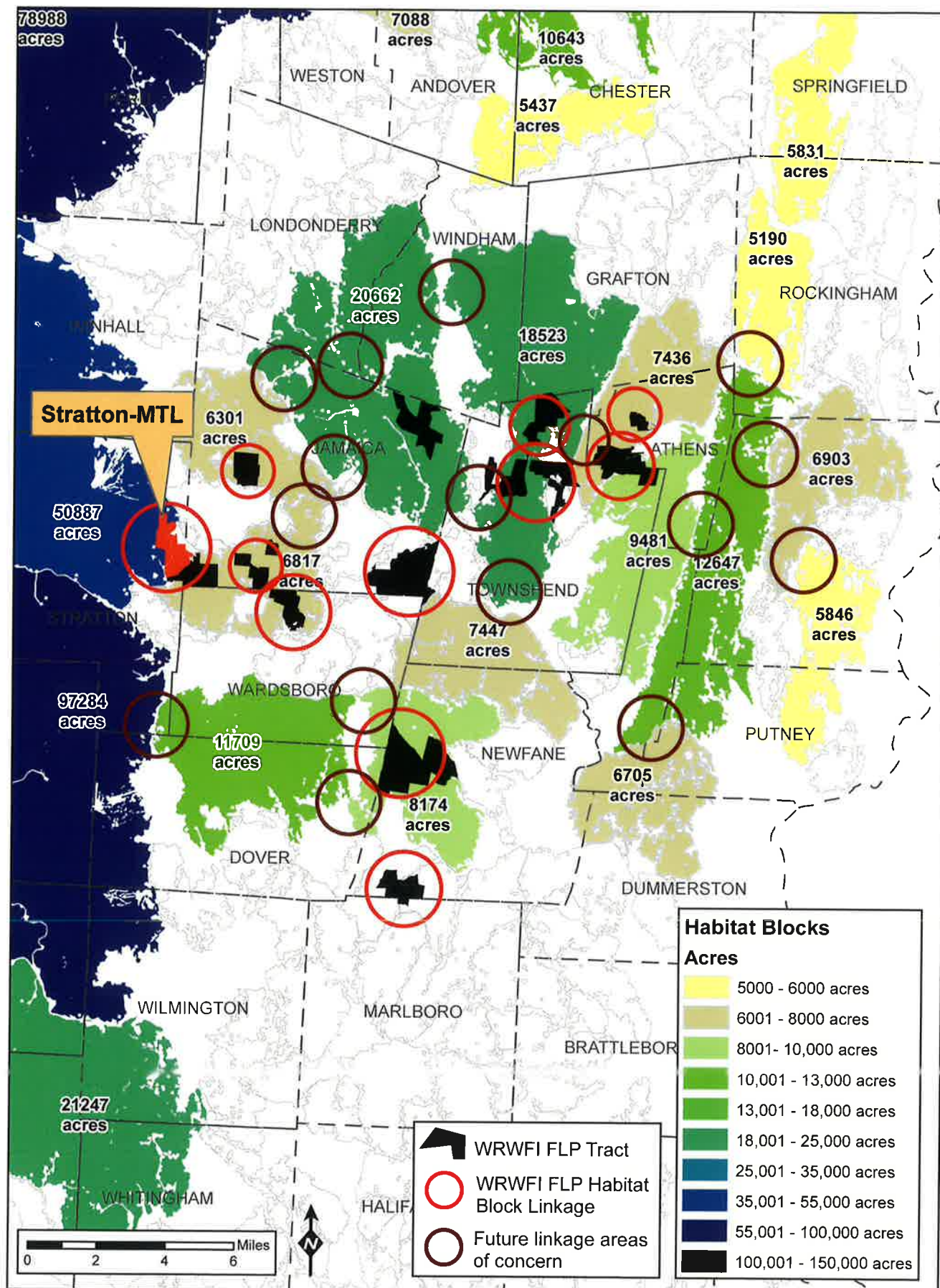


Figure 6

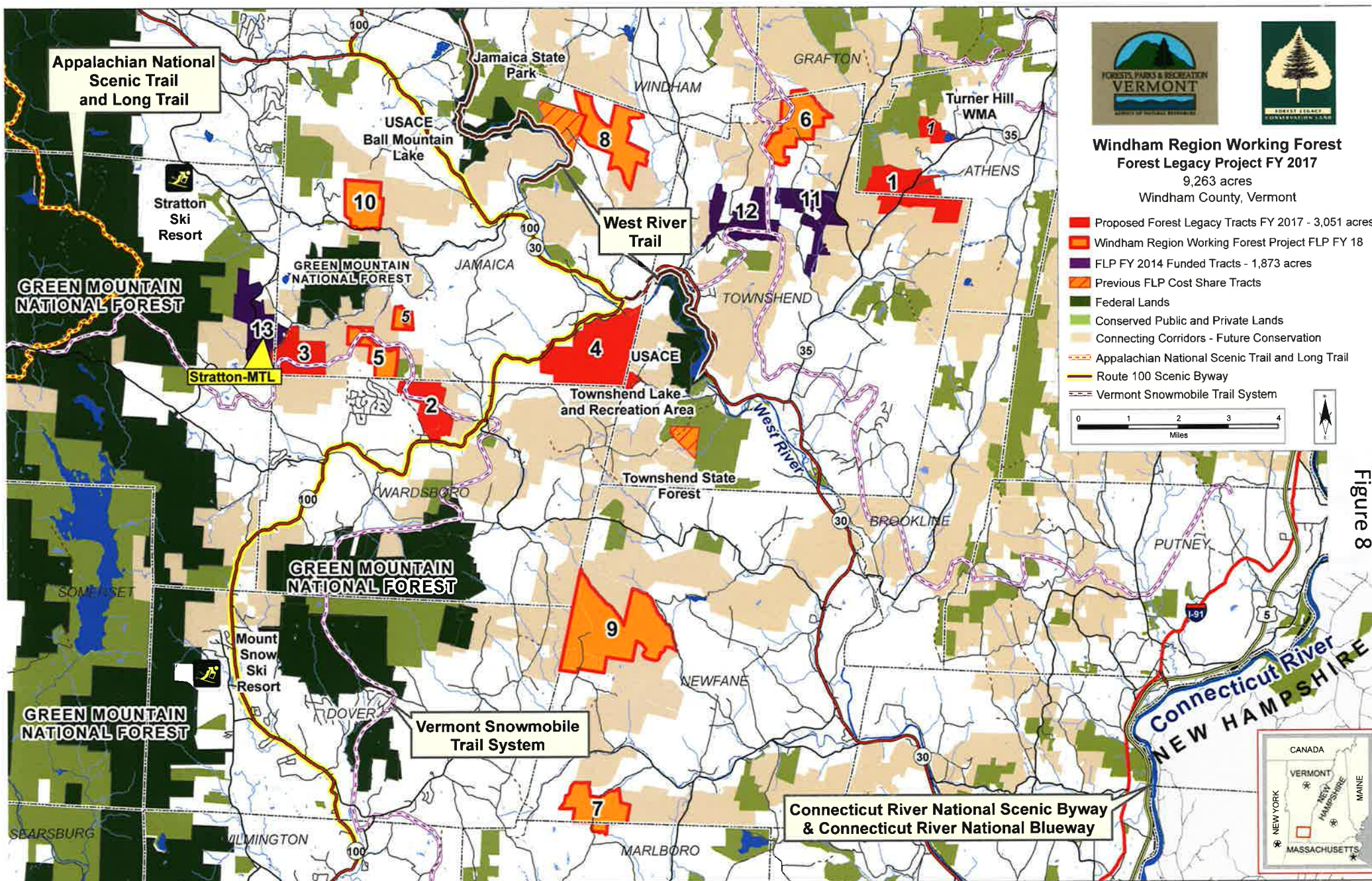


Figure 7

# Windham Region Working Forest Initiative Habitat Block Linkage Map











**Deerfield Wind Project – CPG Condition 12  
Plan for Minimizing Indirect Impacts on Bears<sup>1</sup>**

OCT 16 PM 6 09

Public use of the Deerfield Project sites has been unrestricted for decades. Hiking, hunting and houndsman activity have taken place on these National Forest lands, most intensely during the critical fall feeding period for black bear, and will likely continue. It is not the intent of the Project to discourage, dissuade or prevent public use of public lands. On the other hand, the Project mission is not to facilitate, encourage or expand public use as an artifact of project appurtenances becoming readily accessible to the public. Construction of roads is a necessary component of the Deerfield Wind Project. The possibility that these roads facilitate increased human access to the area, especially motorized public access, is a concern for black bears. Primary goals of this Plan for Minimizing Project-Related Direct and Indirect Impacts on Bears are:

1. Prevent unauthorized motorized access to the Project area,
2. Minimize facilitation or impediment to existing levels of public access to the area on foot, and
3. Minimize disturbance to black bears caused by the normal and routine operation and maintenance of the facility.

