FINAL ENVIRONMENTAL ASSESSMENT

FURBEARER MANAGEMENT

at the

Nulhegan Basin Division
Silvio O. Conte National Fish and Wildlife Refuge
Essex County, Vermont

October 6, 2000

Prepared by:

U.S. Department of the Interior
Fish and Wildlife Service
Silvio O. Conte National Fish and Wildlife Refuge
Nulhegan Basin Division

Address Comments to:

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FINDING OF NO SIGNIFICANT IMPACT

for the

NULHEGAN BASIN DIVISION
of the
SILVIO O. CONTE NATIONAL FISH AND WILDLIFE REFUGE

FURBEARER MANAGEMENT PLAN

Based on a review and evaluation of the information contained in the attached Environmental Assessment and supporting documentation, I have determined that the proposal to establish regulated trapping as a component of an overall furbearer management program on the Nulhegan Basin Division of the Silvio O. Conte National Fish and Wildlife Refuge, Essex County, Vermont under Alternative 2, the Proposed Action, does not constitute a major federal action and will not have a significant effect on the human environment within the meaning of Section 102 (2) (C) of the National Environmental Policy Act of 1969. Accordingly an environmental impact statement will not be prepared.

This determination is based on the following:

1. Regulated trapping as outlined in the Refuge Furbearer Management Plan will result in no significant environmental degradation.

2. Threatened and endangered species (no federally-listed species currently are known to exist on the Refuge) would be afforded reasonable protection through State of Vermont, Federal, and Refuge-specific regulations and enforcement.

Supporting References:

Environmental Assessment
Section 7 Evaluation
Proposed Furbearer Management Plan

10-16-00
Date

Regional Director

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I. Purpose

The purpose of this environmental assessment (EA) is to discuss and evaluate the environmental impacts of establishing an annual trapping program as a component of an integrated approach to furbearer management at the Nulhegan Basin Division of the Silvio O. Conte National Fish and Wildlife Refuge, Essex County, Vermont.

II. Proposal

The U.S. Fish and Wildlife Service (Service) proposes to formalize an annual trapping program in support of an overall furbearer management strategy at the Nulhegan Basin Division (Refuge) of the Silvio O. Conte National Fish and Wildlife Refuge (Conte Refuge). The Service proposes to permit trapping of furbearers on the Refuge through issuance of Special Use Permits. Trapping would take place in accordance with State of Vermont trapping regulations, National Wildlife Refuge System regulations contained in Title 50 of the Code of Federal Regulations, and conditions prescribed within Special Use Permits authorizing trapping on refuge lands within the Nulhegan Basin Division. This program will apply only to lands owned in fee by the Service in Vermont's Nulhegan Basin.

III. Need for Action

Trapping has been an annual furbearer management practice authorized by previous owners on lands that now comprise the Refuge. The Service stated in the EA entitled "U.S. Fish and Wildlife Service Participation in a Partnership to Protect 'the Champion Lands' in Essex County, Vermont" (U.S. Fish and Wildlife Service 1999) that a furbearer management plan for the Refuge would be completed prior to the commencement of the Vermont 2000 trapping seasons. The Conservation Fund, a private conservation organization that primarily facilitated the transfer of the former Champion Lands, held trapping rights for 1999 so that trapping could continue uninterrupted while the Service developed a furbearer management plan. Through this EA, the Service intends to assess the environmental impact of regulated trapping as a tool for furbearer management on the Refuge in order to provide a decision on trapping prior to the 2000 Vermont trapping seasons.

IV. Background

National Wildlife Refuge System

The Nulhegan Basin Division of the Silvio O. Conte National Fish and Wildlife Refuge is part of the National Wildlife Refuge System (System), the world's largest and most diverse collection of lands set aside specifically for wildlife. The System includes more than 520 refuges and encompasses more than 93 million acres of fish and wildlife habitat. The System is administered by the U.S. Fish and Wildlife Service, an agency within the Department of the Interior. The Service's primary responsibilities are for migratory birds, endangered species, freshwater and anadromous fish, and certain marine mammals.

The National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57) established wildlife conservation as the fundamental mission of the System. The Refuge Improvement Act specifically states: "*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.*" The Refuge Improvement Act requires maintenance of the Refuge System's biological integrity, diversity, and environmental health; and monitoring of the status and trends of refuge fish, wildlife, and plants. All

uses of a national wildlife refuge are subjected to a determination of compatibility. A compatible use is one which, in the sound professional judgement of the Refuge Manager, will not materially interfere with or detract from fulfillment of the Refuge System mission, or the purposes for which the refuge was established. Furthermore, when making refuge management decisions, the Refuge Improvement Act requires effective coordination with other Federal agencies, state fish and wildlife or conservation agencies, and refuge neighbors.

Location of the Nulhegan Basin Division

The Refuge is located in Essex County in the Northeast Kingdom area of Vermont. The Refuge is part of the 133,000-acre parcel formerly owned by Champion International Company and known as "the Champion Lands." That parcel now consists of the Refuge (26,000 acres north of Vermont Route 105), the 22,500-acre West Mountain Wildlife Management Area (WMA) owned by the Vermont Agency of Natural Resources, and the 84,500 acres of Essex Timber Company lands. The Refuge lies in the crater-like Nulhegan Basin within the watersheds of the Nulhegan and Connecticut Rivers. The Refuge is located approximately 7 miles east of Island Pond and 4 miles west of the village of Bloomfield, Vermont (and the Connecticut River) and encompasses approximately 17,863 acres in the town of Lewis; 3,928 acres in Bloomfield; 2,650 acres in Ferdinand; and 1,546 acres in Brunswick. (Figure 1). The 2,000-acre Wenlock WMA and the West Mountain WMA adjoin the Refuge on its south boundary; the 4,800 McConnell Pond tract of The Conservation Fund borders the Refuge to the southwest. The remainder of the refuge is surrounded by Essex Timber Company lands. The Refuge lies within Wildlife Management Unit "E" and Watershed Management Unit "16" as designated by the Vermont Fish and Wildlife Department.

History and Purpose of the Refuge

The Silvio O. Conte National Fish and Wildlife Refuge was authorized by the Conte Refuge Act (Public Law 102-212) in 1991. To date the Conte has operated as set forth in the Selected Alternative (Alternative D) of the Final Environmental Impact Statement (U.S. Fish and Wildlife Service 1995). The purposes for the Conte Refuge, as stated in the Conte Refuge Act are:

(1) to conserve, protect and enhance the Connecticut River populations of Atlantic salmon, American shad, river herring, shortnose sturgeon, bald eagles, peregrine falcons, osprey, black ducks, and other native species of plants, fish, and wildlife;

(2) to conserve, protect and enhance the natural diversity and abundance of plant, fish and wildlife species and the ecosystem upon which these species depend within the refuge;

(3) to protect species listed as endangered or threatened, or identified as candidates for listing, pursuant to the Endangered Species Act of 1973 as amended (16 U.S. 1531 et seq.);

(4) to restore and maintain the chemical, physical and biological integrity of wetland and other waters within the refuge;

(5) to fulfill the international treaty obligations of the United States relating to fish and wildlife and wetlands; and

(6) to provide opportunities for scientific research, environmental education, and fish and wildlife oriented recreation and access to the extent compatible with the other purposes stated in this section.

An EA was prepared to discuss and analyze the impacts of fee-simple acquisition of 26,000 acres in the Nulhegan Basin of Essex County, Vermont (U. S. Fish and Wildlife Service 1999). The Nulhegan Basin Division of the Conte Refuge was established on July 21, 1999 to provide long-term protection for important migratory bird habitat, habitat for rare species and plant communities, important fisheries habitat, and valuable wetlands. The partnership to protect 133,000 acres of "the Champion Lands" included the Vermont Agency of Natural Resources, The Conservation Fund, Vermont Land Trust, the Vermont Housing and Conservation Board, The Nature Conservancy, Essex Timber Company, the Freeman Foundation, and the Richard King Mellon Foundation. Additionally, support was gained from local governments, numerous conservation and sportsmen's organizations, local landowners, and citizens. Approximately 16,000 acres of the Refuge were purchased with monies authorized through the Migratory Bird Conservation Act of 1929 and the remaining lands (approximately 10,000 acres) were purchased through authority of the Land and Water Conservation Fund Act of 1965. The Refuge has been operating as set forth by Alternative 2 (Proposed Action) of the Final EA (U. S. Fish and Wildlife Service 1999).

V. Scoping

A press release announcing the intent of the Service to prepare a furbearer management plan, calling for agency and public input, and giving notice of a public meeting was delivered to The New Hampshire News and Sentinel, The Northern Beacon, The Coos County Democrat, The Caledonian Record, The Barton Chronicle, The Newport Daily Express, and the Vermont Outdoors on May 10, 2000. Letters describing the process and soliciting input were mailed to persons that held permits from the Conservation Fund to trap on the Refuge in 1999, and to conservation organizations and sportsmen's groups that had expressed interest in refuge planning. The Champion Lands Steering Committee and Citizen's Advisory Council also were notified of the scoping effort. Furthermore, input was requested from professional wildlife biologists that possessed pertinent knowledge and experience from various state and federal wildlife management agencies in the Northeast, and from Vermont Fish and Wildlife Department game wardens within the Northeastern District. A public open house was held in the Brighton Town Hall in Island Pond on June 1, 2000 from 7 to 9 p.m. Seventeen people attended. A questionnaire was distributed that served as an outline for the meeting and that also could be completed and submitted for comment (Appendix I). Additional copies were available for meeting participants to distribute to other interested parties. Written input was received by mail, email, and fax from 29 parties by the June 17 deadline. Issues identified through scoping are summarized in Appendix I.

