U.S. Fish & Wildlife Service

Missisquoi National Wildlife Refuge

Draft Environmental Assessment for the Eagle Point Unit

(Proposed Donation of the Dunn Property, Derby, VT)

June 2010

DRAFT

ENVIRONMENTAL ASSESSMENT

MISSISQUOI NATIONAL WILDLIFE REFUGE

EAGLE POINT UNIT
(Proposed Donation of the Dunn Property)

DERBY, VERMONT

June 2010

U.S. DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
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I. INTRODUCTION

A. Purpose

This U.S. Fish & Wildlife Service ("Service") proposal is part of a cooperative effort to secure the long-term protection of wildlife habitat adjacent to Lake Memphremagog. The Vermont Land Trust ("VLT") has encouraged the Service to accept, at no cost, donation of the natural resource rich 420±-acres of land located in Derby, Vermont. For purposes of this Environmental Assessment i) reference to the "Dunn Trust VT Property" means 430± acres of land located in Derby, Vermont; ii) reference to the "Eagle Point Property" means the 420± acres of land, which excludes ten (10) acres and four (4) seasonal dwellings, located in Derby, Vermont being a portion only of the Dunn Trust VT Property; and iii) reference to the "Eagle Point Unit" means the Eagle Point Property. The proposal is submitted pursuant to the terms of and with the support of the Trustee of the Michael Dunn Trust ("Dunn Trust"), the property's current owner, and with the support of the Vermont Agency of Natural Resources ("VANR") and its Fish and Wildlife Department ("VDFW"). Through the generosity of Mr. Dunn, the Service has the opportunity to accept title to the property because the federal government is named as the potential beneficiary under the Dunn Trust.

The purpose of this proposal is to protect the important wildlife, habitat and recreational values of the Eagle Point Property. We propose to accept the Eagle Point Property into federal ownership as a Unit of the Missisquoi National Wildlife Refuge (the refuge). The property is located 50 miles east of the refuge, on the Vermont/Canada international border, in a similar setting (see Figure 1).

Acceptance also presents a partnership opportunity for the Service to enter into a cooperative agreement with VANR/VDFW for long-term management of the property. While federal ownership is a condition of the Dunn Trust, currently the Service is not in a position to effectively manage the property on a day to day basis. VANR/VDFW is uniquely qualified and willing to assume an active management role. VANR/VDFW manages the statewide Wildlife Management Area ("WMA") system of lands, is engaged in on-going collaboration with respect to Vermont's two existing National Wildlife Refuges, (Missisquoi and Conte), and has a working relationship with the Service. VANR/VDFW manages the nearby South Bay WMA on Lake Memphremagog.

The Dunn Trust also owns 422± acres of undeveloped land and lakefront in Stanstead Township, Province of Quebec, Canada (the "Dunn Trust CND Property") that adjoins and is contiguous to the Dunn Trust VT Property.

Both the Service and State are interested in the potential that this property presents for international cooperation and cross-border conservation management, because the Province of Quebec is also a Trust beneficiary with respect to the Dunn Trust CND Property. The State and the Province currently cooperate with respect to watershed management, through the Quebec – Vermont Steering Committee on Lake Memphremagog.

B. Need for Action

Title to the Property is vested in the Dunn Trust, and its disposition is controlled by the following language in the Dunn Trust:

"The Trustee shall distribute all real estate located in the United States to the United States Federal government, so long as said government is willing to accept it on the terms outlined herein. The government shall agree to hold said land in an open state, in conjunction with the land hereinbefore disposed of to the Canadian government or the Province of Quebec, as the case may be, and shall use the same as a park available for hikers and campers, for a period of not less than fifty years following the Donor's death. If the United States Government does not agree to these conditions within three years of the date of Donor's death, then the Trustee shall liquidate the land and dispose of the proceeds in accordance with the terms of paragraph (c) hereof."

Mr. Dunn died on September 1, 2007, making September 1, 2010 the deadline for the federal government's decision to accept ownership. The Quebec Department of Natural Resources and Wildlife has already agreed to accept the Dunn Trust CND Property.

The property's wetlands, forests and fields serve as important breeding and migration habitat for many migratory and resident wildlife species of current concern to the Service, State and Province. The property is expected to support many priority wildlife species identified in the Vermont State Wildlife Action Plan and the Bird Conservation Region 13 Plan. It is located within one of only three Focus Areas in Vermont identified under the North American Waterfowl Management Plan, the Lake Memphremagog Focus Area. The property's Hall's Creek Marsh contains rare wetland plant communities, and this marsh and the Southern Lake Memphremagog Wetlands are identified as two of nine wetland sites in Vermont recognized as priority wetlands in the Service's Regional Wetlands Concept Plan.

If the federal government does not accept ownership of the land, the property will be sold, with the intent to maximize its cash value for the remainderman of the Dunn Trust. The most likely outcome would be eventual subdivision and development. The Service and partners recognize previous private land stewardship as having maintained the unique wildlife and open-space values of the property in the past. However, sale of the property threatens the possibility of the continued existence of these values, and the potential for public access, recreational uses and environmental education on this site.

C. National Wildlife Refuge System

The Service is the principal federal agency responsible for conserving, protecting, and enhancing the Nation's fish and wildlife resources. We share this responsibility with other federal, state, local and private entities; however, the Service has specific trustee responsibilities for migratory birds, endangered species, fish, and certain marine mammals, as well as lands and waters administered by the Service.

The Service manages the 97-million acre National Wildlife Refuge System (NWRS) comprised of more than 548 national wildlife refuges and thousands of waterfowl production areas. It also operates 69 national fish hatcheries and 81 ecological services field stations. The Service enforces federal wildlife laws, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, administers the Endangered Species Act, and helps foreign governments with their conservation efforts. It also oversees the Federal Assistance Program which distributes hundreds of millions of dollars in excise taxes on fishing and hunting equipment to state wildlife agencies.

The NWRS is a network of lands and waters managed specifically for the protection of wildlife and wildlife habitat, and represents the most comprehensive wildlife resource management program in the world. National Wildlife Refuges are managed for migratory birds, endangered species, and other wildlife as part of a nationwide system to ensure the conservation of biological diversity across the country. Many refuges also provide the public with wildlife-oriented educational and recreational opportunities such as wildlife observation and photography, environmental education, hiking, hunting, and fishing, when these uses are compatible with the primary purpose for which the refuge was established.

Refuge System Mission and Goals
"The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."
— National Wildlife Refuge System Improvement Act of 1997

The fundamental mission of the System is wildlife conservation. The goals are to:

- Conserve, restore where appropriate, and enhance all species of fish, wildlife, and plants that are endangered or threatened with becoming endangered
- Perpetuate migratory bird, inter-jurisdictional fish, and marine mammal populations
- Conserve a diversity of fish, wildlife, and plants
- Conserve and restore, where appropriate, representative ecosystems of the United States, including the ecological processes characteristic of those ecosystems
- Foster understanding and instill appreciation of fish, wildlife, and plants, and their conservation, by providing the public with safe, high quality, and compatible wildlife-dependent public uses including hunting, fishing, wildlife observation and photography, and environmental education and interpretation

D. Missisquoi National Wildlife Refuge

The Missisquoi National Wildlife Refuge is recognized for its role in maintaining the ecological integrity of the Missisquoi River delta, considered an important international resource for the people of the United States and Canada. This site provides breeding, staging, and migration habitat for thousands of waterfowl and other fish and wildlife.

The refuge also supports education, research, and wildlife-dependent recreational opportunities.

The refuge lies on the eastern shore of Lake Champlain, near the Canadian border in Franklin County, Vermont. Established in 1943, the 6,592-acre refuge includes most of the delta, the largest wetland complex in the Lake Champlain Basin. It encompasses the largest silver maple floodplain forest in the State; extensive natural and managed marshes of wild rice, buttonbush, and tussock sedge that host thousands of waterfowl during migration; and supports rare freshwater mussels, turtles, and fish. The refuge sits at the mouth of the 767,000-acre Missisquoi River watershed. The 88-mile river flows through forested and agricultural uplands and many towns in Vermont and Quebec.

The refuge was established on February 4, 1943 "...for use as an inviolate sanctuary, or any other management purposes, for migratory birds" under the Migratory Bird Conservation Act (16 U.S.C. 715d). Today, the refuge consists of 6,592 acres in the Towns of Highgate and Swanton in Franklin County, Vermont. The Refuge Headquarters and Visitor Contact Station are located in Swanton, Vermont. Refuge lands have been acquired over time under the provisions of the Migratory Bird Conservation Act, Migratory Bird Hunting and Stamp Act, and other authorities. The refuge also owns a 262-acre parcel known as the Westville Unit in Westville, New York, along the Canada-U.S. border. Most of this Unit is reverting agricultural land. In addition, the refuge holds several conservation easements, including the Rock River easement, also along the border.

E. Authorities Applicable to the Proposal

Acceptance of land donations is covered under several existing authorities, including the Fish and Wildlife Act of 1956 (16 U.S.C. 742f), as amended, and the Migratory Bird Conservation Act of February 19, 1929 (16 U.S.C. 715d), as amended. The Fish and Wildlife Act authorizes the Service to accept donations of real and personal property for both program and non-program purposes: "*... the Secretary of the Interior is authorized to accept any gifts, devises, or bequests of real and personal property, or proceeds therefrom, or interests therein, for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude, if such terms are deemed by the Secretary to be in accordance with law and compatible with the purpose for which acceptance is sought*."

The Migratory Bird Conservation Act also authorizes acceptance of donations: "… *The Secretary may purchase or rent such areas or interests therein as have been approved by the commission and may acquire, by gift or devise, any area or interest therein which the Secretary determines to be suitable for use as an inviolate sanctuary, or for any other management purpose, for migratory birds. (715c and 715d) …….reservations are acceptable so long as they do not interfere with use of the areas for the conservation of migratory birds (715e)……Areas of lands, waters, or interests therein acquired or reserved pursuant to the Act shall be administered by the Secretary under rules and regulations intended to conserve and protect migratory birds in*

accordance with treaty obligations with Mexico, Canada, Japan and the USSR, and other species of wildlife found thereon, and to restore or develop adequate wildlife habitat. In administering such areas, the Secretary may: manage timber, range, and agricultural crops; manage other species of animals; enter into agreements with public and private agencies. § 715i."

The Fish and Wildlife Act also authorizes the Service to enter into Cooperative Agreements: " *…the Secretary of the Interior may negotiate and enter into a cooperative agreement with a partner organization, academic institution, State or local government, or other person to implement one or more projects or programs for a refuge or complex of geographically related refuges in accordance with the purposes of this subsection and in compliance with the policies of other relevant authorities, regulations, and policy guidance….. the Secretary may approve projects and programs ….. that promote stewardship of resources of the refuge through habitat maintenance, restoration, and improvement, biological monitoring, or research; and support the operation and maintenance of the refuge through constructing, operating, maintaining, or improving the facilities and services of the refuge.*"

F. National Environmental Policy Act Process

The Service is evaluating the proposal to accept ownership of the Eagle Point Property. Based on the analysis presented in this Environmental Assessment (EA), the Regional Director for the Northeast Region and the Director of the Service will make two decisions:

- Determine whether the Service should expand the acquisition boundary of the Missisquoi NWR in order to accept the Eagle Point Property donation
- Determine whether this action would have a significant impact on the quality of the human environment

The EA has been prepared pursuant to requirements of the National Environmental Policy Act of 1969. It discusses the natural resource values of the lands under consideration, two land protection "alternatives" for the future of the property, and the impacts of those alternatives. As part of the Service's public review process, copies of the draft EA will be made available to abutting landowners, the local community, and other interested parties for review and to receive comments, suggestions, or questions. An open-house/public meeting will be held to discuss the proposal.

G. Study Area Location

The Dunn Trust VT Property is located on the eastern shore of Lake Memphremagog on the U.S.-Canada border, in the town of Derby, Vermont (Figures 1,2,3). Michael Dunn owned property on both sides of the international border with nearly two miles of frontage on Lake Memphremagog and over 1000' on John's River. This analysis addresses the US holdings only. The Dunn Trust CND Property is not considered in this report, although its concurrent protection will be discussed.

The Dunn Trust VT Property includes 210± acres of wetland, woodland and riparian land, 220± acres of highly productive agricultural land, and over 6,301± feet (1.19 miles) of Lake Memphremagog shoreline and 1,059± feet (0.2 miles) of forested shoreline near the mouth of the Johns River. The property includes a total of 20,767 feet (3.93 miles) of road frontage on the west side of North Derby Road and both sides of Eagle Point Road. Most of the land along the road frontage is open, agricultural land which is nearly level with the road allowing for easy access. The property consists of three separate, contiguous tax parcels.

Lake Memphremagog is a 27 mile long glacial lake which straddles the Vermont-Quebec border. While over 70% of the lake area is located in Canada, 75% of its watershed is located in the United States. The lake is located in the Vermont towns of Newport, Newport City and Derby in Orleans County and the towns of Austin, Magog, Ogden, Potton, Saint-Benoît-du-Lac, and Stanstead Township, all in Memphrémagog Regional County Municipality.

H. Background

Vermont Land Trust Proposal. By memorandum dated November 11, 2009, VLT proposed to the Service that it accept, at no cost, the Eagle Point Property. The proposal was submitted with the support of the Dunn Trust and VANR.