A trail system presently exists within and in close proximity to both the East and West Projects. On the east, a trail traverses the length of the ridge where the turbines are proposed, however, access to the trail is through the existing Green Mountain Power (GMP) wind project. Another trail enters the Lamb Brook basin from the village of Heartwellville and passes the south toe of the East Project ridge. This trail is gated to preclude motorized vehicles yet accessible to pedestrians. In the vicinity of the West Project, the existing trail system is more extensive. A ridge trail also exists that is accessed from Putnam Road in the vicinity of the proposed Project headquarters. The trail head is presently gated with motorized access restricted to USFS personnel, utility personnel and the private landowners. This trail, however, can be accessed at two other points: from the utility line service road and a trail coming up from private property to the west.

The most effective means of reducing the potential indirect impact of the Project once it is constructed is prevention of unauthorized motorized access by gating roads in the vicinity of the project – either project-related roads, or existing roads that provide access to the Project area. This would include adding a second gate on the access road for the East Project. This access road uses a portion of the access road for the existing GMP Searsburg wind facility. The road is presently gated at the base of the ridge by GMP. A second gate at the interface between the GMP project and the Deerfield Project will provide added protection against unauthorized motor vehicles accessing the Project. The GMP project is wholly located on private property which controls any type of access from the base station.

Preventing unauthorized motorized use of the access road on the West Project will require more gates, in part due to the number of pre-existing trails. Main access to the west ridge turbines will be through

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<sup>1</sup> A version of this plan was also submitted to the U.S. Forest Service, and incorporated into the Special Use Permit for Construction (submitted to the Board on 10/21/15)

the access road located adjacent to the proposed operations and maintenance building. This area is located on private property at the end of Putnam Road where access can easily be controlled with a gate. This western access road crosses the VELCO transmission line near the top of the ridge in the vicinity of the proposed substation. This will require another gate on the access road south of the transmission line to keep transient users of the VELCO service road from entering the project. A third gate/blockage will be required on the west trail coming up from private property in Woodford. This trail enters the existing ridge trail where the project will be built approximately one third down the ridge to the south. The gates on the west trail and from the transmission line will require wing barriers to prevent ATVs from circumventing the gate itself.