VI. Alternatives

Four alternatives were identified during the planning process:

A. Alternative 1. **(No Action/Status Quo) Establish an annual trapping program in accordance with Vermont state regulations** [see Appendix III], **except that no trapping of fishers would be permitted.**

B. Alternative 2. **(Proposed Action) – Establish an annual trapping program in accordance with Vermont state regulations** [see Appendix III] **as part of an integrated furbearer management program.**

C. Alternative 3. **Establish a trapping program directed toward pest animals that are killed and discarded.**

D. Alternative 4. **No trapping program.**

These alternatives reflect various management scenarios that were developed based on: issues identified through scoping, existing State and Federal regulations, Service policies and guidance, purposes established for the Conte Refuge, existing wildlife populations and habitats, principles of wildlife ecology and management, and administrative, fiscal, and safety considerations. In the Service's opinion, these four alternatives represent a reasonable range as required by the National Environmental Policy Act of 1969.

VII. Affected Environment

The affected environment of northeastern Vermont, with specific reference to the Nulhegan Basin (Basin), is discussed in detail in Chapter 3 of the Refuge EA (U.S. Fish and Wildlife Service 1999).

A. Physical Resources

Climate
The average temperature of the area is approximately 42 degrees Farenheit, with high temperatures in the 90 degree range and low temperatures around 30 degrees below zero. The average frost free period is 100 days. Annual snowfall measures between 80 and 100 inches. Snow depths average 25" and duration of continuous snow cover averages more than 100 days (Alexander and Horton 1986).

Geology
The Basin was formed when a pool of magma formed within existing metamorphic rock. The magma cooled into a relatively soft granitic rock called quartz monzonite. Once erosion wore away the cap of metamorphic rock, the softer monzonite eroded more rapidly than the surrounding metamorphic rock. This resulted in a relatively flat circular interior area, roughly 10 miles in diameter, surrounded by hills. Sand and gravel were later deposited in the bottom of the Basin by melting glaciers (Thompson 1989). Elevations on the Refuge range from approximately 1,000 feet to 2,800 feet above sea level.

Soils
No detailed soil survey has been performed for this area. However, soils on upland sites are generally sandy loam spodosols, with a thick organic soil horizon of low pH. Some kame and outwash deposits exist that are very sandy/gravelly. Wetland sites have peaty soils (Loso et al. 1996).

Lakes and streams
Three of the four major tributaries of the Nulhegan River -- the North, Yellow, and Black Branches -- run south through the refuge. A network of smaller streams feed these branches. The main course of the Nulhegan River runs adjacent to the south boundary of the Refuge. The 68-acre Lewis Pond is located in the Northwest portion of the Refuge.

Refuge infrastructure
The land that now comprises the Refuge has been in private ownership as commercially-managed forest for over a century. Approximately 40 miles of gravel roads and 17 miles of woods roads occur on the Refuge. The majority of these roads become snowmobile trails as part of the Vermont Association of Snow Travelers (VAST) statewide trail network after December 15. The VAST trails on the refuge are maintained by the Brighton Snowmobile Club and the Canaan Border Riders. Six wooden bridges traverse refuge streams for vehicular travel. A 450kV high voltage direct current transmission line, constructed in 1986 on a 200-foot wide corridor owned by Vermont Electric Transmission Company, Inc., runs north-south through the entire length of the Refuge on the east side. The St. Lawrence and

Atlantic Railroad runs through or adjacent to the southeastern boundary of the Refuge. Fifty-seven privately-owned cabins exist on Refuge land on lots leased from the Service. Seven private inholdings totaling approximately 495 acres exist within the refuge boundary. About 15 year-round residences and numerous seasonal cabins are located within one mile of the refuge border, primarily along Vermont Route 105.

B. Biological Resources

Vegetation

Located just a few miles south of the Canadian border, the Basin's vegetation most closely resembles that of the northern Appalachian Mountains, interspersed with elements of the boreal forest to the north. The Refuge is predominantly forested with natural openings small and most frequently associated with wetlands (e.g., bogs and beaver flowages), although windthrow events have temporarily created larger openings. The most conspicuous openings in the landscape are a result of clearcuts ranging in approximate size from 10 to more than 100 acres. Shrublands, primarily dominated by speckled alder (*Alnus incana*), are restricted to poor drained areas, small seepage zones, and wide alluvial stretches of the Nulhegan River and its principal tributaries.

Northern hardwood forest, dominated by sugar and red maple (*Acer saccharum, A. rubrum*), beech (*Fagus grandifolia*), and yellow and paper birch (*Betula alleghaniensis, B. papyrifera*), cloak the mountains of the Basin rim and the larger hills of the Basin interior. Notably absent in the Basin, are any oaks – another indicator of the more northern character of the forest. Spruce-fir forest covers large areas of the Basin bottom. Red and black spruce (*Picea rubens, P. marianna*) and balsam fir (*Abies balsamea*) are the principal trees in these forests, which cover both wetlands on shallow to deep peat soil deposits, and adjacent kame and till soils of the shallow valleys, flats, and low hills. Another northern forest conifer, white spruce (*P. glauca*), occurs sparingly in flood plains and certain swamps. In upland situations, successional stages of these spruce-fir forests can be dominated by quaking and bigtooth aspen (*Populus tremuloides, P. grandidentata*), red maple and paper birch. Tamarack (*Larix decidua*), Northern white cedar (*Thuja occidentalis*) and black ash (*Fraxinus nigra*) occur commonly in the Basin, although restricted to wetlands more heavily influenced by groundwater.

Rare plants of Vermont found in the Refuge include white-fringed orchid (*Habenaria blephariglottis*), bog sedge (*Carex exilis*), shining rose (*Rosa nitida*), drooping bluegrass (*Poa saltuensis*), ligonberry (*Vaccinium vitis-idaea*), and the State-endangered auricled twayblade (*Listera auriculata*). Most of these plants are associated with bogs and other peatlands common in the Refuge, and are more common to the north of the Basin. Peat mosses of the genus *Sphagnum* are a predominant groundcover in the numerous swamps and bogs of the Refuge. No plant species are currently known to occur on the Refuge that are federally-listed as endangered or threatened, or are proposed for federal listing.

Wildlife

The refuge provides habitat for a wide diversity of vertebrate and invertebrate fauna. A partial list of vertebrate species, by common and scientific names, that occur on the Refuge or in the immediate vicinity is presented in Appendix II. No federally-listed wildlife species are currently known to occur on the Refuge. State-listed endangered species found on the Refuge are spruce grouse, common loon, and osprey. In fact, Vermont's only viable breeding population of spruce grouse is mainly located on the Refuge. The Refuge provides nesting and migratory habitat for numerous migratory bird species including woodcock, waterfowl, marsh and wading birds, shorebirds, raptors, and neotropical migrants. The Basin contains the largest deer wintering area in the state, about 15,000 acres, the majority of which

is located on the Refuge. Some of the best habitats for moose and bear in Vermont exist in Essex County, including Refuge lands.

C. Social/Cultural Resources

Population

Vermont is the most rural state in the nation according to the 1990 Census (Glass et al. 1995). Vermont's Essex County had an estimated 6,311 residents in 1996 (Vermont Department of Health 1997). This represents 1.1% of Vermont's population occupying 7% of the state's land area (Vermont Department of Employment and Training 1998). The Connecticut River watershed portion of the county, in which the Refuge is located, had the second lowest population density of all the counties in the watershed (U.S. Fish and Wildlife Service 1995). The population of Essex County declined nearly 3% between 1995 and 1996, and is projected to continue decreasing. The county continues to show declines in the infant and 20-34 year-old age groups and growth in the 65 and over age group (Vermont Department of Employment and Training 1998). The Connecticut River watershed of Vermont and New Hampshire has experienced low population growth compared to the remainder of those states, probably related to lack of job opportunities (Adams 1995).

Communities

Population and land area affected by Service ownership are listed in Table 1; population estimates are based on 1996 figures (Vermont Department of Health 1997). Lewis and Ferdinand are unincorporated towns; a Board of Governors acts as the government for these towns. Bloomfield and Brunswick have Boards of Selectmen that serve as the governing bodies.

Table 1. Towns in Essex County that contain Refuge land

Town	Estimated 1996 Population	Acres	Acres of Refuge Land	% of Town Land Area Affected
Bloomfield	269	25,740	3,928	15.3
Brunswick	107	16,110	1,546	9.6
Ferdinand	23	33,989	2,650	7.8
Lewis	0.00	25,394	17,863	70.3
Total	**399**	**101,233**	**25,987**	**25.7**

Economy

For Essex County alone, employment is reported as follows: Manufacturing 57.2%, Government 20.2%, Trade 9.1%, Services 5%, Contract Construction 3.1%, Transportation and Utilities 2.9%, Agriculture, Forestry and Fishing 1.4% (22 jobs); and Finance, Insurance and Real Estate 1.1% (Phillips 1999). This reporting only accounts for those covered by unemployment insurance, so does not show most agricultural production firms or the self-employed. The services sector showed a 30% growth in Essex

County between 1990 and 1996 (Vermont Department of Employment and Training 1998).

Average annual wage in Essex County in 1996 was $23,208, the fourth highest in the state, due to the high concentration of manufacturing jobs there. Ethan Allen, a furniture manufacturer, has plants in Canaan and Brighton. However, Essex County has the lowest per capita personal income of the Connecticut River watershed counties (U.S. Fish and Wildlife Service 1995) and in the state (Vermont Department of Employment and Training 1998), a result of the low number of wage-earners relative to total county population. The unemployment rate in Essex County in 1996 was 8.4% (Vermont Department of Employment and Training 1998). Trapping of furbearers and sale of their pelts is used by some residents as a sole or supplemental source of income during the fall and winter months. This is especially true of retired citizens and those with seasonal jobs that are generally unemployed during the winter. Sixteen individuals requested permits from The Conservation Fund to trap on the Refuge in 1999.

Recreational Use/Natural Resource Utilization

The Refuge is a popular area for hunting, fishing, wildlife observation, and wildlife photography. Under the previous ownership, no limits were placed on the number of recreationists that used these lands; however, visitation counts are not available. Much of the recreational use of the Refuge, particularly hunting, is based out of leased cabins, but day use is frequent on a year-round basis, particularly for fishing, wildlife observation and photography. Major wildlife species of interest to the public for observation or harvest on the Refuge include deer, bear, moose, snowshoe hare, ruffed grouse, furbearers, and brook trout. Snowmobiling is currently allowed on the Refuge in support of priority public use activities, and for the conduct of management programs such as trapping and inventory work. Snowmobiling is confined to designated VAST trails, which are generally open December 15 to March 15. To prevent excessive damage to Refuge roads, public travel by motor vehicle is prohibited during the spring mud season. During this period, which generally is from mid-March to late-May, roads on the Refuge, West Mountain WMA, and Essex Timber are gated.