As described in more detail under Section III Affected Environment, the property includes outstanding natural resources:

- An unusual diversity of ecological features including upland forests, streams, wetlands, wildlife and lakeshore. The collection of significant natural communities and Vermont rare plants is remarkable, and makes the property very significant from an ecologist's point of view.
- Spectacular frontage on 27 mile long Lake Memphremagog, including areas suitable for public access, both from land and from the lake.
- Very productive agricultural soils associated with a lake-influenced micro-climate that tends to extend the growing season.

VLT proposed that the Service take title to the Eagle Point Property. VLT further proposed that the Service rely upon VANR for the long-term management of the property, pursuant to guidelines applicable to National Wildlife Refuges. Because the Dunn Trust provisions require public recreation, namely, that the property be held "in an open state" and "available for hikers and campers," VLT also recommended that Service/VANR management of the property include public recreational opportunities, consistent with the primary goal of habitat and wildlife protection and enhancement.

Resource Management by VDFW. While Federal ownership is a condition of the Dunn Trust, VDFW is very interested in assuming an active management role. (For more detail about VDFW's proposed management, see proposed Alternative B, Section II below.) VDFW has a substantial land ownership and management presence in the immediate area: the ecologically important South Bay Wildlife Management Area (SBWMA – see Figure 1,3) is situated on Lake Memphremagog about six miles south of the Eagle Point Property.

VDFW staff is quite familiar with both the management prescriptions applicable to National Wildlife Refuges, and the habitats and natural communities that prevail on the property. VANR/VDFW is engaged in on-going collaboration with respect to Vermont's two existing refuges, the Nulhegan Basin Division of the Silvio O. Conte National Fish and Wildlife Refuge and Missisquoi National Wildlife Refuge, and has productive working relationships with the staff at both locations. Finally, VANR has relationships in the greater Derby community that would help facilitate effective stewardship of the property's natural resources.

The VANR is also interested in the potential that the management of this property presents to further international cooperation and management of natural resources. The existing cooperation between the state of Vermont and the Province of Quebec on the management and protection of Lake Memphremagog and its watersheds through the Quebec – Vermont Steering Committee on Lake Memphremagog could be advanced by Service acquisition and VDFW management of the property.

II. ALTERNATIVES

The purpose of this EA is to acknowledge the important wildlife values of the Eagle Point Property, and to describe alternatives regarding the future of these lands. Two alternatives are described below: A) No Action and B) Proposed Action – the acquisition boundary for Missisquoi NWR be expanded to include the Eagle Point Property, and that the donation be accepted into federal ownership as the Eagle Point Unit of the refuge. The Property will be managed as a Unit of the refuge, in a manner similar to a VDFW Wildlife Management Area through a Cooperative Agreement with the Service. Additional alternatives have been considered in the development of this proposal. Alternatives that have been considered and eliminated from detailed study for various reasons are also discussed below.

A. Alternatives Considered but Dismissed

The Service considered accepting the donation into Federal ownership as a Coordination Area, to be managed by the State through a Cooperative Agreement. This option was dismissed as it does not fit well with the intent of the Fish and Wildlife Coordination Act, which focuses on water resources development projects.

One alternative given early consideration involved acceptance of the donation and management of the Unit by the Service, through its Missisquoi NWR staff. This option was eliminated from further analysis, essentially because of the location and size of the Eagle Point Property. The property is not large enough to warrant establishment of a stand-alone National Wildlife Refuge, yet it is over 50 miles from Missisquoi NWR. It therefore presents logistical problems for management by the small staff of, and with the limited resources of, this existing refuge.

Although the property is located 30 miles closer to the Nulhegan Basin Division of the Silvio O. Conte National Fish and Wildlife Refuge, it is outside of the Connecticut

River watershed and the project area delineated by that refuge's establishing legislation. The most feasible role for the Service in this cooperative effort will be to accept donation as a federal agency, and utilize a partnership approach involving federal ownership and state management. This will allow the two agencies to pool resources to accomplish overall protection, and each to complement the other's efforts.

We also considered acceptance of the entire property, including the portions with residences and assorted outbuildings. This would include the 4 seasonal dwellings and assorted out buildings situated on the lakeshore in the vicinity of Eagle Point. The Service and the State are not in a position to accept the responsibility, expense and liability of owning, managing and maintaining the shorefront residence, boathouse and outbuildings. We do not consider acquisition of all lands to be a viable alternative, nor is this essential to accomplish the proposal's purpose. This option was also eliminated from further analysis. The Service is willing to accept the Eagle Point Property.

The Eagle Point Property also includes an old agricultural complex that includes two houses and associated outbuildings, centrally located within open fields/grasslands. Neither the Service nor VDFW has any use for the complex, or the financial and personnel resources to restore and maintain the structures. In addition, the fields provide an opportunity to manage this portion of the property for grassland breeding birds, which require large uninterrupted expanses of grassland. For these reasons, proposed plans for the property include removal of these buildings prior to acceptance of the donation, if approved by the State Historic Preservation Officer ("SHPO").

This complex of buildings is potentially eligible for the National Register of Historic Places, due to the architectural and historical significance of the structures. Because the Service is currently considering the gift of this property, as a federal agency it must comply with Section 106 of the National Historic Preservation Act (16 U.S.C. 470), which "requires that Federal agencies take into account the effect that their undertakings have on properties that are listed on or eligible for the National Register of Historic Places."

The Service's architectural historian is currently conducting Section 106 Review of the project, in consultation with the State Historic Preservation Officer. Section 106 Review includes determining if the agricultural complex is eligible for the National Register of Historic Places, and if it is, determining the effect of the project on the historic resources and how this effect can be mitigated.

The language of the Dunn Trust, controlling the disposition of the Dunn Trust VT Property, precludes other protection alternatives such as State ownership or other conservation options, such as a conservation easement. The Dunn Trust stipulates that if the federal government does not accept the property the land will be liquidated and the proceeds disposed of as detailed in the Dunn Trust.

B. Alternative A – No Service Action

Under this alternative, the Service would not expand the acquisition boundary of the Missisquoi NWR to establish the Eagle Point Unit, and would not accept the proposed donation. This is essentially a prediction of future conditions within the proposal area without active protection efforts by the Service and partnership. If land within the proposal area is not acquired or otherwise protected, important wildlife habitats and public use potential could eventually be lost, as a result of impacts related to changing ownership, subdivision, potential over-development, posting of private lands, and increases in human disturbance to wildlife during critical times.

As stated above, the possibility of other conservation-oriented agencies or organizations, including the State and VLT, providing long-term protection to habitats within the proposal areas, without federal involvement, does not exist. The Dunn Trust specifies that the real estate located in the United States shall be distributed "to the United States Federal government, so long as said government is willing to accept it on the terms outlined herein. …. If the United States Government does not agree to these conditions within three years of the date of Donor's death, then the Trustee shall liquidate the land and dispose of the proceeds in accordance with the terms of paragraph (c) hereof." It will then be necessary to sell the land and donate the proceeds to the remainderman of the Dunn Trust.

Under the No Action alternative, and the Dunn Trust's liquidation of the Dunn Trust VT Property, the Service and partnership would rely on existing state, federal, and local laws/regulations to provide long-term protection for the wildlife habitats within the proposal areas. Maintenance of the ecological integrity of the wetlands, surrounding forest, and shoreline in the face of changing ownership and increasing development pressure would depend on existing laws and regulations.

Local zoning does not appear to be an obstacle to development of this waterfront land. The extensive portions of the property with frontage on Lake Memphremagog are located in the Shoreland Zoning District of the town of Derby, which includes all land within the mean high water mark of any body of water exceeding 20 acres in area. Permitted uses include one and two family dwellings with minimum lot dimensions of 100'x 100' and minimum size of 15,000 square feet. The zoning ordinance includes a special provision that septic tanks and leach fields shall not be located within 100 feet of the mean high water mark of a body of water. There are no additional special requirements for lakefront development on Lake Memphremagog. The State of Vermont septic regulations similarly do not appear to be an obstacle to development of this waterfront land. Additional septic requirements are established by the State of Vermont, these regulations require that a septic leach field be at least 50 feet from the lake and the septic tank at least 25 feet from the lake.

The land along both sides of Eagle Point Road and the west side of North Derby Road in the eastern part of the property also has significant potential for residential subdivision and development by virtue of its location and physical characteristics. Zoning along

Eagle Point Road is 5 acres on the north side and 1 acre on the south and 1 acre on the west side of North Derby Road.

C. Alternative B – Proposed Action

We propose that the acquisition boundary for Missisquoi NWR be expanded to include the Eagle Point Property, and that the donation be accepted into federal ownership as the Eagle Point Unit of the refuge. Under this alternative, we propose that the Service accept title to the Eagle Point Property, excluding approximately 10 acres improved with four seasonal dwellings and assorted out buildings situated on the lakeshore and a very small "camp lot" (80±' x 100±') situated within the "Lake Park" subdivision (Figure 2). The Service and the State are not in a position to accept the responsibility, expense and liability of owning, managing and maintaining the shorefront residences, boathouse and outbuildings. Also, as previously mentioned, neither the Service nor the State has a use for the buildings located in the center of the property, or financial and personnel resources to maintain the structures. Proposed plans for the property include removal of these buildings prior to acceptance of the donation.

The Unit will be managed in a manner similar to a Wildlife Management Area by VDFW, through a management agreement developed by both agencies. The Dunn Trust requires the property be held in federal ownership for 50 years, at which point it could be transferred to the State. Because the Dunn Trust provisions require public recreation, namely, that the property be held "in an open state" and "available for hikers and campers", management of the property will include public recreational opportunities consistent with the primary goal of habitat and wildlife protection and enhancement. A joint long range management plan, approved by both agencies, would be developed.

Acquisition of the Unit will not require federal funding because the project involves donation of the property, and management by the State will be funded in the same manner as all other VDFW WMAs. VDFW uses state hunting license dollars (25%) and Federal Aid in Wildlife Restoration Funds (75%) to operationally manage these lands. Additionally Dingle-Johnson Funds (75%) and motor boat fuel tax funds (25%) are used to manage VDFW Access Areas. Federal management costs will be minimal, and no new federal staff will be required as a result of the proposal. Minor increases in costs to the refuge include salary, administrative costs, boundary posting/signage costs, and planning costs related to the development of a management agreement.

One additional Service cost will be a Refuge Revenue Sharing payment made to the local community. Although lands acquired by the Service are removed from the tax rolls, the town government will receive an annual payment, under provisions of the Refuge Revenue Sharing Act, as amended (Public Law 95-469, 1978). The revenue shared with the town consists of net income from the sale of products or privileges on refuge lands nationwide. The payment is calculated as 3/4 of 1% of the fair market value of the land. The town payment is based on the value of the land as determined by its highest and best legal use (fair market value), updated every five years through reappraisal. The payment can be used for any governmental purpose. If there is not enough money in the Service's revenue-sharing fund to cover the full payment, Congress

is authorized to appropriate money to make up the deficit. In recent years it has not been fully funded. Payments to local units of government have been reduced accordingly, and for 2009 were at 30%.

Management would be generally consistent with the goals of Missisquoi NWR, adapted for the Unit as follows:

- Maintain the ecological integrity of the Unit to ensure a healthy and diverse wetland ecosystem, providing a full range of natural processes, community types, and native floral and faunal diversity.
- Provide diverse upland habitats for Federal trust species including migratory birds and other species of conservation concern in all seasons.
- Provide the potential for education and interpretative programs to promote an understanding and appreciation for the conservation of fish and wildlife and their habitats.
- Increase appreciation and stewardship of the lake, its wetlands and watershed by providing compatible, positive, wildlife-dependent recreation including wildlife observation and photography, hunting, and fishing in accordance with the National Wildlife Refuge System Improvement Act of 1997.
- Preserve the cultural and historical resources on the Unit for current and future generations and to sustain an appreciation of the past.
- Foster cooperative partnerships and actions to promote fish and wildlife conservation in the Lake Memphremagog area.

1.Conceptual Management Plan – Eagle Point Unit

The Unit will be managed in a manner similar to a WMA by VDFW, which manages 85 WMAs totaling over 118,000 acres throughout the state. WMAs play an important role in meeting the Department's mission for the conservation of all species of fish, wildlife, and plants and their habitats for the people of Vermont. Management of WMAs emphasizes management techniques towards the conservation of fish, wildlife, plants and their habitats, and the properties provide important public access for wildlife based activities such as hunting, fishing, trapping, and wildlife observation as well as other dispersed activities.

Management activities primarily focus on providing a diversity of fish and wildlife habitat as well as quality opportunities for fish and wildlife-based outdoor activities. Dispersed non-motorized activities including hiking, snowshoeing, Nordic skiing, canoeing/kayaking, and primitive camping which are compatible with the primary uses are allowed on WMAs.

Utilizing inventory of habitat and infrastructure conditions that exist on the Eagle Point Unit, VDFW and the Service would cooperatively develop an interim plan for the short term. For the long term the Unit would be incorporated into a planning effort in concert with nearby WMAs in the Lake Memphremagog basin (South Bay WMA and the Willoughby Falls WMA) and it would be included in the Long Range Management Plan process for these two Areas. VDFW management would compliment and contribute to

a conservation strategy the Department has put in place in this region for several decades. The Department has had active wetland and riparian restoration efforts on the two nearby WMAs. These areas and the river corridor and adjacent wetlands are being managed to provide waterfowl migration and breeding habitat on the north-south migration corridor which the Memphremagog basin provides to the St. Lawrence River Valley.

