

ENVIRONMENTAL ACTION STATEMENT SCREENING FORM
for
**New England Cottontail Enhancement of Survival Permit and
Candidate Conservation Agreement with Assurances between the
U.S. Fish and Wildlife Service and NH Fish and Game Department**
March 25, 2011

I. Project Information

A. Project name: Issuance of a permit for enhancement of survival of a species pursuant to 16 U.S.C. 1539(a)(1)(A), 50 C.F.R. 17.22(d), 50 C.F.R. 17.32(d), and the Programmatic Candidate Conservation Agreement with Assurances (CCAA) for the New England cottontail (NEC, *Sylvilagus transitionalis*) in New Hampshire, between New Hampshire Fish and Game Department (NHFGD) and the U.S. Fish and Wildlife Service (USFWS).

B. Affected species: New England cottontail (*Sylvilagus transitionalis*) (NEC)

C. Project size (in acres): Lands to be enrolled under the CCAA are located in Hillsborough, Rockingham, Merrimack, Cheshire, and Strafford counties in southern New Hampshire. Approximately 3,000 to 5,000 acres of private and State-owned lands within this area are targeted to be enrolled for NEC habitat management. The amount of land targeted for NEC habitat management constitutes about 0.2% of the total area of these counties. Landowners may also enroll lands adjacent to NEC habitat management areas; the adjacent lands to be enrolled are estimated to total approximately twice the acreage enrolled for NEC habitat management.

D. Brief project description including conservation elements of the plan:

The project is the issuance of an Enhancement of Survival Permit (permit) associated with a programmatic CCAA between the USFWS and the NHFGD (applicant). The permit and CCAA are intended to further conservation of NEC by establishing a mechanism to provide incidental take coverage and regulatory assurances to landowners. Upon signature of the CCAA and issuance of the permit, the NHFGD can extend take authorization, via a certificate of inclusion, to any landowner who enters into a cooperative agreement with the NHFGD. The CCAA program encourages landowners to implement conservation measures for NEC by providing them certainty that additional land-use restrictions and mitigation requirements, beyond those agreed to, will not be imposed in the future if the NEC is listed as endangered or threatened.

In the 1950s, the distribution of NEC in NH extended south from Lancaster, through the Connecticut River Valley, then south of the White Mountains through the Lakes Region to the Maine and Massachusetts border. This area constituted approximately half the State. By 1973, the area occupied by NEC included the southern quarter of the State, and by 2009 only nine sites were found to be occupied by NEC. It is estimated that the late winter 2009 population of NEC in NH may be as low as 25 individuals.

The NEC is a thicket-dependent species. Suitable thickets are generally associated with young

forests or shrublands that provide more than 20,000 stems per acre. Disturbance regimes that result in the establishment of suitable habitat have been altered throughout the species' range. As a consequence, New England forests are maturing and rapidly losing the characteristics that constitute favorable habitat for NEC. An assessment of the species' status concluded that the primary threat to this species, throughout its range, is habitat loss through maturation of forests. Habitat fragmentation is also a threat. Of the approximately 3,000 to 5,000 acres of private and State-owned lands targeted to be enrolled for NEC habitat management, approximately 200 acres are currently estimated to contain suitable NEC habitat.

The primary conservation measure to address the threats to NEC is vegetation management that will result in the establishment or enhancement and maintenance of shrubland communities. An area of 3,000 to 5,000 acres of suitable habitat is expected to provide sufficient habitat to support 1,800 to 3,000 NEC.

