

GUIDELINES FOR THE REVIEW & MITIGATION  
OF IMPACTS TO WHITE-TAILED DEER WINTER HABITAT  
IN VERMONT

1999



Signed: Ronald J. Regan  
Commissioner, Vermont Department of Fish & Wildlife

Date: 01/26/00

VERMONT DEPARTMENT OF FISH & WILDLIFE  
AGENCY OF NATURAL RESOURCES



## TABLE OF CONTENTS

|  |    |
|--|----|
| Introduction.....  | 1  |
| Justification.....   | 1  |
| Procedure.....   | 2  |
| Resource Categorization.....                                 | 2  |
| On-site vs. Off-site Mitigation.....                         | 2  |
| Direct vs. Indirect Impact Determinations.....               | 2  |
| Habitat Compensation Ratios.....                             | 3  |
| Habitat Management Plans.....                                | 3  |
| Conservation Easements.....                                  | 3  |
| Analysis of Alternatives.....                                | 4  |
| Resource Categorization Determination.....                   | 4  |
| Application of Mitigation Strategies.....                    | 5  |
| Mitigation Strategies.....                                   | 6  |
| Mitigation Guidelines for Residential Development.....       | 6  |
| Mitigation Guidelines for Commercial Development.....        | 8  |
| Mitigation Guidelines for Extraction of Earth Resources..... | 9  |
| Mitigation Guidelines for Transmission Lines.....            | 11 |
| Mitigation Guidelines for Transportation Projects.....       | 12 |
| Appendix.....  | 15 |

## **I. Introduction:**

This document provides Vermont Department of Fish & Wildlife (DFW) wildlife biologists with guidelines to ensure consistent, objective application of mitigation measures where deer winter habitat (also referenced as “deer wintering areas”, and “deer yards”) is threatened from some forms of development. These guidelines are specifically intended for the development of biological opinions in the Act 250 process and other local, state, and federal regulatory processes that apply to the protection of deer winter habitat in Vermont. Furthermore, these guidelines set forth a decision-making framework by which DFW determines the level of impact and necessary avoidance, **minimization** and mitigation/compensation measures that apply to a proposed development’s impact on deer winter habitat. Therefore, these guidelines are used to make recommendations to Act 250 District Environmental Commissions and other local, state and federal regulatory decision-makers for permit conditions, mitigation agreements, land conservation instruments (e.g., easements), and, if necessary, permit denials.

These guidelines are designed for application on a case-by-case basis in order to allow for the use of professional judgement and discretion by the DFW. For example, some impacts may be relatively minor and thus, may not require habitat compensation in perpetuity. In some cases, restrictions on timber harvesting in a deer wintering area, or habitat protection for a specified period of time (e.g., for the life of the permit) may be sufficient to mitigate relatively minor impacts to a deer wintering area. These determinations will be made by DFW and will be based on past precedent and individual circumstances.

These guidelines are consistent with and derived from the Agency of Natural Resources’ Conservation Procedure (1996), the DFW’s Position Regarding Wildlife Habitat Impact Assessments in the State of Vermont (1998), Vermont Environmental Board precedent, and the language of 10 V.S.A. section 6086 ((8)(A)(i-iii)).

## **II. Justification:**

Deer winter habitat is universally regarded as critical habitat for the survival of white-tailed deer (*Odocoileus virginianus*) at northern latitudes. It affords necessary and invaluable shelter which minimizes energy expenditures and provides for energy conservation by deer, thus, maximizing their chances for survival. Vermont is part of the northern extreme of the white-tailed deer’s range, and therefore, winter habitat is absolutely essential for maintaining populations of deer throughout this state. Consequently, Act 250 and other local, state and federal statutes and regulations that require the consideration and/or protection of wildlife habitats are employed by the DFW to ensure the conservation of the Vermont white-tailed deer resource and the public’s interests in that resource. These guidelines take into consideration the public’s interests in this resource and legal opportunities to ensure the protection of necessary winter habitat as determined through the DFW white-tailed deer management planning process and public opinion survey, all of which have demonstrated strong public support for such efforts.