Historical/Cultural

The area has had an interesting history of Native American and other uses. It is possible that archaeological sites exist. Historic resources associated with the area's logging and railroad history, such as logging and railroad camp remnants, dams, and railroad beds exist on the Refuge and surrounding area. Although most management activities do not pose a threat to such artifacts, the Service does take precautions to avoid impacting them. Prior to taking actions that would disturb soil, the Service conducts surveys for historical and cultural resources. If any are discovered, actions are modified to avoid or minimize impacts to such resources.

Many natural resource utilization activities that occur in the Nulhegan Basin, including the refuge lands, are a part of the rural community fabric, and embrace cultural and inter-generational traditions as they relate to life in a working landscape. Use of the natural resources of this area provide income, shelter, food, clothing and other commodities for local families.

VIII. Environmental Consequences

A. Alternative 1. (No Action/Status Quo) Establish and annual trapping program in accordance with Vermont state regulations, except that no trapping of fishers would be permitted.

With implementation of this alternative, trapping on the Refuge would continue in the same manner as practiced under Champion's management, and as it did in 1999-2000 when the land was in Service ownership, but trappers operated under permit from The Conservation Fund. The effects would be much the same as those described under Alternative 2, below, but in contrast, the benefits of population management, monitoring capabilities, renewable resource utilization, and other associated outcomes described in Alternative 2, below, would not be realized for fishers. A truly comprehensive approach to furbearer management on the Refuge would not be achieved with implementation of this alternative. Champion prohibited fisher trapping in an attempt to maximize fisher numbers with the hope that high fisher numbers would control porcupine populations (T. Decker, VFWD District Wildlife Biologist, personal communication), which in turn, would limit commercial losses resulting from porcupine damage to trees. However, the Service does not have the same objective of forest habitat management for maximum commercial timber production, and therefore has no reason to justify continuation of this policy. Although fishers indeed prey on porcupines, whether long-term suppression of porcupine populations directly results from fisher predation alone is unknown. Fisher numbers have surged in Vermont (highest levels since the early 1980's) and in northern New England in recent years; they are common on the Refuge and surrounding lands; and VFWD recommends and supports regulated trapping of fishers on the Refuge (K. Royar, VFWD Furbearer Team Leader, personal communication). Fisher trapping is now permitted on the remainder of the former Champion parcel, i.e., the West Mountain WMA and Essex Timber Company lands during the two-week season (see Appendix III). A prohibition on trapping of fishers on the Refuge currently serves no definitive ecological or management purpose. Moreover, this alternative does not provide for integration of habitat management, or environmental education programs within the regime of overall furbearer management. The positive socioeconomic benefits of fisher trapping in the economically depressed local community also would not be realized.

B. Alternative 2. (Proposed Action) – Establish an annual trapping program in accordance with Vermont state regulations as part of an integrated furbearer management program.

With implementation of this alternative, an annual trapping program would be established on the Refuge as part of an integrated and proactive management approach to maintain furbearer activity and populations at levels consistent with Refuge and surrounding land use, and with the accomplishment of the Conte Refuge's purposes. This is the Service's preferred alternative and proposed action. Such a furbearer management program also would support the management and perpetuation of furbearer populations for their ecological, scientific, educational, economic, food, clothing, and cultural roles and values, not only on the Refuge, but also on adjacent properties. The Service recognizes regulated trapping as an effective tool of wildlife population management on National Wildlife Refuges. (Refuge Manual Chapter 7, Section 15). "Regulated Trapping" as defined by Vermont Fish and Wildlife Department (VFWD) is the harvest of wildlife under regulations that stipulate setting of seasons, lawful harvest time frames, open and closed zones, methods of capture, harvest and possession limits, and reporting or tagging of harvested species (Vermont Fish and Wildlife Department 2000). Trapping on the Refuge would be: (1) regulated by the statutes and regulations governing trapping in Vermont as set forth by the VFWD (Vermont Statutes Annotated, Part 4, Title 10, Volume 11) (see Appendix III), (2) conducted under refuge-specific conditions of a Special Use Permit (which would include reporting of trapper effort and harvest) (Appendix III), and (3) subject to compatibility review.

The most viable furbearer management program would ideally encompass integration of regulated trapping and hunting of furbearer species, habitat management, population monitoring and harvest analyses, research on furbearer ecology, and public education for achievement of an overall goal of

conserving furbearer populations (and other fish and wildlife populations), their ecological roles, and their habitats in the public interest. Furthermore, such a fully integrated program is attained not only by the planned, coordinated, and complementary use of various adaptive management programs within the Refuge and surrounding lands, but also in concert with the statewide furbearer management strategy carefully designed and implemented by VFWD. The species classified and regulated as furbearers in Vermont by the VFWD are listed in Appendix III.

Hunting alone is relatively ineffective in managing aquatic and many terrestrial furbearer species due to their secretive habits; trapping is the single-most viable management alternative (Payne 1980). Regulated trapping is a valid, ecologically-sound, versatile, safe, and cost-effective technique of managing furbearer populations (National Wildlife Federation 1979, Boggess et al. 1990, Organ et al. 1996, Southwick Associates 1999, Maryland Department of Natural Resources 2000). Regulated trapping has been documented to provide a variety of ecological benefits that are directly applicable to the Refuge including: prevention and alleviation of habitat degradation, facilitation of habitat and wildlife restoration, reduction of predation on key species of management concern, protection of rare and endangered species, dampening of disease transmission and severity of disease outbreaks among wildlife and between wildlife and humans, and the conservation and enhancement of biological and genetic diversity (Boggess et al. 1990, Organ et al. 1996, Vermont Fish and Wildlife Department 1998).

Habitat loss, not trapper or hunter harvest, is the greatest single threat to furbearer populations (Payne 1980). The VFWD annually monitors the population trends of the state's furbearing species and has designed and implemented a statewide furbearer management program that conserves furbearer populations and maintains a harvestable surplus of furbearers. Specifically, the level of projected trapping effort and harvest on the Refuge, in the opinion of the VFWD, will not result in detriment to Refuge furbearer populations or to nontarget species (K. Royar, VFWD Furbearer Team Leader, personal communication). In fact, regulated trapping on the Refuge is capable of producing demonstrable benefits in terms of wildlife and habitat management. The continuation of an annual regulated harvest of furbearers on the Refuge will contribute to VFWD's management information retrieval and analysis system, and allow continuation of long-term data sets for Wildlife Management Unit "E" and Watershed Management Unit "16." The implementation of this Alternative would support goals for resource conservation, human health and safety, and recreation set forth in the Strategic Plan of the VFWD (Vermont Fish and Wildlife Department 2000).

At the current level of knowledge on the Refuge, the state regulations governing regulated trapping, including species of legal harvest, provide an acceptable foundation on which to build an overall integrated furbearer management program. Such regulations, combined with furbearer management programs in effect for the state, conditions on the Refuge, and the provisions of the Preferred Alternative, are currently sufficient to ensure compatibility of an annual program of regulated trapping and to contribute to the achievement of the purposes of the Conte Refuge and the mission of the National Wildlife Refuge System. Furbearer ecology, harvest levels, habitat conditions, population status and trends, and Refuge ecological needs and programs will be evaluated on a regular basis in consultation with VFWD to determine the proper course for an overall furbearer management program on the refuge in an adaptive management fashion. If future conditions or circumstances arise on the Refuge involving the status of any habitats or wildlife species, including furbearers, and associated effects of trapping that would necessitate deviations from conducting trapping according to Vermont regulations, such special considerations will be developed collaboratively with VFWD, and resultant changes will be reflected in Annual Furbearer Management Programs and, if necessary, incorporated in the conditions of annual Refuge Special Use Permits.

No federally-listed or proposed plant or wildlife species currently are known to occur on the Refuge; therefore, implementation of this alternative would not affect any listed species. However, if any listed species should be discovered on the Refuge, the compatibility of trapping would need to be reevaluated in terms of positive or negative impacts to such species and their habitats, and a Section 7 consultation would be performed. Although the Canada lynx was classified as a state-endangered species in Vermont in 1987, and federally-listed as Threatened in 2000, it is the opinion of the Service and VFWD that lynx are not currently extant in Vermont, nor in southern Quebec Province in the vicinity of the international border about 6.5 miles to the north of the Refuge lands (M. Amaral, USFWS, Senior Endangered Species Specialist, and K. Royar, VFWD Furbearer Team Leader, personal communication); therefore, trapping on the Refuge would not affect lynx. Only four verifiable records of lynx occurrence in Vermont are available, the most recent of which occurred in 1965; none were from the Northeast Kingdom area (Ruggiéro et al. 2000). If lynx are discovered within a 10-mile radius of the Refuge, then the appropriateness and compatibility of trapping as conducted under this alternative will need to be reevaluated (M. Amaral, USFWS, personal communication). However, it is the current position of the Service that the low numbers of lynx in the contiguous United States are not a result of regulated trapping (U.S. Fish and Wildlife Service 2000).

The state-endangered auricled twayblade would not be jeopardized under this alternative, and its streamside habitat likely could be conserved by preventing or alleviating inundation resulting from unchecked beaver activity. Populations of state-endangered spruce grouse, common loon, or osprey would not be negatively impacted on the Refuge; in fact, conditions for spruce grouse could possibly be enhanced through direct or secondary benefits of regulated trapping (e.g., habitat protection, predation management) under this alternative. The trapping of marten (*Martes americana*) is not permitted by VFWD; however, no marten are known to exist on the Refuge, and their existence in Vermont is uncertain (K. Royar, VFWD, personal communication). If occurrence of marten were to be documented on the Refuge, appropriate provisions to minimize their potential capture would be included in the conditions of annual Refuge Special Use Permits, in consultation with VFWD.