The management activities covered under the CCAA include;

- Habitat acquisition of fee titles and/or easements;
- Integrated management of existing shrublands to ensure a stable, native dominated shrub community. This involves the selective removal of individual trees and non-native shrubs in an otherwise native shrubland. This will also involve the treatment of existing shrublands to increase stand vigor. Treatment methods will include the use of chain saws, brontosaurus, hydro-ax, and other standard timber harvesting equipment. Selective treatment with herbicides may also be used;
- Removal of forest canopy to generate a vegetative response by understory shrubs. This activity will result in increased sun exposure to understory vegetation, thereby increasing the vigor of shrubs. Treatment methods include standard timber harvesting equipment including chainsaws, skidders, etc.;
- Regeneration of early successional tree species. This activity involves the removal of large diameter tree species, such as aspen, so that vigorous re-sprouting can be achieved. Standard timber harvest equipment will be used;
- Control of browsing by white-tailed deer (e.g., use of fencing to exclude deer from regenerating habitats);
- Translocation and reintroduction of NEC to newly created and vacant habitats;
- Removal of introduced eastern cottontails;
- Control of non-native invasive plants. Methods may involve cutting, grazing, and herbicide application;
- Establishment of shrublands in abandoned agriculture fields, hay lands, and pastures. Methods could include shallow tilling of the soil in areas with a history of plowing. Establishment of shrublands may include planting of seeds and seedlings; and
- Hydrologic restoration to create the abiotic conditions necessary for establishment of native dominated shrublands that benefit the NEC. Activities associated with this habitat management practice will involve plugging constructed ditches and disrupting drainage tiles in areas where evidence of altered hydrology is present.

Although many of these practices are currently being used in the management of timberlands and agricultural lands within southern NH, they are generally not being conducted with, or in a manner consistent with, the intended purpose of establishing or maintaining shrublands for the

purposes of providing optimal habitat conditions for the NEC. While the outcomes of the currently implemented practices and modified practices may be somewhat different, the environmental effects are expected to be similar. Furthermore, the habitat management prescriptions of the CCAA and the individual cooperator agreements will specify the regulatory requirements and best management practices that the habitat treatments must meet. These controls will ensure that any adverse environmental impacts of the program are minimized.

II. Does the CCAA fit the criteria of a NEPA Categorical Exclusion (516 DM 2 Appendix 2, 516 DM 8.5)?

Yes. The enhancement of survival permit with its CCAA meets the USFWS categorical exclusion 516 DM 8.5C(1):

“The issuance, denial, suspension, and revocation of permits for activities involving fish, wildlife, or plants regulated under 50 CFR Chapter 1, Subsection B, when such permits cause no or negligible environmental disturbance. These permits involve endangered and threatened species, species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), marine mammals, exotic birds, migratory birds, eagles, and injurious wildlife.”

The enhancement of survival permit issued to NHFGD would go into effect if the USFWS listed the NEC as either an endangered or threatened species.

A. Are the effects of the CCAA less than significant on the range-wide populations of other federally listed, proposed, or candidate species or other wildlife and their habitats covered under the CCAA?

Yes. The CCAA will cover only the NEC. See also Section III.H.

B. Are the effects of the CCAA minor or negligible on other environmental values or resources (e.g. air quality, geology and soils, water quality and quantity, socio-economic, cultural resources, recreation, visual resources, etc.)?

Yes. The effects of the CCAA and permit on other environmental values or resources are expected to be negligible. The purpose and consequence of the assurances provided through the CCAA and permit are to allow the activities that would have occurred in the absence of the CCAA and permit to continue without regard to the listing status of the NEC. The NEC is currently found on few properties and in extremely low numbers. Without the CCAA and permit, NEC will likely continue to decline. In this case, whether the NEC is listed or not, haying, silviculture, and other activities identified as covered activities in the CCAA will proceed as they have in the past. With the CCAA and permit, the NEC is expected to increase on managed areas of enrolled lands. In this case, whether the NEC is listed or not, covered activities on “adjacent lands” will continue as they have in the past with perhaps only minor differences (e.g., mowing may be restricted during the nesting season). Likewise, NEC habitat improvement measures and other covered activities on lands managed for NEC will have negligible impacts on the affected environment. These activities will be conducted as they have

in the past with minor differences (e.g., tree removal may be restricted during the nesting season), and they will be conducted in accordance with local, State, and Federal laws that apply to these activities and that are intended to minimize adverse impacts.