### III. Procedure:

The environmental review process established by these guidelines relies on the direction of the Agency of Natural Resources' Conservation Procedure (1996), the DFW's "Position Regarding Wildlife Habitat Impact Assessments in the State of Vermont", and extensive legal precedent as set by the Vermont Act 250 process, Vermont Wetlands Rules, and other applicable regulatory processes. The ANR's environmental review process, in general, involves assessment of impact avoidance, impact minimization, and finally, impact mitigation. The following information explains considerations the DFW incorporates into the review process for the assessment of impacts to deer wintering areas (DWAs).

#### 1. *Resource Categorization*

The DFW places habitat types into one of three "resource categories" (RC's) which determine mitigation options. This allows DFW to consider a habitat's quality and determine its relative significance. All DWAs will be considered RC3 (i.e., high to medium value, relatively scarce or becoming scarce regionally) except for those considered "unique". Those DWAs that are considered unique will be classified as RC2 (high value, unique, and irreplaceable on a regional basis). An RC2 designation requires no net loss of in-kind habitat values on site. An RC2 designation for a DWA may be based on a variety of factors including, but not limited to: (1) it is the only DWA within a town or region; (2) it has regional significance for populations of deer within a Wildlife Management Unit; (3) its level of significance is raised by the fact that other wintering areas in a town or region are of lesser value (quality) and/or significantly impacted by existing development.

#### 2. *On-Site vs. Off-Site Mitigation*

On-site mitigation refers to habitat compensation, protection and/or management within the same DWA. On-site mitigation should always be considered a priority for any RC designation, even for RC3 designations that allow, in some cases, for off-site mitigation. Off-site mitigation refers to habitat compensation, protection and/or management outside of the impacted DWA. All efforts should be made to secure off-site mitigation lands within the same town as the affected DWA. There may be some circumstances, such as in highly developed areas of Chittenden County, where off-site mitigation would be more reasonable and feasible. The DFW will carefully consider these circumstances when addressing issues of on-site vs. off-site mitigation/compensation.

#### 3. *Direct vs. Indirect Impact Determinations*

Impacts should be categorized as "direct" (e.g., roadway or housing/building construction) or "indirect" (e.g., stress or disturbance of wintering deer caused by human or domestic animal, especially dog, activity). Direct impacts should not be allowed in RC2 designated wintering areas, except for insignificant intrusions or when outstanding mitigation opportunities are presented. Direct impacts may be allowed in RC3 designated wintering areas only after a complete assessment of

alternatives for avoiding or minimizing impacts has been conducted. Determinations of direct and indirect impacts are in the form of acres of habitat.

#### 4. *Habitat Compensation Ratios*

Mitigation ratios of 2:1 (i.e., two (2) acres of DWA protected for every one (1) acre impacted) on-site (i.e., within the same DWA) and 4:1 off-site encourage avoiding impacts and, if necessary, rectifying impacts within the same DWA. In addition, where possible, off-site mitigation should be restricted to the town(s) in which the impacted DWA is located. Habitat that is used to compensate for destroyed or impacted habitat will usually be protected by creating a conservation easement. However, in some cases, deed restrictions can serve this purpose (refer to Appendix). The mitigation ratios are not intended to be punitive, but rather, are designed to yield the proportion of deer winter range necessary to maintain state deer population goals as established in the White-tailed Deer Management Plan for the State of Vermont. The ratios incorporate anticipated frequencies of mitigation and changes in the habitat value of protected deer winter habitat when managed as a result of mitigation. In sum, the compensation ratios recognize the biological needs of Vermont's white-tailed deer resource as well as the public's long-term interests in the resource.

#### 5. *Habitat Management Plans*

Habitat management plans may be required as part of a mitigation strategy in order to augment the habitat that may be used for compensation. The purpose of habitat management plans must be to maintain and enhance the long-term integrity of the DWA. The DFW must review and approve all habitat management plans. Habitat management plans for DWAs must be based on the management standards set forth in Management Guide for Deer Wintering Areas in Vermont by the DFW and the Vermont Department of Forests, Parks and Recreation (1990). Habitat management plans should be based on current habitat specific information including, but not limited to: (1) general character of the softwood stands; (2) percent (%) of tree species composition; (3) delineation of individual stands; (4) basal area by stand; and (5) mean stand diameter. Other important information that may be necessary for the development of an acceptable habitat management plan includes the level of use by deer within the habitat. The plan should include a copy of the Town or U.S.G.S. topographic map showing the general location and property boundaries. In addition, a property map should be included which shows stand delineations. The objective of a habitat management plan is not to promote timber harvesting. However, the responsible land steward for an area of protected DWA can typically develop a habitat management plan that meets the objective of maintaining and enhancing the long-term integrity of the DWA, and that is compatible with reasonable timber harvesting opportunities.