Perhaps more than any other wildlife species, beavers occupy a paradoxical role on the Refuge due to their ecological importance, but also with regard to their potential for conflict with management operations. Beavers create or enhance wetland habitat that benefit a wide variety of aquatic, terrestrial, and avian forms of wildlife, particularly within the first few years (perhaps 1-7 years) of beaver inundation. Beavers introduce habitat diversity within the forest ecosystem beneficial to the overall biological diversity of the Refuge. In particular, beavers can create and enhance habitat for waterfowl nesting (both ground and cavity nesting), brood-rearing, foraging (for vegetation and invertebrates), resting, and roosting. Marsh and wading birds, and shorebirds, amphibians, and reptiles also are benefitted by beaver pond habitat. Beaver-impounded wetlands can provide increased opportunities for a variety of priority public uses, including wildlife observation, photography, hunting, fishing, and environmental education. Beaver occupancy rates, acres of beaver-impounded wetlands, and colonization of new areas of the Refuge will be monitored and assessed in regular air and ground surveys conducted cooperatively by VFWD, Refuge staff, and trappers. A carefully planned approach to beaver and beaver pond management in which water levels are periodically manipulated and beaver occupation is systematically interrupted could achieve increased habitat benefits for a wide-range of trust resource species as well as other species of Federal and State management interest. Such a program would be investigated and evaluated under the Preferred Alternative. Refinement/flexibility of trapping strategies, regulation of harvest, monitoring of population status, and habitat management practices will be components of an adaptive management regime directed toward retaining the beneficial aspects of beaver in the landscape, yet minimizing the detrimental effects of habitat degradation and negative species

interactions (Organ et al. 1998, Jensen et al. 1999).

From a beaver damage management perspective, regulated trapping would be a vital tool for the protection of wildlife habitat, infrastructure, and private property (e.g., privately-owned camps) on the Refuge, as well as for adjacent timber resources, dwellings, and other infrastructure on adjacent private lands and inholdings. Beavers can negatively impact Refuge and surrounding habitats and infrastructure through damming, flooding, burrowing, and tree girdling and cutting activities. The impounding activities of beavers can potentially degrade stream conditions for brook trout through increased siltation, which fouls spawning substrate; decreased dissolved oxygen levels resulting from increased water temperature through slower stream velocity, and reduced shade over stream habitat as a result of beaver cuttings; and blockage of upstream passage (Vermont Fish and Wildlife Department 1993). Senescent beaver ponds actually offer decreased habitat benefits for waterfowl, fish, and numerous other types of flora and fauna. Refuge wetlands, and the rare plants they host, are sensitive to impoundment. Conversion of upland habitats to impounded habitat or seasonally-flooded wetlands to permanent impoundments can decrease or eliminate the suitability of these habitats for a wide assortment of vertebrate and invertebrate species. Like other Refuge furbearing species, beaver populations must be managed at levels consistent with Refuge habitat, wildlife, and public use objectives. Regulated trapping is the most desirable and effective method to accomplish an acceptable balance (Payne 1980, Jensen et al. 1999). Unchecked furbearer populations can exhibit marked fluctuations in numbers often with severe consequences for habitat, wildlife, and humans. By way of illustration, in the absence of regulated trapping, the beaver population in Massachusetts increased from 24,000 in 1996 to more than 52,000 in 1999 (S. Langlois, Furbearer Project Leader, Massachusetts Division of Fisheries and Wildlife, personal communication).

In contrast to Alternative 1 (No Action/Status Quo), implementation of the Preferred Alternative would allow the trapping of fishers. This action would promote a truly comprehensive approach to furbearer population management and harvest trend analysis on a Refuge and statewide basis, and the full realization of the associated benefits. It would enable uniform monitoring of fisher populations and harvest trend analysis for WMU E. As explained in Alternative 1, above, there is no apparent reason, on an ecological, management, or compatibility basis, to prohibit fisher trapping on the Refuge. Fisher populations continue to increase in Vermont (and are currently believed to be at their highest levels since the early 1980's), are common on the Refuge and surrounding lands, and VFWD recommends and supports trapping of the harvestable surplus of fishers that occur on the Refuge (K. Royar, VFWD, personal communication). The level of porcupine-induced tree mortality on the Refuge can be monitored to assess potential positive impacts (e.g., creation of snags that could provide opportunities for wildlife in terms of structures for nesting, denning, foraging, or refugia) or negative impacts (e.g., wide-scale tree mortality) to wildlife habitat.

Implementation of a regulated trapping program on the Refuge affords a potential mechanism to collect survey and monitoring information, or contribute to research on furbearer (and other wildlife) occurrence, activity, movement, population status, and ecology. The ecological and monitoring benefits mentioned above are management services that will be accomplished through minimal or even no cost to the government compared to costs associated with using salaried staff or contractual arrangements with private individuals or organizations, other agencies, or refuge staff. By maintaining a trained and experienced cadre of trappers, the Service can utilize their skills and local knowledge to perform or assist with valuable management or research functions such as described above (Mason 1990). As evidence, a trapper was contracted by Vermont Department of Forest and Parks to supply 124 fishers from Maine that were released into Vermont between 1959 and 1967 to bolster the population of this furbearer (K. Royar,

VFWD, personal communication). Trappers that participate in the Refuge program could provide assistance with the implementation of structured management objectives, such as alleviation or reduction of wildlife damage conflicts and negative species interactions. Limited budgets and staff can thus be used for other refuge programs for the benefit of wildlife, habitat, and the public. Refuge trappers have a vested interest in proper habitat and wildlife conservation, and protection of the ecological integrity of the refuge (Kellert 1981). Accordingly, they are valuable assets to the refuge manager in terms of providing on-site reports concerning the fundamental status of habitat, wildlife, and refuge conditions.

By administering the program under an annual Special Use Permit (Appendix III), the refuge manager has a ready list of contacts to whom requests for specific management needs can be directed for dealing with problem areas, targeting offending individuals for removal, or for assistance with wildlife and habitat surveys or research. Additionally, a harvest report (see Appendix III) will be required from each trapper following the close of trapping season that will include data about trapping effort, time span of trapping by species, number of target and non-target species harvested, refuge areas trapped, and remarks on observations of wildlife and their sign, and other noteworthy ecological information. These data can provide a basis for catch-per-unit effort and population trend analyses. Such data have not been previously collected specifically for the former Champion lands and implementation of the Preferred Alternative will provide the first opportunity for the Refuge and the VFWD to do so. These data could provide supplemental information for potential mark-recapture or other population monitoring analyses. Trappers also will continue to file the annual trapper survey required by VFWD that will contribute to the long-term data collection and analysis for WMU "E" and Watershed Management Unit "16." Collection and evaluation of data sets as described above will be essential to operation of an adaptive management system for furbearers on the Refuge.

Current needs for Refuge management, expected level of trapper participation, and conduct of public use programs do not presently warrant delineation of trapping units, time/space zoning of trapping and public use, designation of no-trapping zones, limiting trapper numbers, or charging administrative fees. However, should circumstances warrant such actions in the future, the Refuge will act, in consultation with VFWD, through an adaptive management approach to adjust furbearer management and other programs to prevent or minimize potential conflicts, to enhance ecological integrity, or to better manage the program and its effects. Likewise, trappers could be directed to certain areas as needed to concentrate their efforts in order to accomplish Refuge-specific population or habitat management or ecological needs that could arise. Such changes would be reflected in the conditions of Special Use Permits for trapping on the Refuge (see Appendix III), which would be issued on an annual basis. Interested individuals would apply in writing to the Refuge Manager after 1 September to receive a permit.

Furbearers are a renewable natural resource with cultural and economic values (Kellert 1981, Organ et al. 1996, Vermont Fish and Wildlife Department 1998). Several human dimensions studies have documented trapper profiles, cultural aspects of trapping, and the socioeconomic role of trapping in the United States (Boddicker 1981, Todd and Boggess 1987, Brown et al. 1995), in the Northeast (Muth et al. 1996, Daigle et al. 1998), and also specifically in Vermont (Mason 1990, Glass et al. 1991). Regulated trapping can provide an organic source of food and clothing with minimal impacts to other natural resources. (Vermont Fish and Wildlife Department 1998). A regulated trapping program on the Refuge also could support and promote the fostering of appreciation of wildlife/nature, wildlife observation, environmental education, a greater understanding of ecological relationships, stewardship of natural resources, and inter-generational passage of the methodologies of renewable resource use. Trapping is an activity in which family members and friends often participate together and share joint experiences that broaden the sense of appreciation for natural resources and ecological awareness, and indeed even a sense

of community (Glass et al. 1991, Daigle et al. 1998). In this economically depressed area of the state, trapping provides a supplemental, and in some circumstances, primary source of income for some families, and even enables bartering for goods and services in some communities (Mason 1990, Glass et al. 1991, Muth et al. 1996). The VFWD supports the multidimensional role and the integral function of regulated trapping in the working landscape of Vermont (Vermont Fish and Wildlife Department 1998).

A regulated trapping program as described under this alternative would be compatible with the purposes for which the Conte Refuge was established, with the purpose and mission of the National Wildlife Refuge System, is consistent with the intent of the National Wildlife Refuge System Improvement Act of 1997, and is considered to be in the public interest. A program of regulated trapping on the Refuge as described under this alternative is not expected to conflict with public use on the Refuge. With respect to possible negative reaction to trapping on the Refuge by some members of the visiting public, conflicts are not expected because trapping is generally an inconspicuous activity, traps are usually hidden from view, typically are not set near roads, and are checked in the early morning. These characteristics serve to limit the potential for encounters between traps or captured animals and those engaged in other public use activities.