Impacts to air quality are not expected. In addition, consultation between the NHFGD and the State Historic Preservation Office will occur to ensure that individual projects that involve subsurface soil disturbance will avoid adversely affecting historic resources. To achieve the desired vegetative response, most habitat treatments will be conducted during the winter dormant season on frozen ground. Therefore, soil disturbance is expected to be minimal. Individual cooperative agreements will also incorporate management prescriptions that are consistent with the conservation measures outlined in the CCAA. Projects will comply with existing timber harvesting laws and best management practices that are intended to preserve water quality and aesthetics while preventing erosion and sedimentation. These laws, along with their enforcement procedures, are described in the "Guide to New Hampshire Timber Harvesting Laws" (Guide) (<http://extension.unh.edu/Forestry/Docs/gtnhthl.pdf>). In summary, the Guide includes provisions for:

- current use or open space protection (RSA 79-A) which offers tax incentives for the preservation of open space;
- taxation laws (RSA 79:10) which identifies timber as taxable real estate. Within this law are provisions for filing a notice of intent to cut with municipal officials, identification of responsibility for taxation (RSA 79:1 II(a)), provisions for securing a Timber Tax Bond (RSA 79:10-a), a wood cutting report requirement (RSA 79:11), and penalties, doomsage (a penalty or fine for neglect) and enforcement provisions (RSA 79:12, RSA 21:J 39) and RSA 79:28 & 28-a);
- regulation of wetlands and waters (RSA 482-A);
- trespassing (RSA 227-J:8);
- laws regarding deceptive business practices (RSA 227-J:15);
- laws for maintaining buffers along roads, streams and water bodies (RSA 227-J:9);
- laws for the proper handling of harvesting debris (RSA 227-J:10); and
- laws regarding the transport of timber harvest products and equipment on public roads (RSA 231:190-191).

These statutory requirements for timber harvesting in New Hampshire are further enhanced by a suite of best management practices that are intended to foster forest stewardship. These practices are outlined in "Good Forestry in the Granite State: Recommended Voluntary Forest Management Practices for New Hampshire" (<http://www.spnhf.org/pdf/good-forestry.pdf>). This document provides landowners with suggestions for the:

- maintenance of soil productivity;
- preservation of water quality, wetlands and riparian habitats;
- preservation and enhancement of wildlife habitat;
- preservation of unique and fragile natural areas;
- enhancement of timber resources; and
- preservation of recreational, visual and aesthetic resources.

C. Would the impacts of this CCAA, considered together with the impacts of other past, present, and reasonably foreseeable similarly situated projects, not result, over time, in

significant cumulative effects to environmental values or resources?

Yes. The CCAA and similarly situated projects (i.e., implementation of NEC habitat creation and enhancement projects in New Hampshire, for which the landowner does not enter into this CCAA) will likely increase the amount of NEC habitat over the 50-year permit period.

Activities carried out under the CCAA will restore some shrublands already lost to succession and maintain shrublands that would likely be lost to succession in the future without habitat treatment. Some of this restoration and maintenance of shrublands would likely take place without the CCAA. Loss of shrublands will continue to occur because not all lands will be enrolled under the CCAA or otherwise be subject to habitat treatments. For these reasons, it is difficult to determine the amount of shrublands that would be restored and maintained as a result of the CCAA and similarly situated projects. However, even a substantial increase in shrubland habitat would not be considered a significant effect because this amount of habitat is a small proportion of the total area of, and a small proportion of the historical amount of shrubland habitat within, the 5-county target area of the CCAA.

III. Do any of the exceptions to categorical exclusions apply to this CCAA? (from 516 DM 2.3, Appendix 2) If the answer is “yes” to any of the questions below, the project can not be categorically excluded from NEPA. Each “no” response should include an explanation.