#### 6. *Conservation Easements for Conserved Deer Winter Habitat*

As indicated in section III(4), habitat that is used for compensation of impacted habitat will usually be protected through the development of a conservation easement. In most cases, areas of conserved deer winter habitat that are 25 acres or greater shall be protected by a conservation easement. All

lands that are covered under an easement shall be delineated on town tax maps, as well as on property or development plans, and a copy of the applicable U.S.G.S. map. All conservation easements that are used to satisfy the Department's interests in habitat conservation must be reviewed and approved by the Department prior to being recorded in the town land records. Typically, the Department will request that a permit not be issued until such time as the necessary easement(s) have been agreed upon by all parties, finalized, and recorded in the town land records. The Department will request a permit condition make reference to the conservation easement and any critical habitat conservation provisions in the easement in order to ensure an understandable connection to the permit. As explained later in this document, a variety of conservation groups, organizations or public institutions may serve as grantee to an easement including: (1) the Vermont Department of Fish & Wildlife; (2) the Vermont Department of Forests, Parks, and Recreation; (3) The Nature Conservancy; (4) the Vermont Land Trust; (5) a Town; (6) a local conservation group or organization; (7) others. The Department will assist in the determination of an appropriate grantee to an easement. Typically, the Department will only serve as grantee to an easement if the parcel is large (e.g., over 50 acres), or if the habitat is of exceptional quality or highly significant for other reasons. The exact language of any conservation easement must be coordinated with the reviewing biologist and Department and Agency Land Use Attorney. Examples of acceptable easements may be provided upon request.

In assessing mitigation options, the following process should be applied (refer to Table 1):

A. Analysis of Alternatives

- i. A determination should be made as to whether an alternative site, on or off the proposed project parcel, is available to accommodate the project. If the determination results in positive findings (i.e., yes, an alternative site exists), then no direct impacts should be allowed, except for insignificant intrusions. Indirect impacts may be allowed pursuant to the adoption of mitigation strategies outlined below.
- ii. If the determination results in negative findings (i.e., no, an alternative site does not exist), then proceed to step B.

B. Resource Categorization (RC) Determination

- i. A determination should be made regarding whether the project site is located within or adjacent to an RC2 or RC3 DWA, or portion thereof. In making this determination, DFW will consider whether a DWA has unique or irreplaceable public or biological values on a regional basis. Criteria for evaluating these values may include, but are not limited to: (1) it is the only DWA in a town or region; (2) it consistently supports high numbers of deer; (3) it shows extremely heavy use; or, (4) there are no imminent development threats to its integrity.

- ii. If this determination results in positive findings (i.e., yes, the DWA exhibits one or more of these or other significant values) then it should be considered RC2 and no direct impacts should be allowed, except for insignificant intrusions or when outstanding mitigation opportunities are presented. Indirect impacts may be allowed pursuant to adoption of mitigation strategies outlined below.
- iii. If this determination results in negative findings, (i.e., the DWA does not exhibit one or more of these or other significant values) then it should be considered RC3 and step C should be applied.

C. Application of Mitigation Strategies

- i. A determination should be made regarding whether an applicant is willing to apply all feasible and reasonable mitigation strategies, as determined by the DFW.
- ii. If this determination results in positive findings (i.e., yes, an applicant is willing to apply necessary mitigation strategies) then the following mitigation guidelines should be applied for all direct and/or indirect impacts.
- iii. If this determination results in negative findings (i.e., no, an applicant is not willing to apply necessary mitigation strategies) then no direct impacts should be allowed except for insignificant intrusions.