The VFWD is involved in an intensive national program designed to systematically improve the welfare of animals in trapping through trap testing and development of Best Management Practices (BMPs) for Trapping Furbearers in the United States, under the guidance of the Fur Resources Technical Subcommittee of the International Association of Fish and Wildlife Agencies (International Association of Fish and Wildlife Agencies 1998). Substantial work has already been accomplished with a variety of traps with many of the furbearing species also present on the Refuge, including raccoons, coyotes, foxes, bobcat, river otter, muskrat, and beaver (Trusso 1999). In addition, VFWD has established a Trap Standards Committee whose goal is to improve trapping in Vermont through a critical examination of animal welfare issues related to trap standards and through the exchange of information and ideas (Decker 1999, Vermont Fish and Wildlife Department 1999). In addition, VFWD and the Vermont Department of Environmental Conservation are jointly developing "Best Management Practices for Resolving Human-Beaver Conflicts in Vermont" (Agency Draft, April 12, 2000). As would be expected, in practicing an integrated and comprehensive approach to furbearer management, the Refuge would cooperate with and contribute to the development and implementation of the BMPs and participate as warranted in support of the Trap Standards Committee cited above. This concept of cooperation is in full keeping of Refuge's role as an outdoor laboratory for research and scientific education. In addition, the Refuge will promote the role that trappers could play in training or mentoring new trappers, and in environmental education, not only for the public, but for the Refuge staff and other professionals as well.

C. Alternative 3. Establish a trapping program directed toward pest animals that are killed and discarded.

Although implementation of this alternative would provide some benefit for protection of refuge wildlife habitats, infrastructure, and for indirect support of public use programs, in contrast to Alternative 2, it is a reactive, rather than proactive, approach to managing wildlife-related conflicts, and fails to incorporate an integrated approach to furbearer management. Furthermore, achievement of conservation goals for furbearers or other wildlife could be thwarted. Under this type of reactive, after-the-fact approach to furbearer management, action is taken once a problem is defined and damage has already resulted. The contributions of trappers in providing additional support for monitoring and research programs would not be possible under this alternative. In fact, without the systematic observation and field analysis of Refuge habitat and wildlife conditions that can be provided by trappers through required reporting under

provisions of the Special Use Permit and otherwise, the warning signs of habitat degradation or negative trends in wildlife populations may well go unnoticed until severe problems are exhibited. In particular, habitat degradation resulting from unchecked beaver populations could increase under this alternative. Habitat for rare plants in bogs and stream banks could be jeopardized by such a program. A lack of regulated trapping could produce unfavorable conditions (e.g., adverse habitat alteration, increased potential for predation) for state-endangered spruce grouse, and perhaps loon. The resultant damage may be costly to remedy, or potentially irreversible. Additionally, these corrective actions must be financed by expenditure of Refuge maintenance and operational funds through private contract, refuge staff salaries, or reimbursement of salary and expenses for corrective actions taken by other government agencies, e.g., U.S. Department of Agriculture-Wildlife Services. Costs of programs for beaver removal and damage management (or to correct negative impacts caused by other furbearers) would be more expensive than administration of a regulated trapping program as described in Alternative 2, above (Jensen 1999). Such expenditure could be avoided by proper planning and implementation of the integrated management approach as described in Alternative 2, above.

Typically, resolution of problems such as trapping nuisance beaver to alleviate damage caused by flooding of roads, trapping beaver and muskrat for damages resulting from burrowing into elevated road beds and alongside culverts or bridges, or trapping beaver for destroying terrestrial habitat through girdling and flooding, occurs during the late spring or in summer when captured animals cannot be pelted or sold and therefore they are discarded, and any benefits of food, clothing, or income are precluded. Such activity is a waste of a natural resource and provides no socioeconomic or cultural benefit. The indirect benefits that regulated trapping could potentially provide in support of priority public uses (e.g, increased wildlife for observation, photography, hunting, fishing, environmental education) could be less under this alternative than compared to Alternative 2. A furbearer management program that relies on such remedial measures often offers only limited opportunities for participation. There exists a general lack of public support in Vermont for wildlife harvest programs that are primarily based on the destruction of animals without subsequent utilization (Glass et al. 1994).

Implementation of this alternative also would demonstrate a lack of resource stewardship and poor planning by failing to capitalize on a proactive, integrated program that manages furbearers as assets instead of liabilities (Siemer and Decker 1991, Organ et al.1996). The ecological aspects of a regulated trapping program in terms of regulation of population extremes, incidence and severity of disease, and predation levels are not realized with implementation of this alternative. Additionally, opportunities would be lost for environmental education involving ecologically-sound resource management, elucidating the role of the trapper and regulated trapping in support of refuge programs, and promotion of socioeconomic and cultural benefits to the local community through use of a renewable natural resource. Diminished support for the Refuge and Service programs from adjacent landowners, cooperating agencies, and the public could be expected due to the lack of implementation of sound principles of wildlife management, and programs that would allow socioeconomic and cultural benefit. Such negative perceptions and loss of credibility with supporters could result in an erosion of community trust and could negatively affect implementation of Refuge management or acquisition programs in the Nulhegan Basin or elsewhere in the Northern Forest.

D. Alternative 4. No trapping program.

If this alternative were implemented, the ecological, socio-economic, or other public benefits of an integrated approach to furbearer management that incorporates regulated trapping, such as described under Alternative 2, above, would not be achieved on the Refuge. The negative results discussed under

Alternative 3, above, also would occur, but without even the benefit of any corrective (albeit reactive) actions. Therefore, the cumulative effects of these negative outcomes would be more severely manifested, and others could also develop under this alternative. The Refuge would fail to thoroughly fulfill trust resource management and would fail to fully support public use responsibilities by not permitting a management action that potentially could provide benefits for priority public uses. Additionally, any beneficial potential population, disease vector, conflict, or biological diversity management outcomes described under Alternative 2 would be forfeited. With specific reference to beaver/human conflicts, visitor safety and access problems would arise from failed infrastructure, damage to adjacent landowner properties could result from spread of on-refuge flooding problems, and private lands would be subject to colonization from increased numbers of dispersing individuals emigrating from saturated territories and degraded habitats. Should any wildlife disease outbreaks in the vicinity of the Refuge occur, regardless of cause, the Service likely would be implicated by the public as negligent in not adequately managing the wildlife population within its realm of influence. Transmission of diseases from wildlife to humans or domestic animals in the proximity of the refuge (e.g., giardia, rabies, distemper) could be perceived by the public as a result of mismanagement on the part of the Service.

Both biological and cultural carrying capacity (tolerance of wildlife/human conflicts) would be exceeded as a result of this alternative. Alternative management/control methods, such as exclusion, barriers, shooting, oral vaccines, or toxicants, would be more costly and less effective, if at all, than a regulated trapping program (Organ et al. 1996, Southwick Associates 1999). The cumulative effect of the circumstances described above presumably would lead to an erosion of support from the public, the Vermont Agency of Natural Resources and other resource agencies, the professional wildlife community, and from conservation organizations. Inaction and ineffective management could result in legal action taken against the Refuge to recover financial losses from property damage or compensate from losses due to bodily injury resulting from negligence in properly providing or maintaining safe facilities.

Aside from the implications of the negative socioeconomic and cultural consequences, the Refuge would not benefit from the experienced and trained observations of trappers regularly and systematically viewing and assessing habitat conditions, and wildlife spoor, occurrence, and conflicts, and reporting such observations to Refuge staff for consideration in management planning and decision-making. Refuge trappers would not be available to assist with management, monitoring, research, or environmental education programs. The cultural and socioeconomic benefits that regulated trapping provides in this rural, working landscape would be diminished if this alternative were implemented, and the Refuge and the Service would not be viewed as a good neighbor or as a credible partner in the cooperative conservation of natural resources for the benefit of wildlife, habitat, and people. The Service would not fulfill the expectations for land use and wildlife and habitat management that is held by the local communities, legislators, agencies, and organizations that supported Service acquisition of 26,000 acres in the heart of the most prized lands in the Northeast Kingdom. Such negative perceptions and loss of credibility with supporters would create an unsuitable community climate for implementation of Refuge management or acquisition programs in the Nulhegan Basin or elsewhere in the Northern Forest.

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X. Consultation and Coordination with Others

In addition to input provided by the public that was analyzed to identify issues and develop management alternatives, the following natural resource professionals were consulted with and contributed information used in the development of this draft EA.

Michael Amaral, USFWS, Senior Endangered Species Specialist

Bill Archambault, USFWS, Regional NEPA Coordinator

Annemarie Averill, USFWS, SOCNFWR Wildlife Biologist

David Beall, USFWS, Regional Refuges and Wildlife Division Assistant

John Organ, USFWS, Regional Federal Aid Wildlife Program Chief

Bruce Plowman, USDA/APHIS/Wildlife Services, Wildlife Biologist, VT office

William Crenshaw, VFWD, Waterfowl Team Leader

Scott Darling, VFWD, Director of Wildlife Division

Thomas Decker, VFWD, District Wildlife Biologist and Fur Resources Technical Workgroup, International Association of Fish and Wildlife Agencies; Northeast Furbearer Resources Technical Committee, Northeast Wildlife Administrators Association

Eric Palmer, VFWD, District Fisheries Biologist

Kimberly Royar, VFWD, Furbearer Team Leader and Northeast Furbearer Resources Technical Committee, Northeast Wildlife Administrators Association

Richard Langdon, Aquatic Biologist, Vermont Department of Environmental Conservation

Craig McLaughlin, Maine Department Inland Fisheries and Wildlife, Bear/lynx/wolf Project Leader

Will Staats, New Hampshire Fish and Game Department, Regional Wildlife Biologist

Sue Langlois, Massachusetts Division of Fisheries and Wildlife, Furbearer Project Leader, and Northeast Furbearer Resources Technical Committee, Northeast Wildlife Administrators Association

Thomas Hardisky, Pennsylvania Game Commission, Furbearer Section Leader, and Northeast Furbearer Resources Technical Committee, Northeast Wildlife Administrators Association

Robert Colona, Maryland DNR, Furbearer Project Leader, and Northeast Furbearer Resources Technical Committee, Northeast Wildlife Administrators Association, and Conservation Director, National Trappers Association