Would the CCAA:

A. Have significant impacts on public health or safety?

No. The habitat treatments covered under the CCAA, which will be restricted to private and State-owned lands, comply with the timber harvesting laws and follow the best management practices specified in the habitat management prescriptions of the CCAA and the cooperator agreements that address water quality, erosion, sedimentation, and aesthetics (See also Section II.B). In addition, an increase in shrubland habitat will not pose a risk to public health or safety.

B. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); floodplains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas?

No. Consultation between the NHFGD and the State Historic Preservation Office will occur as needed to ensure that individual projects will not result in significant impacts to historic resources. While some projects may occur on recreation lands, the projects will be coordinated with administrators of those lands to ensure that the activities are compatible with current uses or desired future conditions. Only private and State-owned lands will be enrolled under the CCAA; no wilderness areas will be enrolled. The Lamprey and Merrimack Rivers are designated as Wild and Scenic Rivers and occur within the CCAA project area; coordination with the National Park Service indicated “no conflict” between the CCAA and those designated rivers. The habitat treatments covered under the CCAA must comply with the timber harvesting laws and follow the best management practices specified in the habitat management prescriptions of the CCAA and

the cooperator agreements whose purpose is to protect wetlands and waters from unregulated alteration, maintenance of sufficient buffers to preserved aesthetic and environmental values, and to minimize environmental hazards associated with timber harvesting (See also Section II.B.). Cooperative Agreements that are entered into for the purposes of fulfilling the purposes of this CCAA will require compliance with these laws. Therefore, no significant impacts on aquifers, wetlands, floodplains, or ecologically significant areas are anticipated. While the CCAA may provide some benefits to American woodcock (*Scolopax minor*), these benefits are not considered significant.

C. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?

No. The practices covered under the CCAA, with the exception of translocation of NEC, are currently on-going in southern New Hampshire. Forest management is expected to continue regardless of the CCAA. The targeted area for the CCAA constitutes less than 0.2% of the five-county area in southern NH. American woodcock habitat management, which is similar to NEC habitat management covered under the CCAA, is currently being implemented. Utility companies are frequently involved with the management of shrublands on their utility line corridors. The effects of these habitat management activities are well-known, and are not highly controversial. Translocation of NEC is not expected to have effects that are controversial because this practice will have effects similar to the effects of increasing populations through habitat treatment alone. In addition, protocols will be in place to ensure the health of released individuals is maintained to the maximum extent possible.

D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?

No. Because the habitat treatments covered under the CCAA are common practices, and their effects are well documented.

E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?

No. The USFWS has entered into several programmatic CCAAs for other species. All CCAAs are subject to the same regulatory requirements.

F. Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects?

No. The CCAA is not directly related to other actions. The CCAA is only indirectly related to an experimental NEC translocation effort by the NHFGD and the University of New Hampshire. The CCAA is also only indirectly related to ongoing American woodcock habitat management. These activities do not have cumulatively significant environmental effects because they are conducted on a limited scale and in a manner consistent with regulatory requirements and best management practices.

G. Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau?

No. Consultation between the NHFGD and the State Historic Preservation Office will ensure that individual projects will not adversely affect historic resources.

H. Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species or have significant impacts on designated Critical Habitat for these species?

No. There is no critical habitat designated for any listed species in NH. If USFWS lists the NEC as threatened or endangered and designates Critical Habitat for it during the 50-year term of the CCAA, there will be no significant impact to the NEC or NEC Critical Habitat. This is because NEC habitat management activities covered under the CCAA will enhance existing habitat and will result in only insignificant impacts to the NEC, and activities on lands adjacent to NEC habitat will have only insignificant effects on the NEC and no effect on NEC Critical Habitat.

To ensure that activities covered under the CCAA are not likely to adversely affect federally listed species, the NHFGD will consult the NH Natural Heritage Bureau's rare species database or the USFWS endangered species distribution lists to determine if any federally listed or proposed species are located in or around the project site. If the review indicates that such a species may be present, the NHFGD will consult with the USFWS's Endangered Species Program to ensure that the activities are not likely to adversely affect that species.