It is the intention that the presence of the Deerfield Wind Project should not attract or facilitate increased public foot traffic in the Project area, nor should the Project impede the "normal" movement of hunters, hikers, and other visitors to National Forest lands. Policies and procedures for control of foot travel within the Project area will be developed in collaboration with the GMNF Forest Supervisor, and subject to the terms, conditions, and authorities inherent in the Special Use Permit. Based on experience at the existing GMP facility, there is no evidence suggesting that wind projects are an attractive nuisance that bring excessive human activity to ridge tops. However, it is possible that the new and larger turbines installed at the Deerfield Wind Project would create a greater public interest than the existing GMP facility. Kiosks and available information at the headquarters building and at the base of the eastern access road should satisfy the curiosity of most visitors, providing information about the project, as well as about the hazards of public foot travel within the immediate project area. Signage at each of the gates will explain the hazards of travel on foot within the immediate Project areas. The East Project's second gate at the south end of the GMP project along with existing signage and kiosk at the base of the access road should adequately protect the eastern site from indirect disturbance resulting from the Project facility. The West Project, with pre-existing remote access points, will utilize additional deterrents such as remote cameras at the two upper elevation access points. Signage would prominently identify the access points as being under video surveillance.

It is anticipated that gates and signage will provide the needed protection from potential added indirect impact resulting from the Project. Close monitoring of the gates, particularly the two upper gates on the West Project, and project grounds for signs of unwanted traffic within the Project areas will determine if the next step of installing additional video surveillance is necessary. If there is evidence that these measures are not adequately deterring unauthorized motorized access within the immediate Project area or that public safety is becoming a concern, additional measures can be employed. Such additional measures would be developed and implemented in collaboration with the GMNF Forest Supervisor, and subject to the terms, conditions, and authorities inherent in the Special Use Permit. Again, it is not Deerfield Wind's position to stop public use of public property. Deerfield's position is to not facilitate or attract additional human presence on the Project area.

Minimizing disturbance to black bears caused by the normal and routine operation and maintenance of the facility also is extremely important. Project employees will limit indirect disturbance of black bears and the surrounding habitat by implementing operational protocols during critical times of the year; these critical periods being September through November, and April and May following a good mast

year the previous fall. During these critical periods, nonessential travel into the Project areas will be eliminated. Also, except for extreme emergency, access into the Project areas during these critical periods will not take place until at least ½ hour after sunrise, and will end at least ½ hour before sunset to minimize disturbance during crepuscular hours. Additionally, routine maintenance will be scheduled to avoid these critical periods.

Potential black bear crossing sites over the ridgelines will be investigated to find and enhance the most likely crossing locations. The Vermont Department of Fish & Wildlife (“DFW”) will be consulted regarding the results of its ongoing Deerfield Black Bear Study.<sup>2</sup> GPS collared bears in that study are expected to provide sufficient location and movement data to identify any concentration points for bears crossing both the east and west ridges as well as the access roads. If no visual pattern or concentration of bear movement can be detected, locations for crossing habitat enhancement will be determined by evaluating specific criteria: areas that have the greatest distance between turbines; areas with the least amount of vegetative disturbance across the width of clearing (i.e., narrow road, no stormwater drainage, etc.); prominent softwood sites; and tops of knolls or bottom of hollows. Once potential sites are identified, and after project construction is complete, 100 foot wide areas adjacent to the road will be managed for bear crossing habitat. Any width of clearing for the road and turbine construction that extends wider than a 12 foot post-construction travel way will be allowed to grow back to brush and eventual forest cover. This will provide dense cover on either side of the road with only a 12 foot width for the animals to dart across. Signage along the road will identify these crossing locations to personnel using the road system.

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<sup>2</sup> In addition, to the extent that Deerfield conducts any pre- and post-construction snag fence studies in connection with USFS requirements, such data will be evaluated and shared with DFW.







TO: Deerfield Wind File  
FROM: Doren Emmett, Senior Project Manager, Iberdrola Renewables  
DATE: March 8, 2016  
RE: Construction Schedule for the Deerfield Wind Project

This memorandum addresses construction of the Deerfield Wind Project ("the Project") during May and June. Certificate of Public Good ("CPG") Condition #14 is as follows:

*Deerfield shall not undertake bulldozing, tree cutting, and blasting in areas proximate to breeding bird habitat during May and June to protect breeding birds. If Deerfield anticipates that construction will occur over the course of two seasons, Deerfield may propose that construction be allowed during May and June, but shall demonstrate that such permission will lessen the impact on breeding birds.*

As explained below, with the May/June restriction in place, construction would have to occur over the course of two seasons (years). Conversely, without this restriction, Deerfield Wind could complete the Project in one construction season.