James Andrews, Middlebury College Department of Biology, Research Associate

Brett Engstrom, Former Champion Lands Planning Project Ecologist

William Kilpatrick, University of Vermont Department of Biology, Professor

Dan Lambert, Vermont Institute of Natural Science, Conservation Biologist

Scot Williamson, Wildlife Management Institute, Northeast Representative

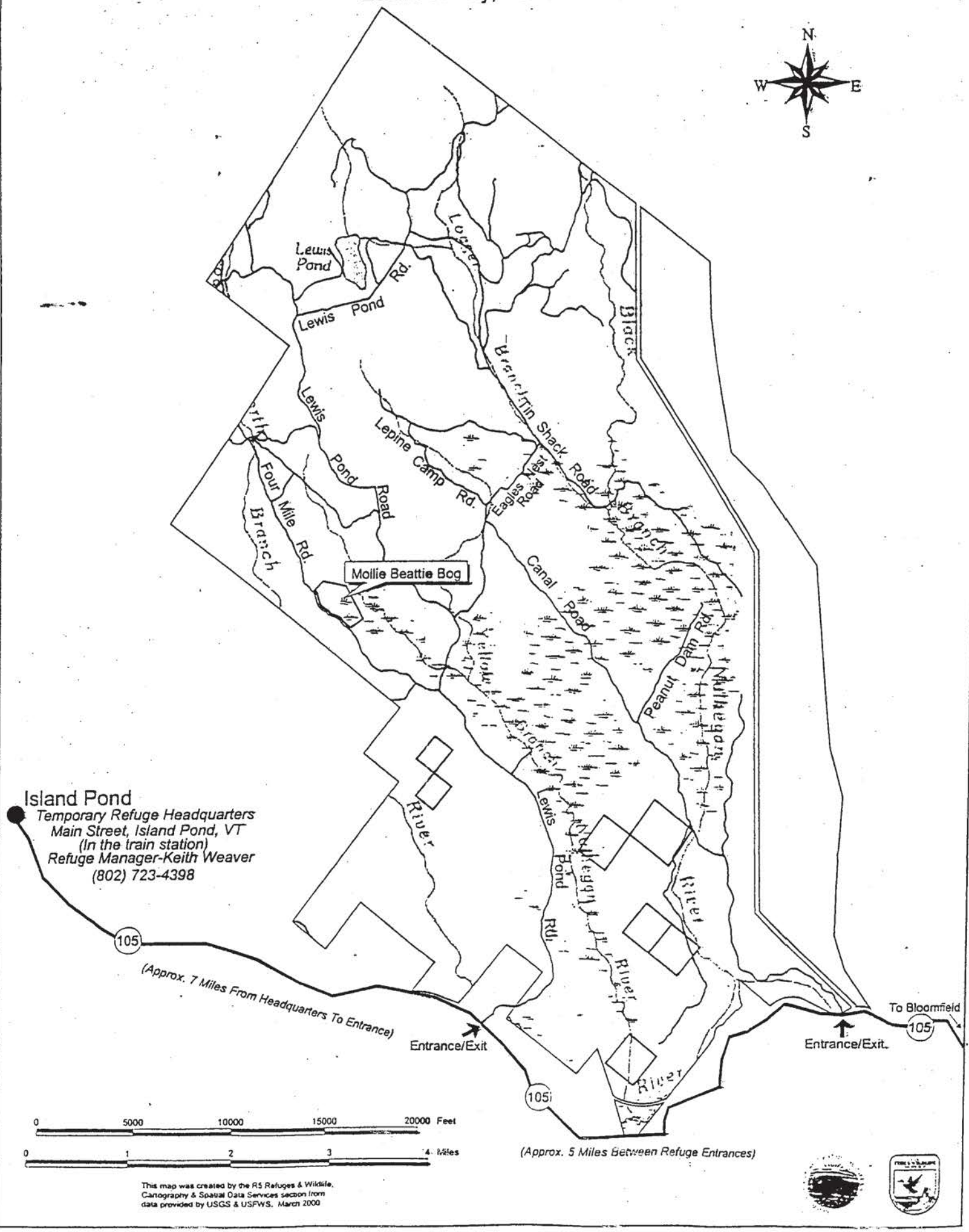
XI. Comment on Draft EA:

A press release announcing a 30-day review and comment period for the draft EA, and giving notice of a public meeting was delivered to The New Hampshire News and Sentinel, The Northern Beacon, The Coos County Democrat, The Caledonian Record, The Barton Chronicle, and The Newport Daily Express on August 24, 2000. Copies of the draft EA were placed in the Brighton Town Hall, the Island Pond Public Library, and the St. Johnsbury, Springfield, and Waterbury offices of the Vermont Fish and Wildlife Department, for public inspection. Copies of the draft EA and notice of the comment period were mailed to persons that held permits from the Conservation Fund to trap on the Refuge in 1999, and to organizations that had expressed interest in refuge planning. The Champion Lands Steering Committee and Citizen's Advisory Council also were notified of the comment period. Furthermore, comment was requested from professional wildlife biologists that possessed pertinent knowledge and experience from various state and federal wildlife management agencies in the Northeast, and from Vermont Fish and Wildlife Department game wardens within the Northeastern District. A public open house was held on September 14, 2000 from 7:00-9:00 p.m. in the Brighton Town Hall in Island Pond, Vermont to provide information on the draft EA and receive comment. Twelve people attended the meeting. Comments at the meeting primarily were centered on discussion of and support for the Preferred Alternative, and numerous questions were raised about process and procedural issues of Special Use Permit Issuance, Refuge Trapper Harvest Report, Furbearer Management Plan approval, revision, and modification; Special Use Permit Conditions; compatibility; law enforcement; consistency of trapping regulations between and state and federal lands; access; impact of discovery of endangered species on Refuge trapping program; and potential conflicts and resolution between trapping and other refuge programs.

A comment period was conducted from August 30 to September 29, 2000 to allow the public, local governments, and other agencies to provide comment on the draft EA. Twenty-five comments were received via U.S. Mail, fax, and E-mail from private citizens, federal and state agencies, and private organizations. All of these comments were in support of the preferred alternative. Most respondents generally expressed support for the Preferred Alternative as the best means of managing furbearers and benefitting the refuge and the public. However, one commentor supported the Preferred Alternative only if the EA were modified to clarify that furbearer management on the Refuge would be steered "almost solely" by ecological needs, not recreational or political desires; however, if the furbearer management would be conducted strictly in accordance with current Vermont trapping regulations over the long-term, then none of the alternatives would be acceptable. The concerns of this commentor were already addressed in the draft EA, but additional clarification was incorporated in the Final EA to more explicitly state how the Proposed Action actually indeed met the concerns expressed. Another commentor believed it was important to note that Vermont was the only state that granted, by virtue of the State Constitution, the right of its inhabitants "...to hunt or fowl on the lands they own or other lands not enclosed." This same commentor stated that trapping is an "ecologically sound method for sustainable public use of a renewable resource" that "supports and enhances" the established purposes of the Refuge; as requested, this principle was reflected in the justification statement of the compatibility statement for establishing an annual regulated trapping program. It was also noted by this commentor that the beaver season had been changed by VFWD (opened 15 days earlier and closed 14 days later) since the writing of the draft EA; the Final EA was modified to reflect this change. One voicemail message was received (but not followed by written comment) that expressed support (without supporting justification) for Alternative 4 (No trapping program). No support was received for Alternative 1 or 3. All comments are maintained in a file in the refuge office and are available for public inspection.

Figure 1. Nulhegan Basin Division of the Silvio O. Conte NFWR

Silvio O. Conte National Fish & Wildlife Refuge-Nulhegan Basin Division
Essex County, Vermont



Appendix I. Sample Questionnaire for public input and public meeting outline and issues identified through scoping.

PUBLIC INPUT - FURBEARER MANAGEMENT PLAN - NULHEGAN BASIN DIVISION

Comment must be received by June 17.

1. Should the trapping of furbearing animals be conducted on the refuge and why or why not?

2. If trapping is NOT conducted on the refuge, what other methods should be used to manage furbearers?

3. What animals, if any, do you think should NOT be trapped on the refuge and why?

4. If trapping is conducted on the refuge, what regulations (e.g., seasons, trapping methods, trapper limits, take limits) should be implemented and why?

5. Are you aware of the development of "Best Management Practices" for trapping in the United States?

6. If trapping is conducted on the refuge, can you foresee any conflicts that might arise with other uses of the refuge? Please explain.

7. Are you a trapper? If yes, have you ever trapped on what are now refuge lands? What species did you trap for?

8. Please provide any additional input or concerns about Furbearer management on the refuge.

9. Would you like to be notified of future opportunities for comment on the Furbearer Management Plan? If so, please provide name, and contact information (mailing address, telephone, fax, and email).

Thank you for your participation in this important planning effort for the Nulhegan Basin Division.

Appendix I. (Continued)

Summary of Issues identified through scoping (issues are not listed in any particular order).

Regulated trapping was identified as necessary/desirable on the Refuge to:

* prevent overpopulations of furbearers;
* maintain healthy populations of furbearers;
* maintain population levels of furbearers that will not conflict with management programs for other species or Refuge habitats;
* enhance management programs for other species;
* reduce predation on species of management interest;
* reduce, prevent, or control habitat destruction, property destruction, disease;
* mimic natural ecological processes (mitigate current decreased level of predation on some species due to elimination of predators and absence of aboriginal harvest levels);
* conserve biodiversity;
* avoid financing wildlife management services on the Refuge that trappers could provide at no cost;
* allow continuation of cultural/traditional/historical use of the land;
* fulfill expectations of public and VFWD (after supporting Refuge acquisition) that trapping Would be continued to benefit wildlife, habitat, local residents;
* provide income/economic benefits for families in an economically depressed area of Vermont;
* provide a source of food, clothing, and decoration;
* fulfill need for fostering the appreciation wildlife/nature, recreation, wildlife observation, environmental education, stewardship of natural resources, and for providing an activity in which families can participate together;
* provide means to collect data/monitor furbearer populations and status;
* to support VFWD efforts in WMU "E;"
* fulfill state constitutional privilege of Vermonters to hunt (and trap);
* allow use of renewable natural resources by the public;
* maximize available tools for refuge management;

If a regulated trapping program were not implemented, alternatives that could be employed for management of furbearers:

* none
* hunting with dogs;
* spay/neuter programs;
* hiring trappers and hunters

If a regulated trapping program were implemented, species that should not be harvested:

* none (i.e., all species legal for harvest under state law should be harvested);
* fishers due to need to control porcupine numbers;
* bobcats due to low numbers;
* only those whose trapping would conflict with specific Refuge management goals or not satisfy compatibility;

If regulated trapping were implemented, trapping should be conducted:

* in accordance with regulations set by VFWD;
* in accordance with regulations set by VFWD unless biologically-based reason for deviation to meet refuge goals for wildlife or habitat, or to minimize conflicts with other refuge programs;

Summary of Issues identified through scoping (Continued).