Federally listed, proposed, or candidate species in the area where this CCAA is to be implemented include:

a) New England cottontail (*Sylvilagus transitionalis*)

While the CCAA and similarly situated projects are expected to improve the status of NEC, this result is not considered to rise to the level of a significant effect to environmental values or resources. The CCAA and similarly situated projects are not likely to make listing of the NEC unnecessary because the maximum number of acres enrolled in this CCAA constitutes less than 0.2% of the species' current known distribution. Complete recovery of the NEC will require additional conservation actions to address the threats to this species in a geographic area greater than can be provided in New Hampshire alone.

b) Small whorled pogonia (*Isotria medeoloides*)

This orchid occurs both in fairly young forests and in maturing stands of mixed-deciduous or mixed-deciduous/coniferous forests. In New Hampshire, many sites that support the small whorled pogonia have "older" canopy trees estimated to be about 75 years of age. The majority of sites share several common characteristics. They include sparse-to-moderate ground cover (except when among ferns), a relatively open understory, and proximity to long persisting breaks in the forest canopy, such as logging roads and streams. For example, in New Hampshire, the small whorled pogonia has been found growing in and adjacent to recently-abandoned, above-ground telephone

transmission lines. The highly-acidic, nutrient-poor soil in which this orchid grows is usually covered with leaf litter. The substrate tends to be variable in texture and ranges from extremely stony glacial till, to stone-free sandy loams, to sterile duff.

As provided in the site selection criteria identified in the CCAA, habitats that the pogonia favors are generally not conducive to the establishment of dense shrublands that are the primary target for activities covered under the CCAA. Sites favored by the pogonia are unlikely to provide sufficient vegetative response that would provide suitable habitat for the NEC. The forest canopy structure associated with pogonia sites will not generate the necessary thicket habitat that the NEC needs because the tree species in those locations do not tend to generate a sprout response that will reach the 20,000 stems per acre density threshold. In addition, the nutrient deficient soils that characterize pogonia sites are unlikely to support a shrub community of sufficient density to support the NEC.

Based upon the site selection criteria and environmental screening procedures for each project, we conclude that this CCAA is not likely to adversely affect the small whorled pogonia or its habitat.

c) Dwarf wedge mussel (*Alasmidonta heterodon*)

This aquatic species is restricted to the mainstem of the Ashuelot and Connecticut Rivers. As provided in the site selection criteria of the CCAA, activities associated with the creation and maintenance of NEC habitat will not occur in dwarf wedge mussel habitat. Furthermore, activities covered under the CCAA will comply with timber harvesting laws and follow the best management practices identified in Section II.B. In addition, the habitat management prescriptions identified in individual cooperative agreements will consider effects to listed species as identified above.

Based upon the site selection criteria and environmental screening procedures for each project, we conclude that this CCAA will have no effect on the dwarf wedge mussel or its habitat.

d) Karner blue butterfly (*Lycaeides melissa samuelis*)

Within NH, this species occurs only at the Concord Pine Barrens within a small portion of Merrimack County in the towns of Concord and Pembroke. The butterfly is dependent upon wild lupine (*Lupinus perennis*), a small, often attractively flowered plant that occurs in pine barrens and oak savannas. The Karner blue's habitat is likely to be a patchwork of pitch pine and scrub oak scattered among open grassy areas. Historically, a network of these openings among the trees was maintained by wildfire, and at one time the butterfly was found in this habitat in a nearly continuous narrow band across 10 states and one Canadian Province. Today it has been eliminated from at least 5 of these states. Because both the NEC and the Karner blue butterfly require early successional habitats, management for the NEC may also create conditions that are favorable to the Karner blue butterfly. NEC conservation efforts at the Concord Pine Barrens will be closely coordinated within the USFWS and NHFGD's Nongame and Endangered Species Programs to ensure that activities to benefit the NEC will also be beneficial to the Karner blue butterfly, and adverse effects to the Karner blue butterfly and its habitat will be

avoided. Although the CCAA may benefit the Karner blue butterfly, these benefits are expected to be less than significant because they will likely occur on only a small number of properties enrolled under the CCAA and be of limited acreage.