#### Construction Schedule Constraints

With the May–June restriction currently in place, Deerfield Wind would be unable to complete construction in one season, for several reasons. First, Vermont's mud season severely restricts work for much of March and April—possibly earlier and/or later, depending on weather conditions. Second, CPG Condition #14 currently prohibits work in May and June. Finally, VTANR recommendations and U.S. Fish & Wildlife Service guidance intended to protect the recently Federally- and state-listed northern long-eared bat (*Myotis septentrionalis*) prohibit Deerfield Wind from removing trees between April 15 and September 30. As a result of these constraints, Deerfield Wind is currently prohibited from conducting much of the necessary construction from March through September—practically the entirety of Vermont's construction season.

Construction is further complicated by the fact that the construction and commissioning of the turbines needs to occur between May and September. There is substantial risk (including safety concerns) in constructing wind turbines outside of those months, due to the excess winds that occur in the other seasons. Higher winds would cause major delays in turbine erection, further extending the time period required for construction. Delivery and installation of the turbines in the winter and spring is also problematic because of uncertain ground conditions.

Given these constraints, observing the May–June restriction in CPG Condition #14 would require Deerfield Wind to construct the Project over two construction seasons. Deerfield Wind currently plans to begin tree clearing in the fall, and to begin road work in the winter. Under CPG Condition #14, work would then have to stop for a minimum of five months (March through July). There would not be sufficient time for the turbines to be delivered, constructed, and commissioned by the end of the construction season. The following summer would be needed to complete bulldozing work within cleared areas required to construct roads, crane pads, and turbine pads in preparation for the turbines to be constructed the successive year. This schedule creates issues with managing exposed soils during wet periods of the year. Extending the construction time period also prolongs the time during which the site is not stabilized in a final condition, thus increasing stormwater and erosion risks.

#### One Season Schedule with Restrictions

Allowing activity in May and June would enable Deerfield Wind to complete the Project in one construction season. Deerfield Wind’s consulting biologists, Stantec, have indicated that constructing in one season (including May and June) rather than two would lessen impacts on breeding birds. Deerfield Wind also consulted with the Agency of Natural Resources (“ANR”), who concurred that one season would be preferable, subject to the following restrictions:

Tree Clearing: Prohibited.

Bulldozing: Allowed.

Blasting: Allowed, subject to the following conditions:

Timing of Blasting (for purposes of these agreed to restrictions, “blasting” refers to the actual detonation of the charges, not to preparation and setup).

*May 1 – May 14:            blasting only between 10 a.m. – 5 p.m.*

*May 15 – June 14:        blasting only between 11 a.m. – 5 p.m.*

*June 15 – June 30:       blasting only between 10 a.m. – 5 p.m.*

Blasting during May and June will be limited to days without rain, to avoid exposing eggs to wet and cold conditions in the event that any nesting birds are flushed from their nests.

Other Construction Activities: Allowed (as per the existing CPG condition)

Deerfield Wind would complete as much clearing, bulldozing, and blasting as possible before May. Deerfield Wind would cease tree clearing between April 15 and September 30 (unless federal or state guidelines change to allow clearing in July, August, and September), but would continue with allowable construction activities such as bulldozing and blasting. This timetable allows Deerfield Wind to prepare the site for turbine delivery and construction within a single construction season, avoiding a second year of breeding bird disruption.