Table 1. Steps for Determining Mitigation Alternatives for Deer Winter Habitat.

|  |   |
|--|---|
| Step 1: Is an alternative development site, on or off the project parcel, available to avoid impacts?  |   |
| <p style="text-align: center;"><b>YES</b></p> <p style="text-align: center;">* No Direct Impacts Allowed<br/>* Utilize Guidelines for Indirect Impacts</p>           | <p style="text-align: center;"><b>NO</b></p> <p style="text-align: center;">* Go to Step 2</p>  |
| Step 2: Is the project within a wintering area, or portion thereof, with unique or irreplaceable public or biological values on a regional basis?                    |   |
| <p style="text-align: center;"><b>YES (RC2 DWA)</b></p> <p style="text-align: center;">* No Direct Impacts Allowed<br/>* Utilize Guidelines for Indirect Impacts</p> | <p style="text-align: center;"><b>NO (RC3 DWA)</b></p> <p style="text-align: center;">* Go to Step 3</p>  |
| Step 3: Is the Applicant willing to apply feasible and reasonable mitigation measures per Guidelines?  |   |
| <p style="text-align: center;"><b>YES</b></p> <p style="text-align: center;">* Utilize Guidelines for Direct and Indirect Impacts</p>                                | <p style="text-align: center;"><b>NO</b></p> <p style="text-align: center;">* No Direct Impacts Allowed<br/>* Utilize Guidelines for Indirect Impacts</p> |

#### IV. Mitigation Strategies

The following mitigation strategies are organized based on the type of development being considered. Within each strategy, the mitigation measures and considerations are classified based on types of impact, e.g., direct impact and indirect impact. Table 2 provides a summary of these mitigation strategies.

##### 1. Mitigation Guidelines for Residential Development:

###### Direct Impacts:

All direct impacts should be avoided except for insignificant intrusions. However, if steps III (A) through (C) above lead to an affirmative conclusion then the following guidelines may be implemented:

- A. For every acre of DWA impacted, a predetermined number of DWA acres must be protected and managed in perpetuity according to the following compensation ratios:

|                        |           |
|------------------------|-----------|
| On-site Compensation:  | 2:1 ratio |
| Off-site Compensation: | 4:1 ratio |

Any acreage proposed for compensation/mitigation must contain habitat of equal or greater quality than the impacted habitat as determined by DFW and must be approved by the DFW. A habitat management plan must be prepared at the applicant's or permittee's expense, approved by the DFW and any other applicable regulatory bodies, and implemented by the property owner or responsible land steward.

- B. Habitat that is to be used for the compensation of destroyed or impacted habitat shall be protected in perpetuity with a conservation easement. The grantee(s) to such easements should be an appropriate public or private land stewardship organization such as DFW, Vermont Department of Forests, Parks and Recreation, the Vermont Land Trust, The Nature Conservancy, local land trusts or conservation groups, or others. The easement must meet with the prior review and approval of the DFW. It may be necessary in some cases to survey the area subject to an easement. If this is the case, the Applicant/Permittee shall assume the cost of having the area surveyed.

In cases where the level of impact is sufficient to warrant application of these guidelines, but not so great as to warrant permanent protection of habitat with a conservation easement, other legal habitat protection mechanisms may be considered such as deed covenants which restrict the development of a



specified area of DWA and define appropriate uses and restrictions. Where applicable, homeowner associations may be able to serve the habitat stewardship role. These decisions shall be made by the DFW on a case-by-case basis.

- C. No further subdivision of the remaining DWA on the applicant's/permittee's property can occur and must be expressly stated in any applicable deed(s).
- D. No softwood trees within a protected area of DWA shall be harvested or otherwise removed without the prior review and approval of the DFW unless recommended in a habitat management plan approved by DFW.
- E. The following language shall be incorporated as covenant into all applicable deeds:

*Each landowner is hereby put on notice that this development is in the immediate vicinity of a deer wintering area. Domestic dog activity seriously jeopardizes this critical habitat and the existence of the deer in this area. A person who owns a dog that is not leashed, kenneled or otherwise under the owner's immediate control is subject to the penalties of 10 V.S.A. section 4748 (Dogs Pursuing Deer) and section 4514 (Possession of Flesh of Game).*

- F. Cross-country skiing, snowmobiling, and travel by ORVs must be restricted to trails approved by the DFW and shall be expressly stated in any applicable deeds. Snowmobiling and ORVs shall be prohibited within a 500 foot radius around the DWA. Commercial ventures regarding these activities shall be prohibited.