Based upon the site selection criteria and environmental screening procedures for each project, we conclude that this CCAA is not likely to adversely affect the Karner blue butterfly or its habitat.

e) Northeastern bulrush (*Scirpus ancistrochaetus*)

This sedge occurs as a component of the emergent vegetation community of acid to circumneutral wetland meadows, marshes and woodland ponds. Although the species is most often found in hillside wetlands, it is also known to occur in an alluvial meadow along the Connecticut River in Vermont. Evidence of current or past beaver activity is often found at these sites. Water levels often exhibit seasonal and annual fluctuations that result in periods that range from inundation to saturation of the soil. As provided in the site selection criteria of the CCAA, no activities covered under the CCAA will occur within sites that are occupied by this plant.

Based upon the site selection criteria and environmental screening procedures for each project, we conclude that this CCAA will have no effect on the Northeastern bulrush or its habitat.

f) Other wildlife

The CCAA will provide benefits to other species that rely on early successional habitats. Many species of shrubland songbirds have experienced steep population declines in the Northeast over the last several decades. Included among these are the American woodcock, prairie warbler, golden-winged warbler, blue-winged warbler, brown thrasher, eastern towhee, and indigo bunting. New Hampshire's State Wildlife Action Plan (Plan) identified the golden-winged warbler, American woodcock, NEC, smooth green snake, black racer, and wood turtle as species of conservation need that are dependent upon shrublands. The Plan further states, "The ecological objective is to increase the amount of functional shrub-dominated early successional habitat that supports reproducing populations of New England cottontails, woodcock, and other habitat associates." Although the CCAA will benefit other species, the benefits are expected to be less than significant because these species occur over an extensive range and their status is less imperiled compared with the NEC.

As prescribed in the habitat management prescriptions of the CCAA and the cooperator agreements, most of the habitat management activities associated with this CCAA will occur during the winter dormant period. Due to the timing of the activities, the effects of the management activities will be less than significant because most wildlife will have migrated or be hibernating. Other wildlife that are year-round residents of the treatment areas tend to be habitat generalists and their populations are not expected to be harmed by the activities proposed. Furthermore, as provided in the site selection criteria of the CCAA, large stands of mature forests will not be targeted for management activities because these areas are unlikely to provide sufficient habitat structure for the NEC.

Within mature forests, abiotic factors, such as hydrology and soils, are typically not conducive to the long term establishment of shrublands. As a result, management of these areas would require extensive manipulation of disturbance regimes and commitment of resources that would hinder our efforts to achieve broader habitat goals for this species. Areas that have a disturbance history will typically have an existing community structure that would greatly facilitate the establishment of the desired vegetative condition. Because mature forests will not be targeted for management activities, impacts to forest-dependent wildlife are expected to be insignificant.

I. Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment?

No. Activities covered under the CCAA must comply with all regulatory requirements, including timber harvesting laws, and best management practices.

J. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898)?

No.

K. Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007).

No. Only private and State-owned lands will be enrolled under the CCAA.

L. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and EO 13112)?

No. As directed by Executive Order 13112, habitat treatments will also include invasive species management.

IV. Environmental Action Statement

Based on the analysis above, the "Programmatic Candidate Conservation Agreement with Assurances (CCAA) for the New England Cottontail (NEC, *Sylvilagus transitionalis*) for New Hampshire between the New Hampshire Fish and Game Department and the U.S. Fish and Wildlife Service" is a member of a class of actions which do not individually or cumulatively have a significant impact on the human environment. Therefore, this action is categorically excluded from further NEPA documentation as provided by 516 DM 2, Appendix 2, 516 DM 8.5, and 43 C.F.R. 46.215.

Other supporting documents (list): programmatic Candidate Conservation Agreement with Assurances

Concurrence:



Acting Northeast Regional Director
U.S. Fish and Wildlife Service

3/31/11

Date