**From: Adam Gravel, CWB; Stantec Consulting Services Inc.**

**To: Deerfield Wind Project File**

**Date: March 8, 2016**

**Re: Assessment of CPG Condition 14 Restricting Certain Construction Activities in May and June for the Deerfield Wind Project**

#### **Background**

The purpose of this memorandum is to address Condition 14 of the Certificate of Public Good ("CPG") issued to Deerfield Wind, LLC ("Deerfield Wind") for the Deerfield Wind Project ("Project") by the Vermont Public Service Board ("PSB" or "Board") on 17 July 2009 relative to the proposed Project construction schedule and potential disturbance to breeding birds within the Project area. Condition 14 reads as follows:

*Deerfield shall not undertake bulldozing, tree cutting, and blasting in areas proximate to breeding bird habitat during May and June to protect breeding birds. If Deerfield anticipates that construction will occur over the course of two seasons, Deerfield may propose that construction be allowed during May and June, but shall demonstrate that such permission will lessen the impact on breeding birds.*

Based upon the memorandum of Doren Emmett (Deerfield Wind, March 8, 2016), we understand that the Project's construction activities are prohibited or severely limited for up to seven months out of the year. Adhering to such a limited schedule would require Deerfield Wind to complete the Project over two construction seasons. In contrast, if construction were allowed during May and June, Deerfield Wind could complete the Project in one construction season.

As explained below, it is my professional opinion that a single season of construction would have less impact on breeding birds as compared with two seasons of construction. It would eliminate a second year of disruption for birds that continue to breed in July and August, reduce



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Re: Assessment of CPG condition restricting certain construction activities in May and June for the Deerfield wind generation facility

the period during which birds are exposed to construction noise, and allow birds to return more quickly to the landscape in its post-construction condition. In addition, May-June construction can be scheduled in such a way as to mitigate impact on breeding birds. On balance, one year of construction is preferable to two for breeding birds.

#### **Clearing Schedule**

Deerfield Wind currently plans to begin tree clearing for the Project in the fall of 2016, after northern long-eared bats have left their potential summer roosting habitat and returned to winter hibernacula. Under the Project's current schedule, tree clearing will be completed prior to April 15, and to the extent possible, other construction activities including bulldozing and blasting will be completed prior to the May-June breeding bird season. Scheduling construction in this way keeps potential associated noise impact to a single year rather than two and should allow quicker establishment of post-construction habitat conditions.

#### **Breeding Bird Phenology and July-August Breeding**

Although the May-June construction restriction protects the most active bird breeding period, the forest bird breeding season is typically not complete by the end of June. A number of Vermont species continue breeding into July and August. These species would have their breeding disrupted twice if construction occurs over two construction seasons, whereas if construction were completed in one season, they could return to a stable environment in the second year.





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Re: Assessment of CPG condition restricting certain construction activities in May and June for the Deerfield wind generation facility

Common forest breeding birds known to occur in the Project area<sup>1</sup> include white-throated sparrow (*Zonotrichia albicollis*), blackpole warbler (*Setophaga striata*), black-throated blue warbler (*Setophaga caerulescens*), wood thrush (*Hylocichla mustelina*), veery (*Catharus fuscescens*), and red-eyed vireo (*Vireo olivaceus*). These species begin arriving at their Vermont summer breeding areas beginning in mid- to late April or early May each year.<sup>2</sup> Territory establishment by males, courtship and subsequent nest-building typically take place in May and June, but often as late as July. Egg-laying and incubation typically lasts for two weeks or more. The nestlings fledge after 10 to 12 days, after which they may be found on the ground or low in the vegetation until they are able to fly well. Many of the species listed above may nest later, resulting in fledglings coming of age well into the month of August. Most of the forest-dwelling bird species in Vermont have only a single clutch, though some birds may re-nest after nest failure.