Applicable regulations (continued):

or to maintain compatibility;
* under Special Use Permit;
* without fees;
* if fees are necessary, they should be reasonable;
* in a humane manner;
* with harvest limits in effect;
* with foothold traps allowed;
* with a requirement for a harvest report;
* in conjunction with annual surveys of harvest, trapping effort, and furbearer populations;
* so that regulations are consistent with surrounding lands to aid in practical law enforcement;
* so that everyone has equal opportunity to participate, but so resource is safeguarded;
* with snowmobile use authorized;
* so that beavers are conserved for benefits to black ducks;
* so that all legal species can be harvested;
* in conjunction with trapping BMP's

If regulated trapping were implemented, conflicts with other Refuge programs that could result:
* none;
* accidental capture of a hound;
* Refuge visitors might see a trap or trapped animal.

Appendix II. Partial list of vertebrate species occurring on the Nulhegan Basin Division.

Waterfowl	
Black duck	*Anas rubripes*
Wood duck	*Aix sponsa*
Hooded merganser	*Lophodytes cucullatus*
Mallard	*Anas platyrhynchos*
Ring-necked duck	*Aythya collaris*
Common goldeneye	*Bucephala clangula*
Common merganser	*Mergus merganser*
Green-winged teal	*Anas crecca*

Other birds	
Common Loon	*Gavia immer***, P
Great Blue Heron	*Ardea herodias**
Osprey	*Pandion haliaetus*** , P
Sharp-shinned Hawk	*Accipiter striatus*
Cooper's Hawk	*Accipiter cooperii*
Northern Goshawk	*Accipiter gentilis*
Red-tailed Hawk	*Buteo jamaicensis*
Ruffed Grouse	*Bonasa umbellus* , P
Spruce Grouse	*Dendragapus canadensis*** , P
Wild Turkey	*Meleagris gallopavo*
Spotted Sandpiper	*Actitis macularia*
Common Snipe	*Gallinago gallinago*
American Woodcock	*Scolopax minor* P
Mourning Dove	*Zenaida macroura*
Great Horned Owl	*Bubo virginianus*
Barred Owl	*Strix varia*
Northern Saw-whet Owl	*Aegolius acadicus*
Ruby-throated Hummingbird	*Archilochus colubris*
Yellow-bellied Sapsucker	*Sphyrapicus varius* , P
Downy Woodpecker	*Picoides pubescens*
Hairy Woodpecker	*Picoides villosus*
Black-backed Woodpecker	*Picoides arcticus*
Northern Flicker	*Colaptes auratus*
Pileated Woodpecker	*Dryocopus pileatus*
Olive-sided Flycatcher	*Contopus borealis* , P
Eastern Wood-Pewee	*Contopus virens* , P
Yellow-bellied Flycatcher	*Empidonax flaviventris*
Alder Flycatcher	*Empidonax alnorum*
Willow Flycatcher	*Empidonax trailii*
Least Flycatcher	*Empidonax minimus* , P
Eastern Phoebe	*Sayornis phoebe*
Great Crested Flycatcher	*Myiarchus crinitus*
Blue-headed Vireo	*Vireo solitarius*
Warbling Vireo	*Vireo gilvus*
Philadelphia Vireo	*Vireo philadelphicus**

Other birds (continued)	
Red-eyed Vireo	*Vireo olivaceus*
Gray Jay	*Perisoreus canadensis*
Blue Jay	*Cyanocitta cristata*
American Crow	*Corvus brachyrhynchos*
Common Raven	*Corvus corax*
Tree Swallow	*Tachycineta bicolor*
Black-capped Chickadee	*Parus atricapillus*
Boreal Chickadee	*Parus hudsonicus* , P
Red-breasted Nuthatch	*Sitta Canadensis*
Brown Creeper	*Certhia americana*
Winter Wren	*Troglodytes troglodytes*
Golden-crowned Kinglet	*Regulus satrapa*
Ruby-crowned Kinglet	*Regulus calendula*
Veery	*Catharus fuscescens* , P
Swainson's Thrush	*Catharus ustulatus*
Hermit Thrush	*Catharus guttatus*
American Robin	*Turdus migratorius*
Gray Catbird	*Dumetella carolinensis*
Cedar Waxwing	*Bombycilla cedrorum*
Nashville Warbler	*Vermivora ruficapilla* , P
Northern Parula	*Parula americana* , P
Yellow Warbler	*Dendroica petechia*
Chestnut-sided Warbler	*Dendroica pennsylvanica*
Magnolia Warbler	*Dendroica magnolia*
Black-throated Blue Warbler	*Dendroica caerulescens* , P
Black-throated Green Warbler	*Dendroica virens* , P
Blackburnian Warbler	*Dendroica fusca* , P
Palm Warbler	*Dendroica palmarum*
Bay-breasted Warbler	*Dendroica castanea**
Blackpoll Warbler	*Dendroica striata* , P
Black-and-white Warbler	*Mniotilta varia*
American Redstart	*Setophaga ruticilla*
Ovenbird	*Seiurus aurocapillus*
Northern Waterthrush	*Seiurus noveboracensis*
Mourning Warbler	*Oporornis philadelphia*
Common Yellowthroat	*Geothlypis trichas*
Canada Warbler	*Wilsonia canadensis* , P
Scarlet Tanager	*Piranga olivacea*
Chipping Sparrow	*Spizella passerina*
Song Sparrow	*Melospiza melodia*
Lincoln's Sparrow	*Melospiza lincolnii*
Swamp Sparrow	*Melospiza georgiana*
White-throated Sparrow	*Zonotrichia albicollis*
Dark-eyed Junco	*Junco hyemalis*
Rose-breasted Grosbeak	*Pheucticus ludovicianus*

Appendix II. (Continued)

Other birds (continued)	
Rusty Blackbird	*Euphagus carolinus*
Common Grackle	*Quiscalus quiscula*
Purple Finch	*Carpodacus purpureus* p
White-winged Crossbill	*Loxia leucoptera*
American Goldfinch	*Carduelis tristis*
Evening Grosbeak	*Coccothraustes vespertinus*

Mammals	
Moose	*Alces alces*
Black bear	*Ursus americanus*
White-tailed deer	*Odocoileus virginianus*
Snowshoe hare	*Lepus americanus*
Porcupine	*Erethizon dorsatum*
Beaver	*Castor canadensis*
Muskrat	*Ondatra zibethicus*
River otter	*Lutra canadensis*
Fisher	*Martes pennanti*
Mink	*Mustela vison*
Raccoon	*Procyon lotor*
Eastern coyote	*Canis latrans*
Red fox	*Vulpes vulpes*
Bobcat	*Lynx rufus*
Striped skunk	*Mephites mephites*
Northern long-eared bat	*Myotis septentrionalis*
Hairy-tail mole	*Parascalopus breweri*
Red squirrel	*Tamiasciurus hudsonicus*
Eastern chipmunk	*Tamias striatus*
Deer mouse	*Peromyscus maniculatus*
Red-backed vole	*Clethrionomys gapperi*
Meadow vole	*Microtus pennsylvanicus*
Meadow jumping mouse	*Zapus hudsonicus*
Woodland jumping mouse	*Napeozapus insignis*
Short-tailed shrew	*Blarina brevicauda*
Masked shrew	*Sorex cinereus*
Smoky shrew	*Sorex fumeus*
Pygmy shrew	*Sorex hoyi**
Water shrew	*Sorex palustrus**
Rock shrew	*Sorex dispar**
Bog lemming	*Synaptomys cooperi**
Rock vole	*Microtus chrotorhinus**
Pine vole	*Microtus pinetorum**

Reptiles	
Common snapping turtle	*Chelydra serpentina*
Painted turtle	*Chrysemys picta*
Wood turtle	*Clemmys insculpta**
Ringneck snake	*Diadophis punctatus*
Redbelly snake	*Storeria occipitomaculata*
Common garter snake	*Thamnophis sirtalis*

Amphibians	
Spotted salamander	*Ambystoma maculatum*
Northern dusky salamander	*Desmognathus fuscus*
Northern two-lined salamander	*Eurycea bislineata*
Spring salamander	*Gyrinophilus porphyriticus*
Northern redback salamander	*Plethodon cinereus*
Eastern newt	*Notophthalmus viridescens*
American toad	*Bufo americanus*
Gray treefrog	*Hyla versicolor*
Spring peeper	*Pseudacris crucifer*
Bullfrog	*Rana catesbeiana*
Green frog	*Rana clamitans*
Pickerel frog	*Rana palustris*
Mink frog	*Rana septentrionalis*
Wood frog	*Rana sylvatica*

Fish	
Brook trout	*Salvelinus fontinalis*
Brown trout	*Salmo trutta*
Burbot	*Lotta lotta*
Creek chub	*Semotilus atromaculatus*
Fallfish	*Semotilus corporalis*
Blacknose dace	*Rhinichthys atratulus*
Longnose dace	*Rhinichthys. cataractae*
Slimy sculpin	*Cottus cognatus*
White sucker	*Catostomus commersoni*
Longnose sucker	*Catostomus catostomus*
Lake chub	*Couesius plumbeus*
Brown bullhead	*Ictalurus nebulosus*

Legend:

* = listed by the state as rare or uncommon (informational categories)

** = endangered (category established by law)

p =Partners in Flight priority species Physiographic Area 28

Appendix III. Vermont 2000 trapping seasons and regulations and Refuge Special Use Permit conditions.

Note: The Vermont regulations below were taken from pages 40-42 of the "*2000 Vermont Guide to Hunting Fishing, and Trapping Laws*," Vermont Fish and Wildlife Department, Waterbury, Vermont.