#### Indirect Impacts:

Indirect impacts constitute the physical intrusion of development into a 300 to 500 foot wide buffer zone around a DWA. Indirect impacts also constitute a 300 foot wide radius around the area of development if direct impacts are allowed (i.e., the area within a 300 foot wide radius around the area of development shall also be considered impacted).

Indirect impacts may be allowed pursuant to the following mitigation measures (mitigation measures A through F above shall apply).

**2. Mitigation Guidelines for Commercial Development:**

**Direct Impacts:**

All direct impacts should be avoided except for insignificant intrusions. However, if steps III (A) through (C) above lead to an affirmative conclusion then the following guidelines should be implemented:

- A. For every acre of DWA impacted, a predetermined number of DWA acres must be protected and managed in perpetuity according to the following compensation ratios:

- On-site Compensation: 2:1 ratio
  - Off-site Compensation: 4:1 ratio

Any acreage proposed for compensation/mitigation must contain habitat of equal or greater quality than the impacted habitat as determined by DFW and must be approved by the DFW. A habitat management plan must be prepared at the applicant's or permittee's expense, approved by the DFW and any other applicable regulatory bodies, and implemented by the property owner or responsible land steward.

- B. Habitat that is to be used for the compensation of destroyed or impacted habitat shall be protected in perpetuity with a conservation easement. The grantee(s) to such easements should be an appropriate public or private land stewardship organization such as DFW, Vermont Department of Forests, Parks and Recreation, the Vermont Land Trust, The Nature Conservancy, local land trusts or conservation groups, or others. The easement must meet with the prior review and approval of the DFW.

In cases where the level of impact is sufficient to warrant application of these guidelines, but not so great as to warrant permanent protection of habitat with a conservation easement, other legal habitat protection mechanisms may be considered such as deed covenants which restrict the development of a specified area of DWA and define appropriate uses and restrictions. These decisions shall be made by the DFW on a case-by-case basis.

- C. No further subdivision of the remaining DWA on the applicant's/permittee's property can occur and must be expressly stated in any applicable deed(s).
- D. No softwood trees within a protected area of DWA shall be harvested or otherwise removed without the prior review and approval of the DFW unless recommended by a habitat management plan approved by DFW.

- E. The following language shall be incorporated as covenant into all applicable deeds:

*Each landowner is hereby put on notice that this development is in the immediate vicinity of a deer wintering area. Domestic dog activity seriously jeopardizes this critical habitat and the existence of the deer in this area. A person who owns a dog that is not leashed, kenneled or otherwise under the owner's immediate control is subject to the penalties of 10 V.S.A. section 4748 (Dogs Pursuing Deer) and section 4514 (Possession of Flesh of Game).*

- F. Cross-country skiing, snowmobiling, and travel by ORVs must be prohibited within 500 feet of the DWA and shall be expressly stated in any applicable deeds.

Indirect Impacts:

Indirect impacts constitute the physical intrusion of development into a 300 to 500 foot wide buffer zone around a DWA. Indirect impacts also constitute a 300 foot wide radius around the area of development if direct impacts are allowed (i.e., the area within a 300 foot wide radius around the area of development shall also be considered impacted).

Indirect impacts may be allowed pursuant to the following mitigation measures (mitigation measures A through F above shall apply).

**3. Mitigation Guidelines for Extraction of Earth Resources:**

Direct Impacts:

All direct impacts should be avoided except for insignificant intrusions. However, if steps III (A) through (C) above lead to an affirmative conclusion then the following guidelines should be implemented:

- A. For every acre of DWA impacted, a predetermined number of DWA acres must be protected and managed in perpetuity according to the following compensation ratios:

|                        |           |
|------------------------|-----------|
| On-site Compensation:  | 2:1 ratio |
| Off-site Compensation: | 4:1 ratio |

Any acreage proposed for compensation/mitigation must contain habitat of equal or greater quality than the impacted habitat as determined by DFW and must be approved by the DFW. A habitat management plan must be prepared at the applicant's or permittee's expense, approved by the DFW and any other

applicable regulatory bodies, and implemented by the property owner or responsible land steward.

- B. Habitat that is to be used for the compensation of destroyed or impacted habitat shall be protected in perpetuity with a conservation easement. The grantee(s) to such easements should be an appropriate public or private land stewardship organization such as DFW, Vermont Department of Forests, Parks and Recreation, the Vermont Land Trust, The Nature Conservancy, local land trusts or conservation groups, or others. The easement must meet with the prior review and approval of the DFW.

