FINDINGS AND RECOMMENDATIONS FOR ISSUANCE OF SECTION 10(a)(1)(A) ENHANCEMENT OF SURVIVAL PERMIT (TE 154037-0) ASSOCIATED WITH THE OREGON SILVERSPOT BUTTERFLY CENTRAL COAST SAFE HARBOR AGREEMENT WITH THE NATURE CONSERVANCY

I. DESCRIPTION OF THE PROPOSED ACTION

The Fish and Wildlife Service (Service) proposes to issue an enhancement of survival permit (permit) to The Nature Conservancy (TNC) under the authority of section 10(a)(1)(A) and section 10(a)(2) of the Endangered Species Act (ESA), as amended, and the Service's Final Policy for Safe Harbor Agreements (64 FR 32717, June 17, 1999). The permit would be in effect for a period of 35 years. Documents used in the preparation of this statement of Findings and Recommendations include the Oregon Silverspot Butterfly Central Coast Safe Harbor Agreement with The Nature Conservancy (Agreement) (TNC *et al.* 2007), associated environmental action statement (Fish and Wildlife Service 2007a), and the Service's biological opinion on the permit application (Fish and Wildlife Service 2007b). All of these documents are incorporated by reference as described in 40 CFR § 1508.13.

Under the permit, TNC would receive incidental take authorization for certain covered activities as identified in the Agreement. TNC is requesting a permit for the federally-listed as threatened Oregon silverspot butterfly (*Speyeria zerene hippolyta*). The permit would authorize the incidental take of the Oregon silverspot butterfly (OSB) associated with certain management activities that are being carried out to restore and maintain coastal meadow habitat on up to about 90 acres of land along a five-mile segment of the central Oregon coast, between Bray Point and Big Creek, in Lane County. TNC would receive assurances under the Service's regulations for Safe Harbor Agreements [50 CFR § 17.32(c)(5)].

Non-federal lands may be enrolled in the Agreement through individual Cooperative Agreements (CAs) between the Service, TNC, and the non-federal landowners (Cooperators). TNC will seek out Cooperators who are willing to voluntarily undertake restoration and management activities on their properties. The Cooperators will be issued a Certificate of Inclusion (CI) which will allow specific habitat restoration activities on the enrolled property to be covered under TNC's section 10(a)(1)(A) enhancement of survival permit.

The OSB was federally-listed as threatened with critical habitat on July 2, 1980 (45 FR 44935). The OSB occupies four types of grassland habitats: marine terrace, coastal headland "salt spray" meadows, stabilized dunes, and montane grasslands. To support the OSB, each habitat area must provide the caterpillar host plant, early blue violet (*Viola adunca*), and adult butterfly nectar sources. Violet density influences the number and location of OSB eggs laid, with areas of higher violet densities used most frequently for ovipositing. Native nectar plants most frequently used by the adult OSB are Canada goldenrod (*Solidago canadensis*), dune goldenrod (*Solidago spathulata*) California aster (*Symphyotrichum chilensis*), pearly everlasting (*Anaphalis margaritacea*), dune thistle (*Cirsium edule*), and yarrow (*Achillea millefolium*).

Both violet abundance and native nectar sources have declined at all OSB habitat areas due primarily to competition from non-native vegetation. Habitat disturbance regimes which maintain an early seral habitat stage have been altered dramatically over the past 150 years, increasing the rate of open meadow succession to shrub or forest. Non-native plants have played a major role in stabilizing the previously dynamic coastal ecosystem which had maintained the availability of open meadow vegetation communities. Some coastal meadows have been used for grazing purposes, which introduced and maintained non-native grass pastures. Potential OSB habitat has also been lost due to residential and commercial development which can destroy habitat, artificially maintain a predominance of non-native plants, and/or result in landscape practices (such as frequent mowing) that degrade habitat.

Refer to the Status of the Species section of the biological opinion (Fish and Wildlife Service 2007b) for more background information on the status and threats of the OSB.

Baseline Determination

Initial baseline determinations will be made by the Service or TNC based on the presence or absence of the early blue violet, prior to any restoration efforts. The baseline for each CA will include an assessment of the number of early blue violets and/or the area occupied by early blue violets. Baseline determinations will require the consent and approval of the Cooperators.

Types of Covered Activities

Activities proposed to be covered under the permit are otherwise lawful activities which are described in sections 4 and 9 of the Agreement. Covered activities include restoration and management actions intended to benefit coastal meadow OSB habitat. Such activities may be applied adaptively to each Cooperator's enrolled property, and will be detailed in the individual CAs. More specifically, management actions to be covered include: 1) modifying existing vegetation through suppression or removal of invasive plant species utilizing such techniques as mowing, brush cutting, grazing, burning, smothering, and tilling; and, 2) planting or seeding native plants within coastal meadows.

Potential incidental take of OSBs associated with restoration activities and/or a return to baseline conditions may occur and is the principle reason an enhancement of survival permit under section 10 is desired by TNC and the Cooperators.

Term of the Permit

The Agreement would be in effect for a period of 35 years and the permit will have a term of 35 years. In accordance with 50 CFR § 17.32(c)(8), we believe the duration of the permit is sufficient to provide a net conservation benefit to the OSB by contributing to their recovery (see discussion below in part III.B).