The VDFW has had active land conservation projects with Federal USDA Farm Bill programs including Wildlife Habitat Improvement Projects and the Wetland Reserve Program easements, along with the use of Pittman Robertson money, hunting licenses revenues, Vermont Duck Stamp funds for land acquisitions and Dingell Johnson funds and Land and Water Conservation Funds for stream bank parcel acquisition to protect fisheries habitat and foster public access along the Barton River, Willoughby River and Black River from Orleans Vermont to South Bay on Lake Memphremagog.

Managing the Eagle Point Unit in a manner similar to a WMA will help active habitat conservation goals listed in the Department's Strategic Plan, State Wildlife Action Plan, North American Waterfowl Management Plan and other conservation initiatives.

Habitat Management Techniques

The Eagle Point Unit encompasses a diversity of habitats including rocky lakeshore, hemlock forest, forested and shrub wetlands, open water, riverine, emergent marsh, and fen wetlands, riparian shoreline with pines, willows, and red maple cover, and expansive hayfields. Habitat enhancement activities are conducted through commercial and noncommercial means to provide the rich diversity of habitat types and forest ages necessary to meet the needs of many wildlife species. The goal is to increase the productivity of such habitats to increase the abundance and diversity of wildlife.

Habitat management techniques likely to be employed on the Eagle Point Unit include:

1. Inventory existing habitat conditions and draft an Interim Stewardship Plan.

2. Maintenance of marginal farmland as "old field" habitat for soft mast (berry) producing shrubs, forbs. This would enhance habitat for American woodcock (a USFWS *focal species of management concern* and VT Species of Greatest Conservation Need SGCN) singing ground habitat. This habitat would be enhanced via periodic brush mowing.

3. Maintenance of the majority of productive farmland as grassland habitat via delayed mowing through leasing to a local farmer. Several hundred grassland acres could substantially benefit bobolink (SGCN) and savannah sparrow as breeding habitat.

4. Maintenance and expansion of wetland and riparian buffers via exclusion of mowing, and perhaps supplemental planting of native trees and shrubs.

Numbers 3 and 4 above are primarily directed toward breeding and migration habitat for American black ducks, blue-winged teal (both SGCN), other waterfowl consistent with the goals of Service lands, and grassland-dependant songbirds. This management would complement VDFW wetland and riparian restoration efforts on the two nearby WMAs, managed to provide waterfowl migration and breeding habitat on the north-south migration corridor which the Memphremagog basin provides to the St. Lawrence River Valley.

5. Installation and maintenance of waterfowl nest structures along Halls Creek where lack of natural snags limits productivity.

6. Maintenance of wild apple trees and other mast trees (oak, cherry) via periodic cutting of competing species.

7. Installation and maintenance of 1 or 2 osprey nest structure(s). VDFW typically works with state utility companies to install these structures

8. Treatment to control invasive exotic plants according to approved state and federal regulations and policies.

9. Evaluation of lakeshore erosion and stabilization needs; stabilization engineering design; implementation of stabilization measures and re-vegetation of eroding lakeshore south of Eagle Point.

10. Maintain vegetated shoreline and mature pines to provide habitat for common loon and bald eagle (VT endangered species) nesting. (no cost)

Infrastructure Maintenance

An essential component of any land management program is the maintenance of the property's boundaries and infrastructure, such as roads, bridges, and signs. Without these efforts, the habitat management and public use goals of each area may not be achievable. WMAs routinely require boundary line surveying and maintenance, signage, trash removal, and responses to encroachments if they arise. The following infrastructure improvements and visitor management activities are applicable to the Eagle Point Unit and could be proposed for consideration in the Long Range Management Plan:

1. Maintenance of property boundary lines via periodic paint blazing and/or NWRS/WMA joint boundary signage.

2. Routine road maintenance; grading, ditching, culvert maintenance, installing signage.

3. Installation of a joint entry sign, a parking area, and information kiosk.

4. Installation of a wheelchair accessible wildlife viewing platform on Halls Creek.

5. Development of a self guided lakeshore-meadow-wetland hiking\birding trail.

6. Designation of a remote lakeshore primitive campsite as part of the Northern Forest Canoe Trail campsite network.

7 Development of a fishing access area with boat ramp and parking to accommodate up to 15 vehicles with trailers to augment the shallow launch and minimal parking available at the VDFW Johns River Fishing Access Area. This access area will also facilitate ice angler access to Derby Bay.

8. Routine monitoring for illegal dumping, and other encroachments.

9 Regulation of users to address habitat management, public safety, or wildlife population goals consistent with the management of all WMAs, including but not limited to:

   a) signage to protect rare species nesting/breeding areas
   b) restrictions on hunting or trapping gear types or uses to manage species, protect habitat, or protect public safety
   c) Regulation of the use of motor vehicles including snowmobiles, mountain bikes, etc.
   d) Regulation of tree cutting, camping, and non-wildlife based activities, etc.

Proposed Public Uses

The National Wildlife Refuge System identifies hunting, fishing, wildlife observation, photography, environmental education, and interpretation as six priority public uses, under the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57). We propose a continuation of many existing public uses for the Eagle Point Unit. One or two primitive campsites are also proposed, to honor Mr. Dunn's wishes, support the Northern Forest Canoe Trail, and facilitate other priority uses such as wildlife observation. The sites would be located along the shoreline, in the vicinity of the cove north of the main cottage. Existing trails have traditionally been used for hiking, snowshoeing, and Nordic skiing. U.S. Border protection authorities would be consulted regarding location of trails. Paddling along the shoreline is also an established use.

Hunting of upland game, small game, waterfowl, and big game will also be a continuation of existing use. The property is within Vermont Wildlife Management Unit D1. Waterfowl hunting is concentrated along Hall's Creek, the John's River and lakeshore. Hunting dates would follow seasons set annually by the Vermont Fish and Wildlife Board, acting upon recommendations from the VDFW. The shoreline has been open to angling during open water periods, and access to the lake for ice fishing from a small unimproved seasonal parking area is also an established use. This area is located adjacent to the eastern edge of Eagle Point Road. Trapping will be evaluated as a

component of a Furbearer Management Plan if the donation of the property is accepted.

The Refuge Improvement Act and its regulations require an affirmative finding by the refuge manager on the compatibility of a public use before we allow it on national wildlife refuge lands. A compatible use is one "that will not materially interfere with or detract from the fulfillment of the mission of the Refuge System or the purposes of the refuge." The act defines the six wildlife-dependent uses that are to receive our consideration on refuges. The refuge manager may authorize those priority uses on a refuge when they are compatible, and consistent with public safety.

Appendix B includes a finding of appropriateness and compatibility determinations supporting the activities outlined in this proposal. In addition to the six priority uses, we have determined that two other non-priority activities are appropriate and compatible: primitive camping in support of wildlife observation and the Northern Forest Canoe Trail, and access to the lake for ice fishing from the Hall's Creek Parking Area. Allowing all of the uses described above on the Eagle Point Unit will not materially interfere with or detract from the mission of the National Wildlife Refuge System or the purpose for which the refuge was established.

One activity not allowed on refuge land is all-terrain vehicle (ATV) use. This type of activity is sufficiently provided elsewhere nearby the Eagle Point Property on other ownerships, so the lack of access with respect to this proposal does not eliminate the opportunity in the area.

III. AFFECTED ENVIRONMENT

A. Geology, topography, and soils

The Eagle Point Property falls within the Northern Piedmont Biophysical Region of Vermont, a region that extends northward into Canada and is characterized by rolling hills, northern hardwood forests, and scattered lakes, rivers, streams, and wetlands. Geologically, the region is dominated by calcareous metasedimentary bedrock, originally laid down as marine sediments in the Devonian and Silurian periods, with igneous intrusions (mostly granite) scattered throughout. Land cover in the region is primarily forest, with agricultural lands interspersed in areas where soils are more favorable.

Glacial processes covered the landscape with till in most areas of the region, but because the initial post glacial Lake Memphremagog was deeper and larger than it is at present, much of the Eagle Point Property is covered with a mantle of sand, silt and clay, laid down as sediments of the larger lake. These sediments effectively mask the effect of bedrock on much of the property. In the northwest corner of the property, though, bedrock is visible at the surface as outcroppings of granite. The southeast corner is underlain by calcareous metasedimentary rock, but no outcrops are visible there.

The soils on the property include the Tunbridge-Lyman complex in the rocky northwestern corner. These are shallow-to-bedrock soils derived from glacial till. This area is almost entirely forested. To the east of the forested area is an area of Tunbridge-Dixfield complex, also derived from glacial till but more fertile. This area, in fact, is rated as a prime agricultural soil. The remainder of the upland area, most of which is agricultural land, is Nicholville very fine sandy loam, a statewide agricultural soil. The wetland areas are Bucksport muck, an organic soil formed over the thousands of years since glacial retreat by the deposition of plant matter in low gradient waters.

B. Hydrology, Water Quality, and the Lake Memphremagog shoreline

The Eagle Point Property includes over one mile of frontage on Lake Memphremagog. This is a large, beautiful lake shared by Vermont and Quebec. The lake and its watershed see significant summer and winter recreational use in both Vermont and Quebec, support a diversity of fish and wildlife species and habitats, and are critical elements in the economies of northeastern Vermont and the Eastern Townships of Quebec. A cooperative effort between Vermont and Quebec seeks to address lake and watershed management issues with the goal of improving and protecting this spectacular natural resource.

Lake Memphremagog is 25 miles long with 73 percent of the lake's surface area in Quebec. Three-quarters of its watershed, however, is in Vermont. The watershed in Vermont is largely agricultural and forest land, with residential development increasing in recent years in both Vermont and Quebec. Like many other lakes, Memphremagog is impacted by accumulating phosphorus, sediments, and other pollutants from a variety of sources. In addition, exotic species infestations are a concern, with an existing Eurasian water milfoil population and the potential for a zebra mussel infestation.

Since the 1970s, significant efforts have been made to reduce the polluting effects of direct discharges into the lake and its tributaries, and lake quality has improved. Now, more attention needs to be focused on addressing nonpoint sources of pollution.

In 1989, the Quebec/Vermont Working Group on Managing Lake Memphremagog and its Environment was formed to study the principal problems related to the management of the lake's water quality. The Working Group issued its final report in 1993, and an international committee, the Quebec/Vermont Steering Committee, has pursued implementation of the report's recommendations.

To help prevent the introduction of zebra mussels, eight boat washing stations have been installed around the lake. A water quality monitoring effort has been initiated to record long-term conditions in the lake and to guide future discussions about compatible water quality standards. Increased funding has enabled farmers to install best management practices on their farms. The EPA and U.S. Department of Agriculture have authorized $260,000 to supplement existing cost-share programs. In 1994, the Lake Memphremagog Watershed Association was formed to bring together citizens interested in lake and river issues in the basin.

The Eagle Point Property includes over 5300'± (1.1 mi.) of shoreline on Lake Memphremagog, in three main areas: a densely forested patch approximately 1,148'± (0.2 mi.) long in an undisturbed condition northwest of Eagle Point and extending to the Canada border; approximately 2,660'± (0.5 mi.) of shoreline comprised of hayfields with a narrow buffer of trees between the mouth of Hall's Creek and Eagle Point; and 1,494'± (0.28 mi.) of forested wetland near the mouth of the Johns River (essentially inaccessible except by boat). This property also includes 1,059'± of forested frontage on the John's River (Figure 2).

The natural lakeshore is both a scenic and a natural resource. To those viewing the Property from a distance, the forested edge is a visual treat on this heavily developed lake. As a natural resource, the forested edge provides important water quality protection, shading, and wildlife habitat including large woody debris and for aquatic and riparian habitat, snags for nesting and perching, feeding and escape cover, and reduced wildlife disturbance from humans and pets.

Notably, riparian habitat loss and human disturbance are two major threats to both common loon and bald eagle productivity. Bald eagles (an endangered species in Vermont – see 10 VSA Chap. 125) gradually have been establishing territories in Vermont from surrounding states and Quebec and through an active three year "eagle hacking" program. The first Vermont eaglet in over 60 years fledged in 2008 from an upper Connecticut River Valley nest, and in 2009 a second upper Connecticut Valley pair was successful. Bald eagle sightings on nearby South Bay Wildlife Management Area (SBWMA) are increasing as birds from both the Connecticut River Valley and the Champlain Valley move "inland", but little natural shoreline remains on this 27 mile-long lake. Over a mile of undeveloped shoreline (1.2 mi. in VT) with mature pines on the excellent lakeside habitat provided by the Eagle Point Property could play a key role in bald eagle recovery in north central Vermont.

Similarly, although the Vermont common loon population (a Vermont Species of Greatest Conservation Need, or SGCN) has recovered, the population is unlikely to remain secure without sustained management and monitoring for the foreseeable future. The birds do not nest on the "main lake" portion of Lake Memphremagog (north of South Bay), probably due to lack of suitable nest sites. The last successful nest occurred in 1982 in the Johns River wetland, which provides one of the few suitable sites. A 2004 nest on nearby Bell Island was predated due to human disturbance.

C. Natural Communities and Rare, Threatened, and Endangered Species

The Eagle Point Property is a mix of forest, open agricultural land, and wetland. The wetlands are of particular interest. Staff from the VDFW Natural Heritage Project have inventoried the Property and nearby waters on at least three occasions in the last two decades. The most extensive work was done as part of a large inventory of the Memphremagog watershed in 1998. The Property was included in that inventory. This report draws heavily from the VDFW Report.