In cases where the level of impact is sufficient to warrant application of these guidelines, but not so great as to warrant permanent protection of habitat with a conservation easement, other legal habitat protection mechanisms may be considered such as deed covenants which restrict the development of a specified area of DWA and define appropriate uses and restrictions. These decisions shall be made by the DFW on a case-by-case basis.

- C. No further subdivision of the remaining DWA on the applicant's/permittee's property can occur and must be expressly stated in any applicable deed(s).
- D. No softwood trees within a protected area of DWA shall be harvested or otherwise removed without the prior review and approval of the DFW unless recommended by a habitat management plan approved by DFW.
- E. Cross-country skiing, snowmobiling, and travel by ORVs must be prohibited within 500 feet of the DWA and shall be expressly stated in any applicable deeds.
- F. All DWA impacted by the extraction project must be reclaimed as prescribed in a habitat or reclamation management plan prepared by the applicant/permittee and approved by the DFW.

Indirect Impacts:

Indirect impacts shall be accounted for by the following restriction:

*The Permittee shall not operate the project during the period December 15 through April 15 unless prior written authorization has been secured from the DFW.*

This provision allows for exemptions to the time of year for operation restriction based on winter severity conditions. Exemptions are only granted if it has been

determined by DFW that the winter weather and snow conditions are mild. Additionally, exemptions are only granted for short specified period of time. It is recommended that Permittees stockpile material away from protected DWA prior to December 15 so it will be available during the restricted period.

**4. Mitigation Guidelines for Transmission Lines:**

These guidelines apply to the construction of new transmission lines and the upgrade of existing transmission lines.

Direct Impacts:

All direct impacts should be avoided except for insignificant intrusions. However, if steps III (A) through (C) above lead to an affirmative conclusion then the following guidelines shall be implemented:

- A. For every acre of DWA impacted, a predetermined number of DWA acres must be protected and managed in perpetuity according to the following compensation ratios:

|                        |           |
|------------------------|-----------|
| On-site Compensation:  | 2:1 ratio |
| Off-site Compensation: | 4:1 ratio |

Any acreage proposed for compensation/mitigation must contain habitat of equal or greater quality than the impacted habitat as determined by DFW and must be approved by DFW. A habitat management plan must be prepared at the applicant's or permittee's expense, approved by DFW and any other responsible regulatory bodies, and implemented by the property owner or responsible land steward.

- B. Habitat that is to be used for the compensation of destroyed or impacted habitat shall be protected in perpetuity with a conservation easement. The grantee(s) to such easements should be an appropriate public or private land stewardship organization such as DFW, Vermont Department of Forests, Parks and Recreation, the Vermont Land Trust, The Nature Conservancy, local land trusts or conservation groups, or others. The easement must meet with the prior review and approval of the DFW.

In cases where the level of impact is sufficient to warrant application of these guidelines, but not so great as to warrant permanent protection of habitat with a conservation easement, other legal habitat protection mechanisms may be considered such as deed covenants which restrict the development of a

specified area of DWA and define appropriate uses and restrictions. These decisions shall be made by the DFW on a case-by-case basis.

- C. Softwood travel corridors with a minimum width of 200 feet must be retained and managed at designated points along the transmission line route. The number of travel corridors needed will be determined by DFW and dictated by the length of the transmission corridor. An additional 1 foot must be added to the travel corridor width for every 1 foot the transmission corridor width exceeds 200 feet. The 200 foot minimum corridor width may be expanded or contracted, depending on case-specific circumstances, and as determined by the reviewing DFW biologist.
- D. Whenever possible, residual softwood cover on both sides of the transmission line corridor must be at least 1,000 feet wide.
- E. Control of vegetation within the transmission line corridor shall be restricted to mechanical treatment (i.e., no herbicide treatment) in order to maintain and promote the production of browse.