In Vermont, nestlings and otherwise dependent young have been documented for wood thrush, red-eyed vireo and white-throated sparrow from mid-July into late August depending upon the species.<sup>3</sup> As noted above, the potential for disrupting nests or displacing young birds could extend into both July and August. As a result, conducting construction over two years has the potential to affect two breeding seasons and delay the establishment of conditions that will exist once the Project is operational. In my opinion, construction should occur in as short a time period as possible, specifically to allow breeding birds to return the year following infrastructure

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<sup>1</sup> Per Appendix D, Avian White Paper, contained in the Supplemental Environmental Impact Statement for the Deerfield Wind project.

<sup>2</sup> Breeding Bird Atlas Explorer (online resource). 2015. U.S. Geological Survey Patuxent Wildlife Research Center. 2015 <http://www.pwrc.usgs.gov/bba>. Data compiled from: Vermont Breeding Bird Atlas 2003-2007. Vermont Center for Ecostudies. Interim results used with permission.

<sup>3</sup> Laughlin, S.B. and D.P. Kibbe, eds. 1985. The Atlas of Breeding Birds of Vermont. University Press of New England, Hanover.



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Re: Assessment of CPG condition restricting certain construction activities in May and June for the Deerfield wind generation facility

construction to a stable environment where they can choose nesting locations in adjoining forests that will not be further disrupted by construction activities.

### **Construction Noise Impacts**

Noise created by certain construction activities can impact breeding birds by deterring them from nesting nearby, causing incubating birds to temporarily leave their eggs, or by masking breeding vocalizations. Limiting construction to one season would reduce this impact, by simply reducing the time that construction trucks and equipment are at the Project site.

Our understanding is that if allowed to conduct blasting during the May-June period, Deerfield Wind will plan its activities to mitigate the impact on breeding birds. In particular, Deerfield Wind has agreed with ANR to the following restrictions:<sup>4</sup>

**Tree Clearing:** Prohibited.

**Bulldozing:** Allowed.

**Blasting:** Allowed, subject to the following conditions:

**Timing of Blasting** (for purposes of these agreed to restrictions, "blasting" refers to the actual detonation of the charges, not to preparation and setup).

May 1 – May 14: *blasting only between 10 a.m. – 5 p.m.*

May 15 – June 14: *blasting only between 11 a.m. – 5 p.m.*

June 15 – June 30: *blasting only between 10 a.m. – 5 p.m.*

Blasting during May and June will be limited to days without rain, to avoid exposing eggs to wet and cold conditions in the event that any nesting birds are flushed from their nests.

**Other Construction Activities:** Allowed (as per the existing CPG condition)

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<sup>4</sup> Personal communication with John Buck (VT Department of Fish and Wildlife) on 10/8/15, and e-mails dated 10/8/15 and 10/9/15.



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I concur that these restrictions will help to lessen impacts to breeding birds. Blasting will be limited to periods when it is warm and dry, so that if an incubating bird were to flush from its nest, its clutch would be protected from harm by the favorable weather conditions. Blasting would also be prohibited during the early morning hours (approximately 5 a.m. to 9 a.m.) when breeding vocalizations are at their peak.<sup>5</sup>

### **Conclusions**

Deerfield would need two seasons to complete construction of the Project under the May-June restrictions. Without the May and June restrictions in place, construction would be able to proceed as a single event, thus avoiding two years of disruptions. Breeding birds returning to the vicinity of the Project area during the second spring would not be subject to additional disturbances and local landscape conditions would closely reflect that of the operating facility. Under this scenario, resident and migratory breeding birds would be adjusting to the landscape changes during the second year (or first operational year), rather than potentially being further disturbed by continued construction.

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<sup>5</sup> Ziolkowski, D. Jr., K. Pardieck and J. R. Sauer. 2010. On the Road Again for a Bird Survey that Counts. *Birding* 42(4): 32-40.; "The survey begins one-half hour before local sunrise; Each survey is normally completed in 4-4.5 hours" Vermont Center for Ecosystem Studies. Vermont Forest Bird Monitoring Program. Norwich, Vermont: "We recommend a 5:00 AM start time."