Ecologist Marc Lapin surveyed the property in August of 1998 and found a number of state-significant wetland features. He described a diverse wetland complex of approximately 100 acres along Hall's Creek, a stream that arises in Quebec (where it is known as Ruiss Arnold) and flows southwestward, through the Property, to Lake Memphremagog near Lake Park. This wetland complex encompasses a large and beautiful intermediate fen (a rare natural community in Vermont) that occurs in patches along the creek. Lapin also described a multi-layered sweet gale shoreline swamp, also a rare natural community. Small fingers of riverine floodplain forest near the Quebec border, and two large areas of red maple-northern white cedar swamp, one along a branch of Hall's Creek, and the second near the mouth of Johns River, were also identified by Lapin as natural communities of statewide significance (Engstrom et. al. 1999).

Several rare and uncommon plants were found during the 1998 inventory, and others in subsequent aquatic surveys by the renowned aquatic botanist Barre Hellquist of North Adams (Mass.) State College and botanist Bob Popp of the VDFW Species Conservation and Management Section. In the wetlands are marsh mermaid weed (*Proserpinaca palustris,* G5S2), yellow water crowfoot (*Ranunculus flabellaris*, G5S3), small bedstraw (*Galium trifidum*,G5S3), false-cyperus sedge (*Carex pseudo-cyperus* (G5S3), and false water-pepper (*Polygonum hydropiperoides,* G5S3). In deeper water are whorled water milfoil (*Myriophyllum verticillatum,* G5S2S3), Fries' pondweed (*Potamogeton friesii,* G4S3) and Vasey's pondweed (*Potamogeton vaseyi,* G4S2). Another rare plant, not named here for reasons of data sensitivity, is ranked G5S1 and is state endangered. Rarity ranks (e.g. G5S2) are explained in Appendix A.

Wetlands and their plants and animals can be impacted by a variety of stresses to their integrity and health. Predominant among these are diminished water quality and eutrophication, the invasion of non-native species of plants and animals, hydrological changes, removal of vegetation for human uses, and disruption of soil integrity. Nearly all these threats have the potential to impact the wetlands on the Property, but the most immediate concerns are reduced water quality, invasive exotic species, and hydrological changes.

D. Wildlife: Species of Conservation Need and Species of Management Concern

Approximately 228 acres of diverse wetlands provide potential habitat for numerous Vermont Species of Greatest Conservation Need (VT SGCN), including two waterfowl species, five marsh birds, two passerines, four raptors, three aquatic mammals, four small mammals, two salamanders, and many potential invertebrates (Section III. D.4 and D.5).

Great blue heron, pied-billed grebe, sora, northern harrier, and osprey are VT SGCN which inhabit the Vermont Fish & Wildlife Department's nearby SBWMA , seven miles south at the end of the lake (Figures 1, 3). Suitable habitat for these species exists on the Property. American bittern and Virginia rail, both ranked "uncommon" breeding birds in Vermont, are also found at SBWMA and might breed on the Property. Although osprey recovered to robust breeding numbers in the Champlain Valley and Connecticut

River Valley, they are still slowly colonizing breeding sites in the mid-section of the state. Three nest platforms were installed at SBWMA in 2005; one was used for the first time in 2009, and a second nest was established in 2010. Three other osprey nests are located on the Clyde River, a tributary to Lake Memphremagog. Installation of two or three nest platforms on the Property would enhance the "interior" Vermont population and provide highly visible public viewing of this popular species.

Small patches of habitat suitable for American woodcock, a USFWS *focal species of management concern* and VT SGCN, are found on the margins of the wetlands. Active management of this habitat, combined with expansion of wetland buffers to create additional alder/shrub habitat for feeding and singing grounds would contribute to conservation of this species.

D1. Waterfowl

Historically, American black ducks were very abundant in the wetlands of the Memphremagog basin. During nine years of banding conducted between 1955 and 1970, 1803 black ducks were banded on SBWMA, accounting for 61% of all ducks captured on the WMA. Recent observations of black duck broods and hunter harvests indicate that the area continues to provide essential habitat for the species, which is found in numbers much lower than historically observed. According to the USFWS, "The American Black Duck *(Anas rubripes)* has been identified as a *focal species of management concern* because of major population declines over the last half century. American Black Ducks were once one of the most abundant freshwater ducks in eastern North America, particularly in the northeastern United States where they are year-round residents. The number of Black Ducks wintering in the United States has declined by more than 50% since the 1950s, with the sharpest decline occurring in the Mississippi Flyway." (USFWS 2008).

Over the past decade VDFW has implemented a strategy of acquiring floodplain meadows and wetlands along the Barton river (a major tributary to Lake Memphremagog) and worked with partners including Ducks Unlimited and United States Department of Agriculture (USDA) to restore wetland hydrology to the meadows and associated swamps and marshes. Delayed mowing is also practiced via agricultural leases to maintain nesting habitat for waterfowl and grassland birds as proposed by Perlut et al. (2006), and riparian buffers are being established via tree and shrub planting and mowing restrictions. Implementation of these habitat management actions on the property would provide excellent breeding and migration habitat for American black ducks and blue-winged teal (both VT SGCN), consistent with the goals of other USFWS lands. This management would complement VDFW efforts on the two nearby WMAs (Figure 1,3).

Potential also exists to provide breeding, feeding and resting habitat for Canada geese, mallards, wood ducks, green-winged teal, hooded mergansers and other waterfowl which migrate along the north – south oriented lake and its tributary rivers dotted with agricultural fields. Corn could be planted on the 29 acres of prime soils, and a portion left standing for wildlife via agricultural lease. Nest boxes installed in Halls Creek

marsh would greatly increase the productivity of cavity nesting waterfowl, as would expansion of the forested buffer at the margin of the agricultural fields.

D2. Grassland Birds

Second only to the wetlands on the property, the abundant agricultural lands are a prominent feature of the landscape. Approximately 221 acres, nearly half of the Vermont land cover, is agricultural land suitable for hay production, and nearly all of the farmland is being used for hay at this time. The farmland lies in two large contiguous blocks on the east and west sides of Halls Creek.

Tremendous potential exists for the property to function as a grassland bird production area, especially for bobolink (VT SGCN) and savannah sparrow. The property shares several key habitat characteristics with the Missisquoi National Wildlife Refuge (MNWR), including:

- Location at 45 degrees latitude in the St. Lawrence River Watershed
- Extended growing season due to climate moderated by a large lake
- Preponderance of cool season grasses in large contiguous meadows
- Orleans County has highest proportion of agricultural and open land (22%) in Vermont outside the Champlain Valley, similar to Franklin County (29%) and Grand Isle County (25%), the landscape around MNWR.

MNWR, located approximately 50 miles due west, ranks highest for grassland breeding bird density and abundance among 13 NWRs in Region 5 (Bird Conservation Region 13), and close to the median for species richness. According to the USFWS, the refuge "seems to be the most important in the Region in terms of numbers of obligate breeding birds, and has a moderately diverse bird community. MNWR seems to contribute the most to supporting the bobolink (comprises 73% of the refuge's GBB community), *a priority bird population for the PIF plan for the St. Lawrence Plain*." In fact grassland breeding bird abundance and density are approximately twice as high as any other NWR in BCR 13. Since the Property exhibits many of the same habitat features as MNWR, it's highly likely that the implementation of a delayed mowing regime, or conservation mowing as outlined by Perlut et. al. (2006) would result in the Property functioning as a similar grassland bird production area. This role would compliment VDFW efforts on 144 acres of delayed mowing meadows on the SBWMA, and additional acreage enrolled in the Wetland Reserve Program approximately 10 miles south along the Barton River, a major tributary to Lake Memphremagog.

Delayed or extended mowing would greatly benefit many pollinator insects, in particular native bees which have exhibited population declines in recent decades. Very little is known about the density and distribution of these insects, which are absent from the VT Wildlife Action Plan. Concerns have recently been raised about the apparent decline of several species, which is alarming considering the ecological services they provide.

D3. Furbearers

Muskrat is a VT SGCN because its population is in decline nationally for unknown reasons. Muskrats inhabit Johns River marsh and the Halls Creek marsh. Since the Property essentially encompasses the entire 100-acre Halls Creek marsh habitat and surrounding uplands, it presents a unique research opportunity to study this decline via population monitoring, harvest regulation, habitat manipulation and control of other variables.

Mink and northern river otter are additional VT SGCN which likely utilize the wetland habitat on the Property. The forested lakeshore provides an extensive habitat area for these species on this heavily developed lake. Expanded wetland buffers would benefit both species.

Bobcats, also a VT SGCN, seem to be most successful in large tracts of undeveloped lands connected by vegetated linkages. The diversity of wetlands, meadows, and forests of the Property provides excellent habitat, especially when the forest in the Canada parcel is considered. Steep, rocky cliffs provide good habitat. A long ridge of ledge in the hemlock forest along the Canada lakeshore provides this habitat feature in the form of talus, boulders, crevices and overhangs.

A Furbearer Management Plan will be developed which could include a trapping program.

D4. Vermont Grassland Species of Greatest Conservation Need which *may* occur on the property

High Priority

Birds

Grasshopper Sparrow (*Ammodramus savannarum*)
Upland Sandpiper (*Bartramia longicauda*)
Northern Harrier (*Circus cyaneus*)
Vesper Sparrow (*Pooecetes gramineus*)

Mammals

Hoary Bat (*Lasiurus cinereus*) possible, habitat exists
Woodland Vole (*Microtus pinetorum*) - possible, good habitat, found E & W of the Property
Pygmy Shrew (*Sorex hoyi*) - possible, good habitat, found E &W of the Property

Invertebrates

Butterflies (four VT grassland spp. Unlikely due to warm season grass host plant requirements)
Moths Group

Medium Priority

Birds

Cooper's Hawk (*Accipiter cooperii*)
Blue-winged Teal (*Anas discors*)
Bobolink (*Dolichonyx oryzivorus*)
American Kestrel (*Falco sparverius*)
Field Sparrow (*Spizella pusilla*)
Eastern Meadowlark (*Sturnella magna*)

Mammals

Hairy-tailed Mole (*Parascalops breweri*) possible, good habitat, found E & W of the Property

Reptiles

Smooth Green Snake (*Liochlorophis vernalis*) (confirmed in Albany, south of L. Memphremagog)

D5. Vermont Wetland Species of Greatest Conservation Need which *may* occur on the property

High Priority

Birds
American Black Duck (*Anas rubripes*)
Bald Eagle (*Haliaeetus leucocephalus*)
Common Loon (*Gavia immer*)
Canada Warbler (*Wilsonia canadensis*)
Least Bittern (*Ixobrychus exilis*)

Mammals
Eastern Pipistrelle (*Pipistrellus subflavus*) (possible, habitat present)
Water Shrew (*Sorex palustris*) (possible, habitat present)

Invertebrates
Bog/fen Odonata Group
Lakes/ponds Odonata Group

Seep/rivulet Odonata Group
Vernal Pool Odonata Group
Mayflies/Stoneflies group
Freshwater Snails
Hardwood Forest Butterflies

Medium Priority

Birds
Blue-winged teal (*Anas discors*)
Great Blue Heron (*Ardea herodias*)
Northern Harrier (*Circus cyaneus*)
Red-shouldered Hawk (*Buteo lineatus*)
Veery (*Catharus fuscescens*)
Osprey (*Pandion haliaetus*)
Pied-billed Grebe (*Podilymbus podiceps*)
Lesser Yellowlegs (*Tringa flavipes*) (migration habitat only)
Sora (*Porzana carolina*)

Mammals
Long-tailed Weasel (*Mustela frenata*)
Muskrat (*Ondatra zibethicus*)
Northern River Otter (*Lutra canadensis*)
Southern Bog Lemming (*Synaptomys cooperi*) (possible, habitat present)
Mink (*Mustella vison*)
Cinereus or Masked Shrew (*Sorex cinereus*)

Amphibians
Blue-spotted Salamander (*Ambystoma laterale*)
Spotted Salamander (*Ambystoma maculatum*)

E. Historical and Archaeological Resources

The National Historic Preservation Act requires that any actions by a federal agency which may impact archaeological or historical resources be reviewed by the State Historic Preservation Office (SHPO), and that identified impacts be avoided or mitigated. Service policy is to preserve these resources in the public trust, avoiding impacts wherever possible.

Consultation with the Vermont Division of Historic Preservation (DHP) indicates that there are no recorded archaeological sites on the Eagle Point Property. DHP staff and several local archeology consultants note that although the area is widely considered to be highly sensitive archeologically, very little systematic survey work has been done in the area. Therefore, given the lake/wetlands/streams/promontory-bluffs association on the Eagle Point Property it is likely that prehistoric or historic archaeological sites may be located within the area.

The Eagle Point Property being considered in this proposal currently includes two houses and associated outbuildings, at the location of the original farmstead in the center of the property. The architectural and historic significance of these buildings is currently being investigated, as explained earlier in this EA. The four seasonal dwellings along the lakeshore, together with the 10± acres to be retained by the Dunn Trust, were not evaluated by the SHPO.

F. Land Use and Economy

The town of Derby is located in the northern part of Orleans County, Vermont with the entire northern boundary of the town being the international border with Canada. The local economy is based primarily on agriculture, forestry and local services. The town includes the villages of Derby Center and Derby Line each of which includes commercial districts. Significant bodies of water within the town include Lake Memphremagog, Derby Pond and Salem Lake as well as the Clyde River and Johns River. The town has a total area of 36,877 acres with the northern boundary being Canada, the eastern boundary being Holland, Morgan and Charleston, the southern boundary being Coventry and Brownington and the western boundary being Newport. The population of the town of Derby is 4,604 and there are 2,258 housing units. According to the Vermont Indicators On-line, a collaborative data centralization and clearinghouse of information managed by the University of Vermont Center for Rural Studies and Vermont Center for Geographic Information, the per capita income of Derby is $17,192, the median home value is $166,789, and the average annual wage is $32,970. According to real estate appraiser Daniel Berna, single family dwelling prices range from $50,000 to $1,000,000.