Furbearing Animals

The following are classified as furbearing animals in Vermont: beaver, otter, marten, mink, raccoon, fisher, fox, skunk, muskrat, bobcat and coyote.

Species	Season	Bag Limit
Beaver	8:00 a.m. Dec. 1 - 4:00 p.m. on the 4th Sat. in Feb.	No limit
Otter	4th Sat. in Oct.- Dec. 31 and during beaver season.	No limit
Mink	4th Sat. in Oct.- Dec. 31	No limit
Raccoon	4th Sat. in Oct.- Dec. 31	No limit
Fisher	Dec. 2 - 17	No limit
Fox	4th Sat. in Oct. - Dec. 31	No limit
Skunk	4th Sat. in Oct. - Dec. 31	No limit
Muskrat	4th Sat. in Oct. - Apr. 19	No limit
Bobcat	Dec. 2 - 17	No limit
Coyote	4th Sat. in Oct. - Dec. 31	No limit
Marten	No open season	--

Trapping Information

Trapping License Requirements

Trapping licenses are only available from Fish & Wildlife in Waterbury. The law requires that an applicant for a trapping license must present either: (a) A previous or current trapping license from any state or Canadian province, or (b) A certificate showing satisfactory completion of a trapper education course, or (c) Other satisfactory proof that the applicant has previously held a valid trapping license.

Tagging and Reporting

Bobcat, Fisher, and Otter pelts and carcasses shall be presented to a Vermont Game Warden within 10 days of the close of the season. The pelts will be tagged and the carcasses kept by the Warden. No bobcat or fisher pelts or carcasses may be transported out of Vermont prior to being tagged by a Vermont Game

Warden. State Game Wardens are not required to tag furs when they have probable cause to believe they were taken illegally or possessed unlawfully.

Checking and Marking Traps

At least once in every 24 hours traps must be checked and any animals caught therein must be removed except that at least once in every 72 hours traps set under the water or ice during beaver season must be checked and any animals caught therein must be removed. A person who sets traps on land other than his own must mark each such trap with his name and address, either stamped or engraved on the trap or on a tag of rustproof material securely attached thereto. Anyone setting traps on another person's land must first notify the landowner of the intent to set traps. The property owner may revoke trapping permission at any time.

Beaver

A person may take beaver during the open season (declared annually) by means of a trap only. Such traps must be marked with a tag visible above the ice in addition to the identification on the trap. No person shall set a trap within 10 feet of the nearest point, above the water, of a beaver house or dam. No person may interfere with dams or dens of beaver except in protection of property.

It Is Unlawful To:

- Set any trap with toothed jaws.
- Set a body gripping trap with a jaw-spread over eight inches, unless the trap is set five feet or more above the ground or in water.
- Set a trap between Dec. 31 and the following 4th Sat. in Oct. unless the trap is in the water, under the ice or on a float in the water.
- Take furbearing animals with poisonous mixtures of any kind.
- Take raccoons, skunks or foxes from holes or dens by cutting, digging, smoking, or by use of chemicals.
- Take black bear or other game animals by trapping.
- Disturb a muskrat house or place a trap therein, thereon, or at the entrance thereof, or in the entrance of or inside a muskrat burrow.
- Disturb a trap lawfully set by another person.
- Take furbearing animals by means of snares.

COMPATIBILITY DETERMINATION

STATION NAME: Nulhegan Basin Division, Silvio O. Conte National Fish and Wildlife Refuge

DATE ESTABLISHED: July 21, 1999

ESTABLISHING AUTHORITY: Silvio O. Conte National Fish and Wildlife Refuge Act (Public Law 102-212)
Migratory Bird Conservation Act of 1929
Land and Water Conservation Fund Act of 1965

PURPOSE(S) FOR WHICH ESTABLISHED:
(1) to conserve, protect and enhance the Connecticut River populations of Atlantic salmon, American shad, river herring, shortnose sturgeon, bald eagles, peregrine falcons, osprey, black ducks, and other native species of plants fish and wildlife;

(2) to conserve, protect and enhance the natural diversity and abundance of plant, fish and wildlife species and the ecosystem upon which these species depend within the refuge;

(3) to protect species listed as endangered or threatened, or identified as candidates for listing, pursuant to the Endangered Species Act of 1973 as amended (16 U.S. 1531 et seq.);

(4) to restore and maintain the chemical, physical and biological integrity of wetland and other waters within the refuge;

(5) to fulfill the international treaty obligations of the United States relating to fish and wildlife and wetlands; and

(6) to provide opportunities for scientific research, environmental education, and fish and wildlife oriented recreation and access to the extent compatible with the other purposes stated in this section.

Goals of the National Wildlife Refuge System:
To preserve, restore, and enhance in their natural ecosystems (when practicable) all species of animals and plants that are endangered or threatened with becoming endangered.

To perpetuate the migratory bird resource.

To preserve a natural diversity and abundance of fauna and flora on refuge lands.

To provide an understanding and appreciation of fish and wildlife ecology and man's role in his environment, and to provide refuge visitors with high quality, safe, wholesome, and enjoyable recreational experiences oriented toward wildlife, to the extent these activities are compatible with the purpose for which the refuge was established.

DESCRIPTION OF PROPOSED USE: To establish regulated trapping as part of an integrated approach to furbearer management on the Refuge, for all Service-owned lands within the boundary of the Nulhegan Basin Division of the Silvio O. Conte National Fish and Wildlife Refuge, in accordance with laws and regulations of the United States and the State of Vermont, and Refuge Special Use Permit Conditions.

ANTICIPATED IMPACTS ON REFUGE PURPOSE(S): The proposed program will provide opportunity for ecologically sound, safe, and cost-effective wildlife and habitat management that will fulfill the purposes of the Refuge without adverse impacts on refuge habitat or wildlife.

DETERMINATION: THIS USE IS COMPATIBLE X
THIS USE IS NOT COMPATIBLE ____ (Check one)

THE FOLLOWING STIPULATIONS ARE REQUIRED TO ENSURE COMPATIBILITY:
The furbearer management program will be reviewed annually to assess its effectiveness and to insure and that wildlife populations and habitat quality are managed appropriately. In addition, the following Refuge Special Use Permit Conditions will apply:

1. Any person engaging in activities on the Nulhegan Basin Division of the Silvio O. Conte National Fish and Wildlife Refuge that would be defined as trapping under Vermont state law must be in possession of a valid Vermont trapping license and a valid Refuge Special Use Permit and will present such credentials to refuge officials and law enforcement agents of United States or Vermont upon their request. This permit is valid only for trapping conducted on the Refuge during the legal trapping seasons established by the state of Vermont and only for species legal for trapping harvest as defined by the state of Vermont.
2. In consideration of being permitted to engage in the activity authorized under this permit at the Nulhegan Basin Division of the Silvio O. Conte National Fish and Wildlife Refuge, **Permittee**, being of lawful age, for himself and his personal representative, heirs, and next of kin, hereby releases, waives, and forever discharges the United States of America, its agents and employees, all for the purposes herein referred to as, Releasees, from any and every claim, demand, action or right of action, of whatsoever kind or nature, either in law or in equity, arising from or by reason of any bodily injury or personal injuries known or unknown, death and/or property damage resulting or to result from any injury, which may occur while engaged in the permitted activity, and covenants not to sue the Releasees, for any loss or damages, and any claim or damage therefor, on account of injury to the person or property or resulting in death of the Permittee, whether caused by the negligence of Releasees or otherwise.

   Permittee agrees to indemnify, defend, save and hold harmless the Releasees and each of them from any loss, liability, damage or cost Releasees may incur due to the presence of Permittee in or upon the said property of the United States.

INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Originating person: **Keith M. Weaver, Refuge Manager**

Telephone number: **802-723-4398**

Date: **August 26, 2000**

I. Service activity (program) and proposed activity:

USFWS, Division of Refuges, Furbearer management (regulated trapping)

II. Pertinent species within action area:

(Canada lynx)

III. Station name and action:

Nulhegan Basin Division, Silvio O. Conte NFWR, P.O. Box 427, Island Pond, VT 05846

IV. Location

Towns of Lewis, Ferdinand, Brunswick, and Bloomfield; Essex County, Vermont

V. Determination of effects:

A. Explanation of effects of action on species and critical habitats listed in II.:

See Attached EA

B. Explanations of actions to be implemented to reduce adverse effects:

See Attached EA; If lynx are documented within 10 miles of refuge, compatibility of trapping will be reassessed; Section 7 consultation will be performed.

VI. Effect determination and response requested:

A. Listed species:

Determination	Response requested
No effect	
(species: Canada lynx)	**__X__ Concurrence**

VII. Reviewing ESO Evaluation:

A. Concurrence ✓ Nonconcurrence _____

B. Formal consultation required _____

C. Conference required _____

D. Remarks:

Signature SR. ENDANGERED Species Specialist 9/6/2000 Date

Title/~~office of ESO~~ Field Supervisor
ES Specialist

ENVIRONMENTAL ACTION MEMORANDUM

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and have determined that the action of:

Establishing a regulated trapping program as part of an overall furbearer management program for the Nullegan Basin Division of the Silvio O. Conte National Fish and Wildlife Refuge.

___ is a categorical exclusion as provided by 516 DM 6 Appendix 1. No further documentation will be made.

_X_ is found not to have significant environmental effects as determined by the attached Environmental Assessment and Finding of No Significant Impact.

___ is found to have special environmental issues as described in the attached Environmental Assessment. The attached Finding of No Significant Impact will not be final nor any actions taken pending a 30 day period for public review, 40 CFR 1501.4(3)(2).

___ is found to have significant effects, and therefore a "Notice of Intent" will be published in the Federal Register to prepare an Environmental Impact Statement before the project is considered further.

___ is denied because of environmental damage, Service policy, or mandate.

___ is an emergency situation. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

J. Mitch King
Acting Regional Director — Date: 10/12/00

Anthony D Lege
Regional Chief, National Wildlife Refuge System — Date: 10/12/00

NEPA Compliance Coordinator — Date: 10/12/00

Richard W Dyer
Initiator — Date: 10/12/00