Indirect Impacts:

Indirect impacts shall be accounted for by the following restriction:

*The Permittee shall not construct or authorize the use of snowmobiles or snowmobile trails without the prior review and approval of the DFW.*

**5. Mitigation Guidelines for Transportation Projects:**

Direct Impacts:

All direct impacts should be avoided except for insignificant intrusions. Direct impacts must maintain the integrity of the DWA (i.e., road development should be located as close to the edge of the DWA as possible in order to avoid bisecting the habitat). However, if steps III (A) through (C) above lead to an affirmative conclusion then the following guidelines should be implemented:

- A. For every acre of DWA impacted (as determined by the roadway footprint, 300 feet on either side of the roadway, and any bisected DWA less than 50 acres in size), a predetermined number of DWA acres must be protected and managed in perpetuity according to the following compensation ratios:

On-site Compensation: 2:1 ratio  
Off-site Compensation: 4:1 ratio

Any acreage proposed for compensation/mitigation must contain habitat of equal or greater quality than the impacted habitat as determined by DFW and must be approved by the DFW. A habitat management plan must be prepared at the applicant's or permittee's expense, approved by the DFW and any other applicable regulatory bodies, and implemented by the property owner or responsible land steward.

- B. Habitat that is to be used for the compensation of destroyed or impacted habitat shall be protected in perpetuity with a conservation easement. The grantee(s) to such easements should be an appropriate public or private land stewardship organization such as DFW, the Vermont Land Trust, The Nature Conservancy, local land trusts or conservation groups, or others. The easement must meet with the prior review and approval of the DFW.
- C. Where appropriate, the road must be classified as a restricted access highway.
- D. The permittee shall erect signs warning of deer crossings for that portion of the highway that passes through the wintering area.
- E. The use of wildlife underpass and overpass technologies may be considered on a case-by-case basis for mitigating impacts from transportation projects that bisect deer winter habitat.

Indirect Impacts:

Indirect impacts occur when the traveled portion of the roadway is located within 300 feet of the DWA. Mitigation measures A through D above shall apply to indirect impacts.

Table 2. Summary of Mitigation Alternatives by Resource Category, Type of Development, and Type of Impact.

| Type of Development              | Resource Category 2 Mitigation             |  | Resource Category 3 Mitigation           |  |
|----------------------------------|--|--|--|--|
|                                  | Direct Impacts                             | Indirect Impacts                           | Direct Impacts                           | Indirect Impacts                           |
| Residential                      | Not allowed                                | Allowed, 2:1 ratio, on-site only           | Allowed, variable ratio, on- or off-site | Allowed, variable ratio, on- or off-site   |
| Commercial                       | Not allowed                                | Allowed, 2:1 ratio, on-site only           | Allowed, variable ratio, on- or off-site | Allowed, variable ratio, on- or off-site   |
| Earth Resource Extraction        | Allowed per "outstanding mitigation offer" | Limited months of operation per guidelines | Allowed, variable ratio, on- or off-site | Limited months of operation per guidelines |
| Transmission Lines               | Allowed per guidelines                     | No snowmobile trails                       | Allowed, variable ratio, on- or off-site | No snowmobile trails                       |
| Transportation (roads, highways) | Not allowed                                | Allowed, 2:1 ratio, on-site only           | Allowed, variable ratio, on- or off-site | Allowed, variable ratio, on- or off-site   |



## **APPENDIX**



## VERMONT DEPARTMENT OF FISH & WILDLIFE

### EXAMPLE LANGUAGE FOR DEED RESTRICTIONS FOR THE PROTECTION OF CRITICAL WILDLIFE HABITAT

1. Deed restriction(s) for the protection of wildlife habitat such as deer wintering area should begin by clearly identifying the boundary of the lands to which the deed restriction(s) apply.

2. Following an identification of the protected lands to which the restriction(s) apply, the deed should clearly indicate the purpose of the restrictions. For example,

*These lands are hereby dedicated to serve as critical (deer wintering habitat) in perpetuity.*

3. The deed should clearly indicate what activities are and are not allowed on the applicable lands. For example,

*These lands shall not be subdivided, or otherwise developed including unauthorized logging or removal of vegetation that is not in conformance with the conditions of all applicable permits or other liens, development of trails, or extraction of earth resources.*

4. Finally, the deed language should indicate that the restrictions “run with the land” and apply to all heirs, successors and assigns. Again, the intent is to maintain the habitat area for the good of present and future generations as well as the general ecological integrity of the region and therefore, the restrictions are perpetual, applying to all future holders of title.