The Eagle Point Property's immediate neighborhood is rural residential and lakefront in nature and consists of a mix of open space and residential use with a trend of gradual conversion from open space to residential use.

The Derby Town Plan notes the existence of the public town beach and VT Department of Fish and Wildlife boat access at the John's River just south of the Eagle Point Property. For such a large lake, there are not many public access points. The Northern Forest Canoe Trail passes through the lake, although it is noted that there are few public camping areas available to paddlers. Public access to the lake is also a key objective of the Quebec Department of Natural Resources and Wildlife with respect to the portion of the Dunn Trust CND Property.

The lake itself and this region of Vermont are noted for hunting and fishing experiences. The existing character of the property is well suited for nature and wildlife based activities. In 2006 a National Survey by the U.S. Fish and Wildlife Service found in Vermont that hunting, fishing, trapping and wildlife viewing generated over $376 million annually in direct expenditures. Hunting and fishing contributed more than $253 million of this amount. These dollars are spent throughout the state but often are spent in rural communities such as this property and current land uses. A 2000 National Survey of the Vermont Visitor by UVM's School of Business Administration and the

Vermont Tourism Data Center found that tourists coming to Vermont for the primary purpose of fishing or hunting spent an average of $2,096 in Vermont on their trips during the year. This was higher than average expenditures for all the other types of recreation in the survey.

IV. CONSEQUENCES OF ALTERNATIVES

A. Alternative A - No Action

Under the No Action alternative, the Service would decline the gift of land from the Dunn Trust and following the provisions of the Dunn Trust, the property would be liquidated and the proceeds distributed to another beneficiary. The maintenance of the ecological integrity of the wetlands, surrounding forest, productive agricultural land and undeveloped shoreline in the face of changing ownership and increasing development pressure would depend on existing laws/regulations. If the land is sold to new owners interested in development, there is great potential for this unique property and its associated wildlife habitat, wetlands, and undeveloped shoreline to undergo loss, degradation, and increases in disturbance.

Given the extensive road and Lake Memphremagog frontage on the Eagle Point Property, it has significant potential for additional residential subdivision and development. The following section borrows heavily from an analysis by appraiser Daniel Berna in April 2010, which used tax parcel information and weighed local zoning regulations, State septic and water requirements and the projected absorption rate for new homes in the immediate area to predict the potential development of at least 25 new homes on the Eagle Point Property. No septic soil suitability tests have been done in this area as part of the analysis however.

The Lake Memphremagog frontage is by far the most valuable land associated with the Eagle Point Property. The available US lake frontage in the towns of Derby and Newport is nearly fully developed with single family dwellings on small lots with 100-200 feet of lake frontage. There is very little undeveloped land left at the U.S. end of Lake Memphremagog. The Eagle Point Property represents one of the largest remaining developable land holdings on the lake. As noted earlier, local zoning does not appear to be an obstacle to development of this waterfront land.

The historic precedents on the lake suggest that 13 acres of lakefront land west of Eagle Point Road, opposite the farmstead, will at some time be developed with lakefront single family dwellings. According to appraiser Dan Berna, current market conditions support a 2 lot subdivision but the potential exists for up to 13 lakefront lots in this area given local zoning requirements. These homes would be a mix of summer and year-round residences, and would include out buildings, drives, docks and moorings. Since 2005 there has been an average of approximately 2 lakefront lots per year sold on Memphremagog. As market conditions change development pressures may be such that more dense development of this area is warranted.

The land along both sides of Eagle Point Road and the west side of North Derby Road in the eastern part of the property also has significant potential for residential subdivision and development by virtue of its location and physical characteristics. The land along the road frontage is open, agricultural land with many areas providing good views of the lake. Appealing, easily developed lots could be created here. Development here would be limited only by the prevailing real estate market conditions and the ability of the local area to absorb new development. Zoning along Eagle Point Road is 5 acres on the north side and 1 acre on the south and 1 acre on the west side of North Derby Road. According to Dan Berna's analysis, with proper pricing and marketing annual sales of 2-4 lots is possible under current market conditions, with at least 12 homes possible.

The remaining 350+ acres surrounding the farmstead also has significant potential for residential subdivision and development. The parcel includes over 1,000 feet of wooded frontage on Lake Memphremagog north of the Dunn seasonal lakeshore buildings. This parcel could have appeal as an estate property; with its large size, lake frontage, views, and road frontage. Development of the land closer to the intersection with North Derby Road would not be visible from the existing farmstead and would have limited impact on the views, privacy and appeal of the farmstead.

Development of the property, as described above, has the potential to affect wildlife, habitat, water quality, and other natural resources in a number of ways. Residential development would fragment and reduce the existing upland forested area and meadows by directly converting habitat to lawns, driveways, and structures, and indirectly impact the quality of remaining habitat fragments well beyond the footprint of this infrastructure in numerous ways. Future development also has the potential to negatively impact archaeological and historic resources that may be present, since private ownership does not provide protection.

New homes bring increased traffic and many new mortality factors for wildlife. Residential development would substantially increase the traffic volume on the dead end road which bisects the property, resulting in an exponential increase in wildlife mortality, especially for amphibians, reptiles (snakes, turtles), and grassland birds. Homeowners often apply pesticides which kill beneficial pollinators in addition to target insects, which would reduce the value of remaining meadows as habitat for native butterflies, bees, and insect species important as grassland bird forage. Populations of small mammals, birds, reptiles and amphibians, which are prey species for raptors and furbearers, incur increased mortality in habitat fragmented by development indirectly due to lawn mowing, window collisions (birds), habitat loss due to invasive plants, removal of snags and denning sites, and direct trapping and poisoning to reduce their populations as "pests" near dwellings.

Populations of skunks, squirrels, and raccoons typically increase in rural residential developments due to access to un-natural food resources (birdseed, gardens, pet food, compost, trash cans etc.) and a concurrent decrease in their predators (foxes, coyotes, bobcats, and raptors). Nest predation on waterfowl, marsh birds, grassland birds, and wild turkey would undoubtedly increase under this alternative. New domestic animals, and pets (cats and dogs primarily) are known to impact native wildlife populations as

well. Quoting from The Wildlife Society (2006), "a growing body of literature strongly suggests that domestic cats are a significant factor in the mortality of small mammals, birds, reptiles, and amphibians. Because free-ranging cats often receive food from humans, they can reach population levels that may create areas of abnormally high predation rates on wildlife."

Residential development adjacent to wetlands and lakes increases the input of nutrients from lawn fertilizers and sediments, resulting in excessive aquatic and emergent plant density and eutrophication, increased sedimentation, and loss of fish spawning gravel and cobble shoreline. It is also likely that increased development would have the side effect of reducing the natural vegetated buffers to the wetlands and Lake Memphremagog, in spite of regulations regarding actual development within those buffers. Removal of riparian trees and conversion of shoreline buffer to lawns would result in sedimentation due to erosion, loss of trees and snags as nest sites and the source of large woody debris for fish habitat, and increased sunlight resulting in shoreline algae and dense aquatic plant growth.

Shoreline erosion due to buffer removal would ultimately lead to installation of typical Lake Memphremagog rip-rap structures which destroy potential nest sites for common loon and waterfowl, and degrade habitat for mink, otter, and other wildlife. In the early 1990s, the U.S. Environmental Protection Agency and the Service concluded from a study of 345 northeast lakes that the stress from shoreline alteration was a more widespread problem than eutrophication and acidification (Whittier et al. 2002). Loss of vegetation in these areas would make the wetlands and lake less habitable for sensitive animals such as the bald eagle, common loon, and black duck, and may affect the habitat for rare wetland plants, some of which occur very close to the upland edge, due to changes in the amount of sunlight, water chemistry due to lawn chemicals, road salt, etc.

Impacts of the No Action Alternative on existing wildlife-based recreation, including hunting, trapping, and wildlife observation, would be extremely detrimental. The No Action Alternative will ultimately result in privatization of the property, parcelization, and residential development of a large proportion of the acreage. These factors will negatively impact habitat and the abundance and diversity of wildlife as noted above, thus diminishing the resources needed for wildlife based recreation. Hunting, trapping, hiking and wildlife observation are not possible among residential developments due to several factors, including safety of people and pets, noise, property rights-privacy-trespass issues, and limited public access opportunities. In addition to diminishing or completely terminating existing opportunities for public wildlife based recreation, the No Action Alternative would also preclude options to provide enhanced opportunities via habitat management to increase wildlife abundance and diversity, and via infrastructure such as a birding trail, wetland observation platform, fishing access area, and canoe camping area.

B. Alternative B - Proposed Action

Under this alternative, the acquisition boundary for Missisquoi NWR will be expanded to include the Eagle Point Property, to create the Eagle Point Unit of the refuge. The

Unit will be managed similar to a Wildlife Management Area by VANR/VDFW, through a management agreement with the Service. Full consideration of the provisions of the NWRS Administration Act will apply. The Dunn Trust requires the property be held in federal ownership for 50 years, at which point it could be transferred to the State. Because the Dunn Trust provisions require public recreation, namely, that the property be held "in an open state" and "available for hikers and campers", management of the property will include public recreational opportunities consistent with the primary goal of habitat and wildlife protection and enhancement. Joint long range management planning will be conducted in partnership by both agencies.

Acquisition and management of the property as described above in the Proposed Action (Section II.C.) would have the benefit of protecting, in perpetuity, the diverse natural resources found on the property (described in detail above in Section III). The unusual natural communities, rare plants, and abundant wildlife would have the benefit of the expert management of the VDFW, ensuring that they remain viable and healthy in the face of challenges such as invasive species, climate change, and increasing human use of the area. The management contemplated by the Department would include opportunities for light recreation, allowing visitors the use and appreciation of the area without compromising the integrity of the natural resources.

Access to, and education about, the natural resources will have the long-term effect of fostering environmental stewardship. For children in particular, "research has substantiated that an empathy with and love of nature, along with later positive environmental behaviors and attitudes, grow out of children's regular contact with and play in the natural world." (White and Stoecklin 2008). Availability of the Eagle Point Property for school groups and young people just learning to fish, hunt, and enjoy the outdoors would have lasting positive effects for wildlife and natural resources throughout Vermont.

Recent national surveys have documented that public lands play an integral role in providing opportunities for the public to hunt, fish and trap. The amount of time people spend in these activities often hinges on having a place to go afield to engage in the activity. Vermont's WMAs equal more than 184 square miles of lands that provide this public opportunity. VDFW history of WMA Management is almost 100 years old, as the Department recognized that habitat is critical to healthy wildlife populations and first secured land for habitat protection in 1919.

Wildlife Management Areas play an important role in providing access and opportunity for the public to enjoy the outdoors and Vermont's wildlife heritage. Surveys conducted by the US Fish and Wildlife Service documented Vermont is 3rd nationally in the percent of the public who watch wildlife, hunt, fish or trap. This is advantageous to the state; having a public that is well connected to the out-of-doors is very important and it will be a challenge to continue this out-of-doors connection for the future. WMAs will be part of addressing this challenge.

The importance of Wildlife Management Areas to local communities includes:

- Public access for fish and wildlife based activities (hunting, fishing, viewing, and photography) and a host of compatible activities (boating and hiking).

- Aesthetic values (views, foliage) of undeveloped mountains, waters, fields and wetlands contribute to the quality of life enjoyed by Vermonters and visitors, and the Vermont tourism brand and economy.

- Ecological and biological values provided by habitat for common and rare plants and fish and wildlife, groundwater recharge, flood abatement, and a host of ecosystem services such as carbon sequestration, temperature moderation, etc.

- Educational values for schools and communities.

- Contracted services (excavating, infrastructure repairs and construction, brush mowing, habitat work etc.) and agricultural leases also contribute to the local economy statewide.

- Economic and cultural benefits are derived from the roles WMAs have played throughout the state with respect to nature/wildlife based tourism. These areas serve as an economic basis for rural tourism for fish and wildlife dependent activities such was wildlife watching, hunting, fishing and trapping. Service surveys have documented that wildlife viewing, hunting, fishing and trapping contribute over $376 million annually in direct expenditures through out Vermont.

In addition to public access and wildlife habitat, WMAs are also important for several other reasons. WMAs are managed for ecological roles, including providing habitats for healthy wildlife populations. These areas need to be dynamic in the future for processes such as river migration, floods and fires, as well as to offset losses of young forest and shrub lands. WMAs can provide greater abundance and diversity of various species.

Management of WMAs provides wildlife biologists a venue in which to demonstrate science based techniques to private land owners, consulting professionals, and the public. Active management on WMAs serves the wildlife conservation mission of VDFW by providing demonstration areas readily accessible for use in technical assistance workshops, where landowners can learn techniques applicable to private lands which comprise about 81 percent of the landscape.

With respect to any archaeological or historic resources, any such sites found to be present on the property in the future would be protected under the Archaeological Resources Protection Act and the National Historic Preservation Act. These resources would be protected through federal ownership. Any future plans for activities involving ground disturbance would involve consultation with the Vermont Division of Historic Preservation.

C. Property Tax Impacts of the Two Alternatives

The school tax and municipal property tax consequences of permanent land conservation such as proposed by Alternative B are distinct.

In tax year 2009-2010, the Dunn Trust VT Property's tax liability was $41,982, with 81.4% percent being associated with the **school tax**. In the late 1990's, Act 60 (and later, Act 68) changed the way towns pay for education, and also changed the relationship between the Grand List and school taxes. Now the school effective tax rate depends on per-pupil spending and not on the tax base. Shrinking the tax base by taking land off the tax rolls for land conservation does not change the school tax rate. Similarly, growing the tax base will not change the school tax rate, as long as the district continues to spend the same amount per pupil. (See "The Land Use - Property Tax Connection" prepared for Vermont Natural Resource Council and Vermont League of Cities and Towns by Deb Brighton and Brenda Hausauer, December 2002.)

The **municipal tax** will be affected by a transfer of the Eagle Point Property to the Service. However, Alternative B would exclude approximately 10 acres, together with four seasonal residences. Of the $41,982 property tax revenue paid by the Dunn Trust in tax year 2009-2010, $20,331 is associated with the land and seasonal residences excluded from Alternative B. The Dunn Trust intends to openly market the seasonal residences, they will remain on the Grand List, and modernization and improvements to those structures may result in an increased Grand List valuation of this property.

The remaining $21,651 in tax year 2009-2010 revenue is associated with the land the Service would acquire. However, because 81.4% of this amount is the school tax portion, the municipal tax loss to Derby would be $4,647.

While the Service can make no long term assurance, the Service does have a "Refuge Revenue Sharing" program which, when fully funded, reimburses municipalities at the rate of 0.75% of the fair market value of land owned by the Service. If this program is in place and is fully funded, the municipal tax loss to Derby would be further reduced to $2,229. Historically, however, Congress has not fully funded the Refuge Revenue Sharing program. In 2009, it was funded at 30%.

Town officials often worry that land conservation locks up land and therefore precludes the possibility that the town may see some development that would enhance the municipal tax base. "Although commercial and industrial development is often sought to lower taxes, in general, towns with more commercial and industrial property have higher, rather than lower taxes" (Brighton and Hausauer, 2002). Deb Brighton's work demonstrates that Vermont municipal tax rates tend to be higher in the towns that are most developed and lower in the towns that are most rural. She graphed the impact of residential development (population size) and the value of commercial-industrial-utility properties in all Vermont towns, and found that municipal taxes progressively increased from lowest in sparsely populated low-development towns to the highest rates (nearly double) in highly populated, substantially developed towns.

Concurrently, towns with the highest proportion of conserved land (>25%) had the *lowest* municipal taxes, while those with less than 13% conserved land had the highest municipal tax rates. Brighton concluded that more rural towns have lower rates because they have fewer people to serve. Service lands require minimal municipal services, and contribute no students to local schools. A high proportion of conserved land does not drive a town to a higher tax rate, but rather has the opposite beneficial effect, contrary to popular belief.

In summary:

- 40.5% of the Dunn Trust tax bill is associated with the 4 seasonal residences and land excluded from Alternative B. This real estate would continue to be taxed.
- Of the $21,651 in tax revenue associated with land included in the proposed Service acquisition, $4,647 is the municipal tax loss.
- Because Alternative A would ultimately result in substantial new residential development accompanied by an increased demand for municipal and school services, Service ownership of the Eagle Point Property will likely reduce long-term tax burdens.
- As a result of the Refuge Revenue Sharing program, the loss of municipal tax revenue would be further mitigated.

V. COORDINATION/COOPERATION

This proposal is the result of a partnership planning effort which has involved coordination with VLT, the State of Vermont, the Michael Dunn Trust, the Province of Quebec, and the Vermont Congressional Delegation. VANR (responsible for parks, forests, and wildlife management areas, as well as regulatory matters) is fully supportive of this proposal, and would manage the land and the uses. The Vermont Land Trust is a locally based conservation organization dedicated to protecting important lands and waters, open space, agricultural landscapes and the natural heritage of the state. VLT has conserved more than 500,000 acres in Vermont, including 700 farms totaling over 160,000 acres.

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VII. APPENDICES

APPENDIX A.

Vermont Fish & Wildlife Department
Explanation of Legal Status and Information Ranks

State Rank - Value that best characterizes the relative rarity (abundance) or endangerment of a taxon within Vermont.

Global Rank - Value that best characterizes the relative rarity (abundance) or endangerment of a taxon throughout its range.

1 - Very rare (Critically imperiled): At very high risk of extinction or extirpation due to extreme rarity (often 5 or fewer populations or occurrences), very steep declines, or other factors.

2 - Rare (Imperiled): At high risk of extinction or extirpation due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

3 - Uncommon (Vulnerable): At moderate risk of extinction or extirpation due to restricted range, relatively few populations or occurrences (often 80 or fewer), recent and widespread declines, or other factors.

4 - Common to uncommon (Apparently secure): locally common or widely scattered to uncommon, but not rare; some cause for long-term concern due to declines or other factors; or stable over many decades and not threatened but of restricted distribution or other factors.

5 - Common (Secure): widespread and abundant

State Status - Legal protection under Vermont Endangered Species Law (10 V.S.A. Chap. 123) or informational category
E = Endangered: in immediate danger of becoming extirpated in the state
T = Threatened: with high possibility of becoming endangered in the near future
PDL = Proposed for Delisting
PE = Proposed for Endangered Status (not legally protected)
PT = Proposed for Threatened Status (not legally protected)
SC = Special Concern: status should be watched (not legally protected)

Federal Status - Designation under the federal Endangered Species Act, U.S. Fish & Wildlife Service
LE = Listed Endangered
LT = Listed Threatened
PDL = Proposed for Delisting
C = Candidate for Listing (not legally protected)
SC = Species of Concern (not legally protected)

APPENDIX B.

Compatibility Determinations and Finding of Appropriateness

COMPATIBILITY DETERMINATION
Pre-acquisition

USE: Hiking, Primitive Camping, Wildlife Observation, and Wildlife Photography

REFUGE NAME: Missisquoi National Wildlife Refuge, Eagle Point Unit

DATE ESTABLISHED: February 4, 1943

ESTABLISHING AUTHORITY: Migratory Bird Conservation Act of 1929

PURPOSE(S) FOR WHICH ESTABLISHED:

The Missisquoi National Wildlife Refuge was established "… for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." Migratory Bird Conservation Act 16 U.S.C. 715-715d, 715d, 715f – 715r

MISSION OF THE NATIONAL WILDLIFE REFUGE SYSTEM:

To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

DESCRIPTION OF USE:

(a) What is the use? Is the use a priority public use?

The use is hiking, primitive camping, wildlife observation, and wildlife photography on the Eagle Point Unit of Missisquoi National Wildlife Refuge. The use is a continuation of an existing use (except primitive camping) of lands proposed for addition to the National Wildlife Refuge System. One or two primitive campsites are proposed in support of the Northern Forest Canoe Trail and to facilitate wildlife observation and wildlife photography.

The National Wildlife Refuge System identifies hunting, fishing, wildlife observation, photography, environmental education, and interpretation as the six priority public uses. This use is a priority public use of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

(b) Where would the use be conducted?

The proposed use would be conducted on the Eagle Point Unit of the Missisquoi National Wildlife Refuge in the town of Derby, Orleans County, Vermont. Minimally developed trails on the property have traditionally been used by those interested in hiking, snowshoeing, or Nordic skiing. One trail skirts the edge of Lake Memphremagog from the

main cottage north to the international border. Other trails skirt the edges of some of the fields along the international border. Users park along the roadsides or at the edges of hay fields.

Paddlers enjoy the shoreline of the unit as they follow the Lake Memphremagog portion of the Northern Forest Canoe Trail (NFCT) which in its entirety extends from Maine into New York. Paddlers and hikers would also be able to camp at a primitive camp site or sites to be established on the shoreline of the lake on the refuge, perhaps in the vicinity of the cove north of the main cottage. Camp site(s) will be determined following acquisition, upon evaluation of potential sites, and with input from the professional staff of the Northern Forest Canoe Trail and the Vermont Agency of Natural Resources.

(c) When would the use be conducted?

Foot trail use would occur throughout the year. The paddlers trail use would occur during the open water season of the year, normally from some time in April or early May until early to mid-December with the main period of activity anticipated for June-September.

(d) How would the use be conducted?

Foot trail users would drive to the unit and park at roadside or field edge locations as they have traditionally until improved parking areas are proposed and developed following acquisition. They would embark on the trail of their choice on foot, perhaps utilizing Nordic skis or snowshoes as desired and appropriate for trail conditions. Trail use is self-guided. No permits or associated fees are proposed or contemplated for this use. The primitive campsite(s) would be accessible from the trail.

Paddlers would either park on the roadside or field edge near Hall's Creek and join the Northern Forest Canoe Trail at that point or would be paddling through the area from another point of embarkation on the Northern Forest Canoe Trail. Use of the primitive campsite on the refuge would be monitored and administered by the Agency of Natural Resources.

(e) Why is this use being proposed?

Hiking on the proposed Eagle Point Unit and paddling along the shoreline are established uses. It is known that historical users desire continued access here. Provisions of the Dunn Trust require public recreation, namely, that the property be held "in an open state" and "available for hikers and campers". Continuation of this type of use will honor that stipulation. This use accommodates and facilitates several of the priority public uses of the National Wildlife Refuge System.

AVAILABILITY OF RESOURCES:

It is proposed that this unit of the National Wildlife Refuge System be managed by the Vermont Agency of Natural Resources (VANR), Department of Fish and Wildlife (VDFW) via the terms of a cooperative agreement to be developed between that agency

and the U.S. Fish and Wildlife Service. It is presumed that funds would be made available within the VANR to support this use.

ANTICIPATED IMPACTS OF THE USE:

There may be some general disturbance to wildlife associated with the mere presence of humans on trails throughout this unit. It is anticipated that VDFW personnel will evaluate the potential impact of users on traditional trails and act appropriately to close or reroute trails as necessary to ensure protection and productivity of wildlife species, especially species of conservation concern, and protection of sensitive habitats.

Likewise, the presence of paddlers may have similar impacts to lakeside wildlife. VDFW personnel will likely evaluate and mitigate those impacts as necessary as well.

Small amounts of litter are usually associated with such use but can be handled through self-policing, litter patrol and clean-up, and an effective law enforcement program.

PUBLIC REVIEW AND COMMENT:

This compatibility determination will undergo extensive public review, including a comment period of at least 30 days following the release of a Draft Environmental Assessment on or about June 15, 2010; an open house at Eagle Point on the afternoon of June 29, 2010; and a public meeting in Derby on the evening of June 29, 2010.

DETERMINATION:
THIS USE IS COMPATIBLE __X__
THIS USE IS NOT COMPATIBLE _____ (Check one)

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

1) Minimize or avoid negative impacts to wildlife and habitat by rerouting trails around sensitive areas of wildlife use or closing trail sections or spurs.

2) Provide for visitor safety by installing adequate boundary signs, closed area signs, and hunting area signs. Make visitors aware of hunting season dates and recommend that they wear hunter orange on refuge trails.

3) U.S. Border protection authorities should be informed and consulted about the location of existing trails to ensure that trails are safe for refuge visitors and are not known routes of ingress or egress between the US and Canada. Likewise trail modifications for wildlife or environmental education purposes should be done in a manner that will not attract use for illegal cross-border activity.

JUSTIFICATION:

Wildlife observation is an activity especially suited to a national wildlife refuge. This activity may be restricted to prevent any serious disturbance of wildlife. Providing the

opportunity for people to see some of the wildlife that benefit from the establishment of the refuge will maintain public support for this area and other areas like it.

Photography will occur primarily while observing wildlife, walking or hiking. It will have no additive impact on wildlife habitats.

Allowing these uses on the Eagle Point Unit of the Missisquoi National Wildlife Refuge will not materially interfere with or detract from the mission of the National Wildlife Refuge System or the purpose for which the refuge was established.

Signature: Refuge Manager: _____
(Signature and Date)

Concurrence: Regional Chief: _____
(Signature and Date)

MANDATORY 10 YEAR REEVALUATION DATE: (10 years from date of concurrence above)

COMPATIBILITY DETERMINATION
Pre-acquisition

USE: Hunting

REFUGE NAME: Missisquoi National Wildlife Refuge, Eagle Point Unit

DATE ESTABLISHED: February 4, 1943

ESTABLISHING AUTHORITY: Migratory Bird Conservation Act of 1929

PURPOSE(S) FOR WHICH ESTABLISHED:

The Missisquoi National Wildlife Refuge was established "… for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." Migratory Bird Conservation Act 16 U.S.C. 715-715d, 715d, 715f – 715r

MISSION OF THE NATIONAL WILDLIFE REFUGE SYSTEM:

To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

DESCRIPTION OF USE:

(a) What is the use? Is the use a priority public use?

The use is the hunting of upland game birds, small game, waterfowl, and big game on the Eagle Point Unit of Missisquoi National Wildlife Refuge in accordance with State and Federal regulations. The use is a continuation of an existing use of lands proposed for addition to the National Wildlife Refuge System.

The National Wildlife Refuge System identifies hunting, fishing, wildlife observation and photography, environmental education and interpretation as the six priority public uses. This use is a priority public use of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

(b) Where would the use be conducted?

The proposed use would be conducted on the Eagle Point Unit of the Missisquoi National Wildlife Refuge in the town of Derby, Orleans County, Vermont. Hunting of upland game birds, such as ruffed grouse, and small game occurs on some of the forested portions of the property or along the brushy and forested edges of Hall's Creek and the John's River. Big game hunting occurs throughout the property but is concentrated along edge habitats.

Waterfowl hunting is concentrated for the most part along Hall's Creek, the edge of the John's River and the lakeshore of the property.

(c) When would the use be conducted?

Hunting dates would follow the seasons set annually by the Vermont Fish and Wildlife Board acting upon recommendations from the Fish and Wildlife Department for deer, moose, upland game birds, and small game. Waterfowl and other migratory game bird (woodcock) hunting dates are also set by the Vermont Fish and Wildlife Board acting upon the recommendations of the Fish and Wildlife Department within the annual framework provided by the U.S. Fish and Wildlife Service.

(d) How would the use be conducted?

Upland game bird, woodcock, and small game hunters park on the roadsides or field edges of the property and walk through areas of suitable habitat, often with pointing or flushing dogs, in pursuit of target species which are primarily ruffed grouse and woodcock, gray squirrels, cottontail rabbits, or snowshoe hares.

Big game hunters, hunting primarily for deer and occasionally moose, park on the roadsides and field edges of the property. Archery hunters most often hunt from tree stands or ground blinds set up along habitat transition zones or edges, or along runways between feeding and bedding or cover areas. Rifle, shotgun, and muzzleloader hunters also utilize tree stands and ground blinds as well as stalking or still hunting through forested habitats on the property. Due to the proximity of the property to the international border, deer hunters do hunt back and forth over the border. Presumably they are properly licensed to do so. This property lies within Vermont Wildlife Management Unit (WMU) D1. In 2009, 40 permits were issued by lottery by the Department of Fish and Wildlife for moose hunting in WMUD1. Moose hunting pressure is very light on this unit as it is relatively small and chances for success are greater in other parts of the WMU. The number of moose permits available as well as the number of antlerless deer permits available annually is set by the Vermont Fish and Wildlife Board upon the recommendations of the Vermont Department of Fish and Wildlife.

Waterfowl hunters typically access Hall's Creek by canoe or car top boat from Eagle Point Road or several field access points along the upper part of the creek. The entire creek may be hunted at various times. Waterfowl hunters also hunt in the vicinity of the refuge shoreline along the John's River, occasionally utilizing elaborate cedar blinds similar to the style common to Missisquoi Bay and other Lake Champlain shoreline marshes. Other lakeshore areas of the property may be hunted as well throughout the season and are usually accessed by boat.

Wild turkey hunting has occurred on the property, but the activity will be deferred pending evaluation of the potential for significant disturbance impacts to nesting migratory birds.

Likewise, bear hunting has occurred on the property but will be deferred pending further

evaluation of potential impacts, especially relative to the small size of the parcel and the potential for impacts on the Canadian side of the border.

Wildlife management areas in Vermont are open without additional fee or permit requirements, unless the demand for hunting in a particular WMA exceeds the capacity of the area, usually as related to hunter safety or quality of experience.

Baiting or the use of food-based attractants is illegal in Vermont.

(e) Why is this use being proposed?

Hunting on the proposed Eagle Point Unit is an established use. It is known that historical users desire continued access here. Provisions of the Dunn Trust require public recreation, namely, that the property be held "in an open state" and "available for hikers and campers". Continuation of this type of use will honor that stipulation. This use accommodates several of the priority public uses of the Refuge System.

AVAILABILITY OF RESOURCES:

It is proposed that this unit of the National Wildlife Refuge System be managed by the Vermont Agency of Natural Resources, Department of Fish and Wildlife via the terms of a cooperative agreement to be developed between that agency and the U.S. Fish and Wildlife Service. It is presumed that funds would be made available within the Vermont Fish and Wildlife Department to support this use.

ANTICIPATED IMPACTS OF THE USE:

Migratory birds are managed on a flyway basis and hunting regulations are established in each state based on flyway data. Atlantic Flyway and State of Vermont regulations apply to this property. The total numbers of birds in the flyway is reduced as a result of hunting on this property, but would certainly be within allowable limits as determined by State and Federal agencies. Disturbance to non-target birds and resident wildlife would likely occur from hunting and associated hunter activity, but would be short term and temporary. Waterfowl hunter activity has little impact on other refuge visitors with the exception of those who wish to use those portions of the property being hunted for hiking or wildlife observation and photography. Those users are impacted by the presence and noise associated with waterfowl hunting. Waterfowl hunting in Vermont, however, is a well-established and anticipated annual event and most non-hunting visitors recognize that and adjust their visits accordingly when hunting is in progress.

Big game hunting of resident wildlife species is managed on a statewide basis in accordance with approved big game management plans. The state is segmented into 24 Wildlife Management Units and population management objectives are set by WMU. Deer are plentiful on the Eagle Point unit, which is a very small portion of WMU D1. Hunting on this unit poses no danger of reducing the deer population in the WMU to undesirable levels.

There is potential for conflicts between big game hunters and non-hunters on this unit. Not only may the activities of non-hunters be impacted by hunters, but the activities of hunters may be impacted by non-hunters. However, as stated above, waterfowl hunting, big game hunting, small game hunting, and upland game bird hunting are well-established and anticipated annual events in Vermont and most non-hunting visitors recognize that and adjust their visits accordingly when hunting is in progress. History has shown there to be little conflict between hunters and non-hunters on Vermont Wildlife Management Areas.

Landowners are afforded options of Safety Zones under Vermont law. Most likely this would apply to areas abutting the property. Safety Zones would likely be established around the yet to be established primitive camping area that will probably be located in the vicinity of the lakeshore between the main cottages on Eagle Point and the international border. Safety Zones would also apply to the main cottages and other residences and camps along the lakeshore in the vicinity of the refuge boundary.

PUBLIC REVIEW AND COMMENT:

This compatibility determination will undergo extensive public review, including a comment period of at least 30 days following the release of a Draft Environmental Assessment on or about June 15, 2010; an open house at Eagle Point on the afternoon of June 29, 2010; and a public meeting in Derby on the evening of June 29, 2010.

DETERMINATION:
THIS USE IS COMPATIBLE __X__
THIS USE IS NOT COMPATIBLE _____ (Check one)

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

Spring Turkey hunting and bear hunting will be delayed until the FWS has time to more fully evaluate those uses.

JUSTIFICATION:

The Eagle Point Unit of the Missisquoi National Wildlife Refuge is located in a rural area where regulated hunting conducted by licensed hunters is an established, traditional activity. Hunting is compatible with the primary purpose for which the refuge was established, and provides opportunity for a popular form of wildlife-oriented recreation, a priority public use of the National Wildlife Refuge System.

Allowing hunting on the Eagle Point unit of the Missisquoi National Wildlife Refuge contributes to, and does not materially interfere with or detract from, the mission of the National Wildlife Refuge System and the purposes for which the refuge was established.

Signature: Refuge Manager: _____
(Signature and Date)

Concurrence: Regional Chief: _____
(Signature and Date)

MANDATORY 10 YEAR REEVALUATION DATE: (10 years from date of concurrence above)

COMPATIBILITY DETERMINATION
Pre-acquisition

USE: Access to Lake Memphremagog for Ice Fishing from Hall's Creek Parking Area

REFUGE NAME: Missisquoi National Wildlife Refuge, Eagle Point Unit

DATE ESTABLISHED: February 4, 1943

ESTABLISHING AUTHORITY: Migratory Bird Conservation Act of 1929

PURPOSE(S) FOR WHICH ESTABLISHED:

The Missisquoi National Wildlife Refuge was established "… for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." Migratory Bird Conservation Act 16 U.S.C. 715-715d, 715d, 715f – 715r

MISSION OF THE NATIONAL WILDLIFE REFUGE SYSTEM:

To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

DESCRIPTION OF USE:

(a) What is the use? Is the use a priority public use?

The use is access to Lake Memphremagog for ice fishing via a seasonal parking area immediately adjacent to Eagle Point Road near Hall's Creek on the proposed Eagle Point Unit of the Missisquoi National Wildlife Refuge. The activity is an existing use of lands proposed for addition to the National Wildlife Refuge System.

The National Wildlife Refuge System identifies hunting, fishing, wildlife observation, photography, environmental education, and interpretation as the six priority public uses. This use, access for ice fishing, is not a priority public use of the National Wildlife Refuge System under the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

(b) Where would the use be conducted?

The proposed use would be conducted on the Eagle Point Unit of the Missisquoi National Wildlife Refuge in the town of Derby, Orleans County, Vermont. A small, relatively unimproved seasonal parking area is located immediately adjacent to the eastern edge of Eagle Point Road, just north of Hall's Creek. The parking area is simply a flat spot in the

field north of and above the creek. The parking area is likely cleared of snow by a user or users with a truck-mounted snowplow. This allows a small number of vehicles to get off Eagle Point Road with their vehicles and any trailers they may be pulling. A few users are also be able to park along Eagle Point Road at either end of the bridge over Hall's Creek although space is limited and may be dependent on how far off the road the snowplow pushes the snow. Users park in the field or along the road, then access the lake on the west side of Eagle Point Road at this location.

(c) When would the use be conducted?

The use could occur during the winter whenever the surface of Lake Memphremagog is frozen solid enough for safe access onto the ice for ice fishing.

(d) How would the use be conducted?

Users may park in this parking lot, then via snowmobile or on foot, cross Eagle Point Road, and access Lake Memphremagog which borders the road on the west. They also may or may not drag a fishing shanty onto the ice, but their purpose for access is ice fishing. As an alternative, some users drive their motor vehicle of the west edge of Eagle Point Road directly onto the surface of the lake from this location.

No permits or fees are proposed or contemplated for this use.

(e) Why is this use being proposed?

Access to Lake Memphremagog for ice fishing via the proposed Eagle Point Unit is an established, existing use. It is known that historical users desire continued access here.

AVAILABILITY OF RESOURCES:

It is proposed that this unit of the National Wildlife Refuge System be managed by the Vermont Agency of Natural Resources, Department of Fish and Wildlife via the terms of a cooperative agreement to be developed between that agency and the U.S. Fish and Wildlife Service. There would be no significant administrative costs associated with allowing the continuation of this use.

Eagle Point Road is a town road and is maintained and plowed by the town within their annual operating budget.

ANTICIPATED IMPACTS OF THE USE:

There may be some general disturbance to wildlife and other refuge visitors associated with the mere presence of man and his machines while crossing refuge land to access Lake Memphremagog. Traditionally, users park within fifty meters of the lakeshore and traverse a short portion of parking area and roadway to access the lake, an area that is not sensitive for wildlife disturbance or habitat damage during the period of use.

Temporary snowmobile crossing signs, and "stop" signs for snowmobilers, may be required to facilitate safe crossing of Eagle Point Road, a public roadway.

Small amounts of litter are usually associated with such a use but can be handled through self-policing, litter patrol and clean-up, and an effective law enforcement program.

At times, enough vehicles attempt to park on the roadside, on both sides of the road, so as to create a traffic nuisance. Occasionally, vehicles get stuck as they slip of the edge of the road

PUBLIC REVIEW AND COMMENT:

This compatibility determination will undergo extensive public review, including a comment period of at least 30 days following the release of a Draft Environmental Assessment on or about June 15, 2010; an open house at Eagle Point on the afternoon of June 29, 2010; and a public meeting in Derby on the evening of June 29, 2010.

DETERMINATION:

THIS USE IS COMPATIBLE __X__
THIS USE IS NOT COMPATIBLE _____ (Check one)

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

Users must comply with State regulations governing the operation of snowmobiles.

Users may not utilize ATV's from this location.

Users must restrict their activity to the immediate vicinity of the parking area and the crossing.

Users must park so that a clear, safe, and unobstructed travel lane is left in the roadway.

JUSTIFICATION:

Overall, this use will not diminish the purposes for which the Refuge was established, will not pose significant adverse effects on trust species or other Refuge resources, will not interfere with public use of the Refuge, nor cause an undue administrative burden. Further, it facilitates an off-refuge wildlife-oriented public use considered a high priority by the Service.

Signature: Refuge Manager: _____
(Signature and Date)

Concurrence: Regional Chief: _____
(Signature and Date)

MANDATORY 10 YEAR REEVALUATION DATE: (10 years from date of concurrence above)

Finding of Appropriateness of a Refuge Use

Refuge Name: __Missisquoi National Wildlife Refuge – Eagle Point Unit_____

Use: _____Access to Lake Memphremagog for Fishing from Hall's Creek Parking Area_ _____

This exhibit is not required for wildlife-dependent recreational uses, forms of take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision criteria:	YES	NO
(a) Do we have jurisdiction over the use?	X	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	X	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?	X	
(d) Is the use consistent with public safety?	X	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?	X	
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	X	
(g) Is the use manageable within available budget and staff?	X	
(h) Will this be manageable in the future within existing resources?	X	
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?	X	
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D. for description), compatible, wildlife-dependent recreation into the future?	X	

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes _X_ No ___

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate_____ Appropriate___X__

Refuge Manager: _____ Date: _05/27/2010_____

If found to be Not Appropriate, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found Not Appropriate outside the CCP process, the refuge supervisor must sign concurrence.

If found to be Appropriate, the refuge supervisor must sign concurrence.

Refuge Supervisor: _____ Date: _____

A compatibility determination is required before the use may be allowed.

Justification:

This is an existing use for access to Lake Memphremagog from a small, unimproved, seasonal lake-side parking area near the mouth of Hall's Creek. Most users park, unload their equipment, and proceed across the parking area and Eagle Point Road directly onto the shoreline of Lake Memphremagog. Their activities then occur off-refuge until they leave the lake. Their activities are wildlife-oriented and promote public appreciation for the continued conservation and protection of wildlife and habitat.

Other users access the lake by motor vehicle directly from Eagle Point Road at this location when the ice is safe for such use.

Users traditionally access the lake for ice fishing here by motor vehicle; on foot; or by ATV or snowmobile. All of these uses may continue with the exception of ATV's.

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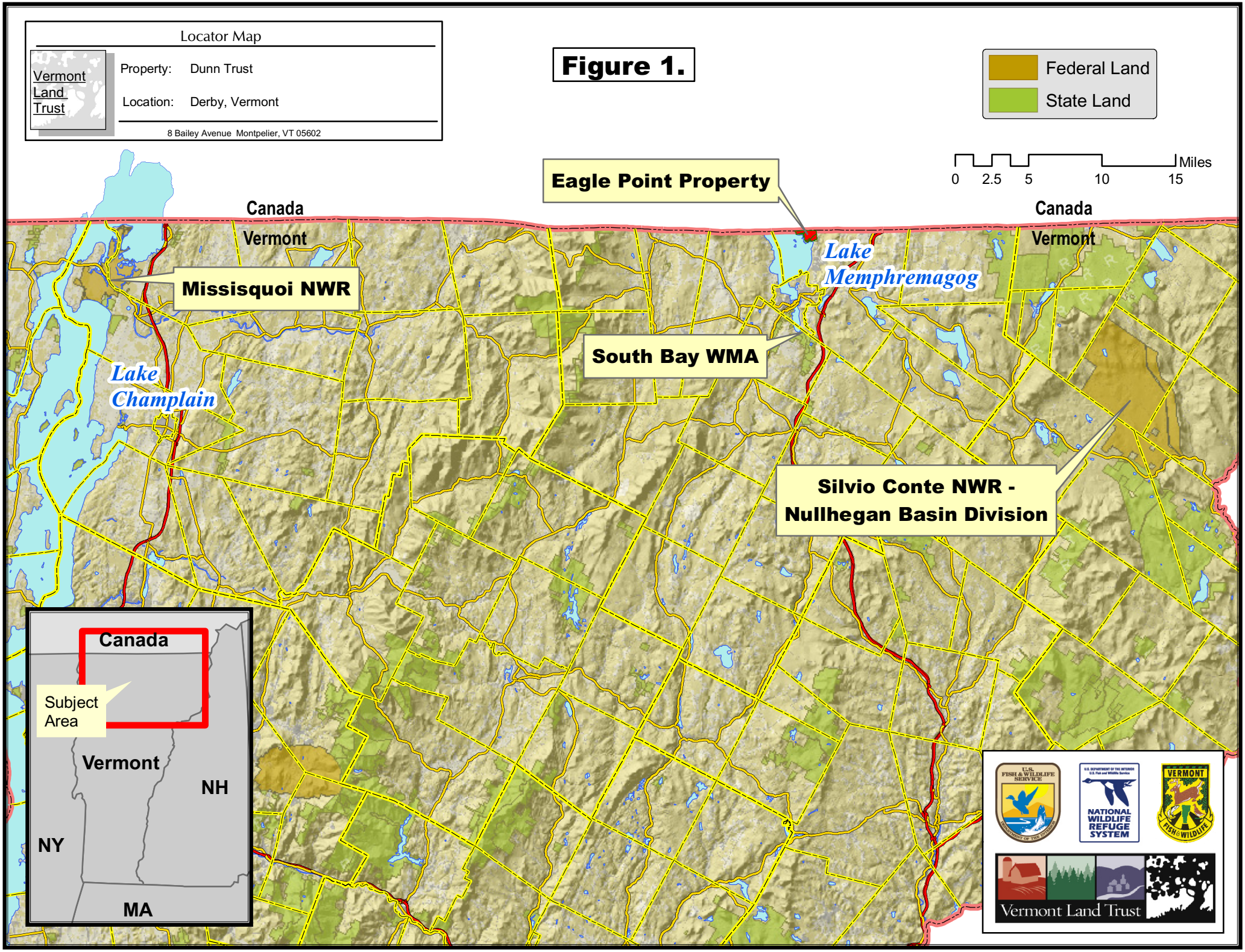

Locator Map
Vermont Land Trust
Property: Dunn Trust
Location: Derby, Vermont
8 Bailey Avenue Montpelier, VT 05602
Figure 1.
Federal Land
State Land
Miles
0 2.5 5 10 15
Eagle Point Property
Canada
Vermont
Canada
Vermont
Lake Memphremagog
Missisquoi NWR
South Bay WMA
Lake Champlain
Silvio Conte NWR - Nullhegan Basin Division
Canada
Subject Area
Vermont
NH
NY
MA
U.S. FISH & WILDLIFE SERVICE
NATIONAL WILDLIFE REFUGE SYSTEM
VERMONT FISH & WILDLIFE
Vermont Land Trust

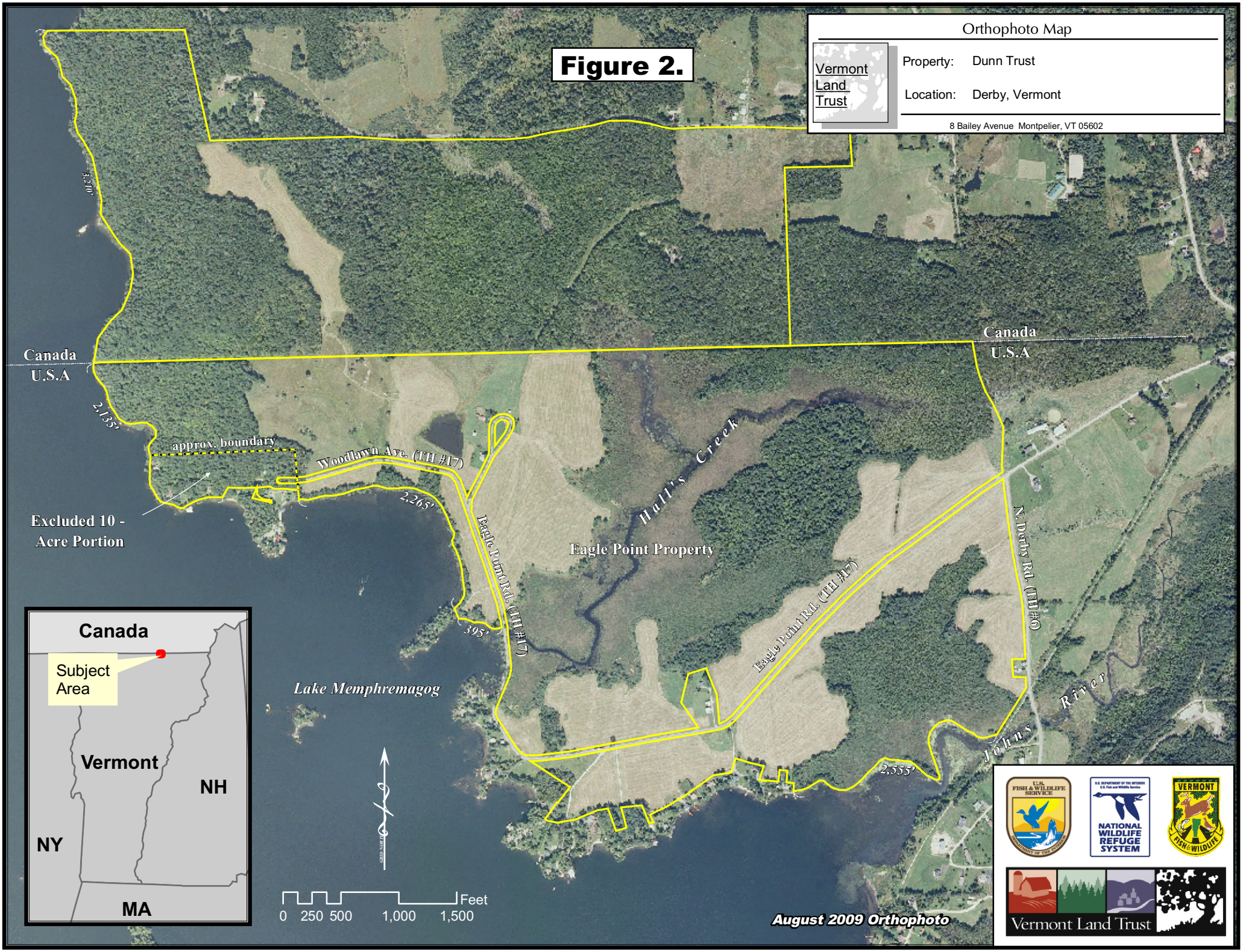
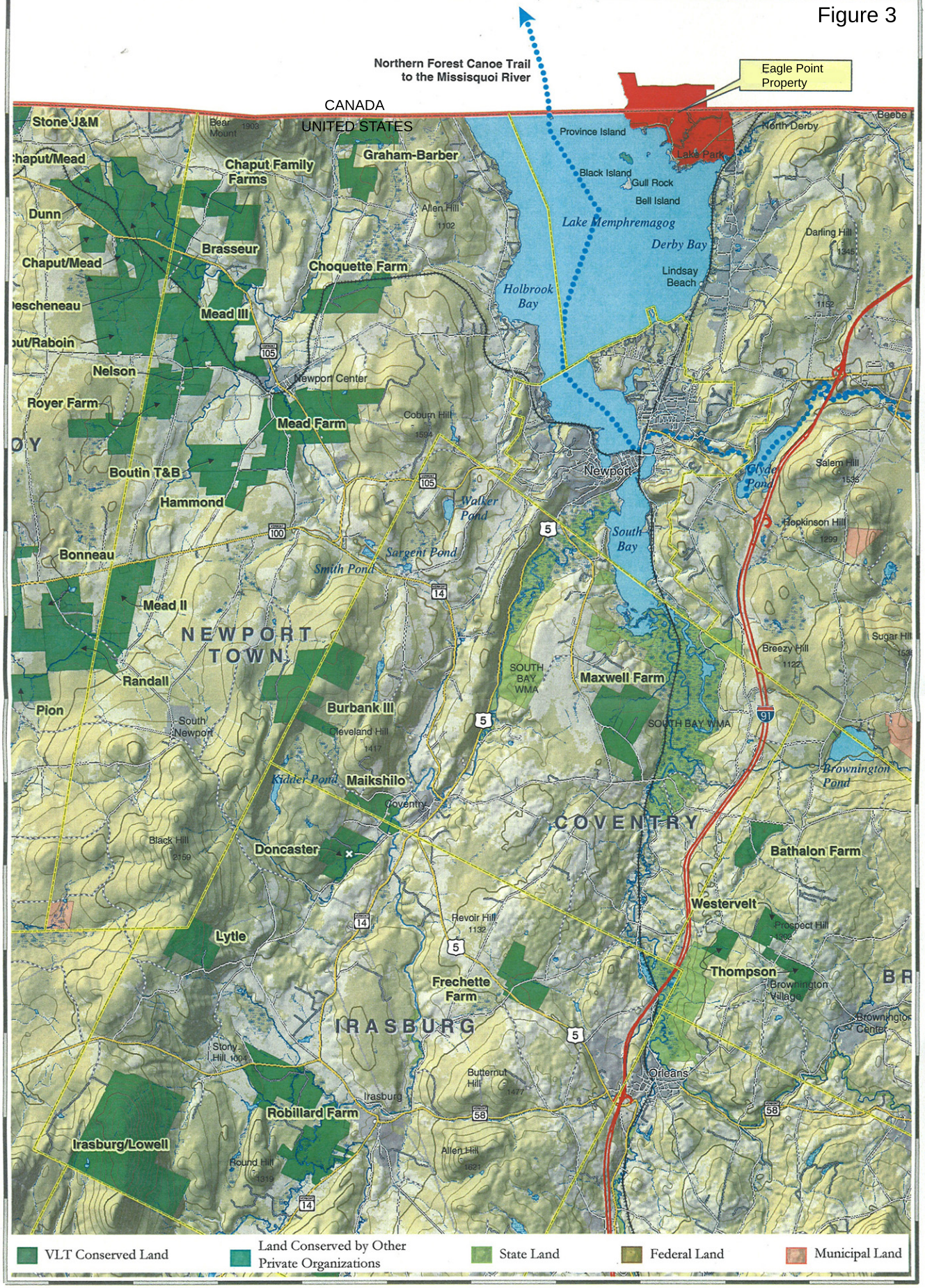


Figure 2.
Orthophoto Map
Vermont Land Trust
Property: Dunn Trust
Location: Derby, Vermont
8 Bailey Avenue Montpelier, VT 05602
Canada
U.S.A
Canada
U.S.A
3,210'
2,135'
approx. boundary
Excluded 10 - Acre Portion
Woodlawn Ave. (TH #17)
2,265'
Eagle Point Rd. (TH #17)
395'
Hall's Creek
Eagle Point Property
Eagle Point Rd. (TH #17)
N. Derby Rd. (TH #6)
Johns River
2,555'
Lake Memphremagog
Canada
Subject Area
Vermont
NH
NY
MA
0 250 500 1,000 1,500 Feet
August 2009 Orthophoto
Vermont Land Trust

Figure 3



Conserved Lands in the Newport Area

Vermont Land Trust

Conserving Land for the Future of Vermont