Conservation Strategy

The conservation strategy of this Agreement involves the restoration of adult and larval habitat for the OSB. Most areas where restoration activities will occur are dominated by non-native plants (mostly grasses) or successional species such as bracken fern (*Pteridium aquilinum*) and trees (such as sitka spruce (*Picea sitchensis*) and shore pine (*Pinus contorta*)) and shrubs (e.g., salal (*Gaultheria shallon*)) that shade out the native meadow grass and forb species. It is anticipated that most restoration areas will have a baseline of zero early blue violets (and OSBs) such that initial management activities will not have any adverse effects to OSBs. Invasive plant species will be suppressed to encourage the establishment of native plants. These efforts will emphasize the establishment of the larval host plant, early blue violet, and native nectar sources most often used by OSBs. The nectar sources, include, but are not limited to, Canada goldenrod, dune goldenrod, California aster, pearly everlasting, dune thistle, and yarrow. Seeding and planting of native vegetation will occur when in TNC's judgment, suppression of invasive vegetation is at a level where native species could be successfully reintroduced. Enhancing or establishing early blue violet populations will be a key factor to encourage breeding and ovipositing activity, and ultimately increasing the number of OSBs. Currently, OSBs are known to occur at the northern and southern boundaries of the area addressed in this Agreement. By improving the quality of their habitat, it is hoped that a functional dispersal corridor between these two existing populations will be established and that OSBs will colonize the restored habitats so as to effectively increase connectivity between them. Shorter dispersal distances will encourage genetic interchange between populations. Successful establishment of habitat will require multiple years of habitat manipulation, depending on the habitat condition and degree of exotic plant invasion on each property. This process is expected to take approximately two to three habitat management treatments and approximately two to three seasons for each treated area. Some restoration and management activities not specifically described in the Agreement may occur; however, they will have to maintain the baseline conditions or enhance native coastal meadow habitat, and will not adversely affect the beneficial actions set forth in the Agreement.

If OSBs are known or are believed to be present on a Cooperator's enrolled property and incidental take is reasonably expected to occur due to otherwise lawful activities (such as restoration and management activities or a returning to baseline conditions), then TNC will make a reasonable estimate of the number and status of the OSBs present, and assess, in consultation with the Service, whether the OSBs should be relocated, if feasible. If warranted, TNC and the Service will recommend procedures (i.e. translocation of early blue violets and/or OSBs if appropriate) the Cooperator and/or TNC can take to avoid future incidental take based on incidental take described in past annual reports.

Monitoring and Reporting

Habitat restoration activities will be followed by post-project monitoring. Site inspections will evaluate the successfulness of coastal meadow habitat restoration efforts. Cooperators will allow access to TNC and/or the Service (or their designees) to monitor habitat conditions to determine long-term success of such actions. Depending upon funding availability, TNC will implement compliance monitoring for management activities specified in each CA, as well as take authorized by the permit. TNC will monitor OSB habitat restoration within the CA area

annually. In the event that TNC is incapable of doing so due to budget or staff limitations, the Service will fulfill the monitoring responsibilities outlined in the Agreement or find another party to assume these responsibilities. An annual report, due no later than December 31 of each year, will include the following: 1) status of the permit, including the number, locations, and total acres of enrolled properties; 2) baseline conditions of newly enrolled properties; and 3) current status of enrolled properties, including: (i) management actions implemented and outcomes if known; (ii) description of activities undertaken pursuant to the Agreement or related to OSB management; and (iii) description of any activities that resulted in, or may have resulted in, incidental take of OSBs, such as habitat modification or destruction, burning, emergency actions taken to protect life or property, etc.

TNC and Cooperators will notify the Service 60 days in advance of any otherwise lawful activities planned to be undertaken on enrolled properties that TNC or the Cooperator reasonably anticipate could result in the take of OSBs above the baseline determination. During such 60 day period, TNC and Cooperator shall consult with the Service to attempt to minimize the effects of the planned activities on OSBs and will provide the Service the opportunity within such 60 day period to capture and/or relocate any potentially affected OSBs.

II. PUBLIC COMMENT

A notice of availability of the Agreement was published in the Federal Register on November 9, 2006 (71 FR 65830). Public comments on the permit application, the proposed Agreement, and the Environmental Action Statement were requested to be received by December 11, 2006. No comments were received.

III. INCIDENTAL TAKE PERMIT CRITERIA – ANALYSIS AND FINDINGS

The final Safe Harbor Agreement policy and associated regulations specifying the permit issuance criteria were published in the Federal Register on June 17, 1999 (*see* 64 FR 32706 and 32717). As set forth in this policy, the Agreement does include: the species and habitats covered; the agreed upon baseline condition criteria for the OSB; management actions that will be undertaken to accomplish the expected net conservation benefit and the agreement term; the incidental take associated with management conditions; a notification requirement to provide the Service with a reasonable opportunity to rescue individuals of OSB; and the activities that would be expected to return the property to baseline conditions and the associated incidental take; and, a monitoring schedule with identified responsible parties.

As set forth in 50 CFR § 17.32(c)(2), the Service finds that the section 10(a)(1)(A) permit issuance criteria for a safe harbor agreement are met as outlined below:

A. The taking will be incidental.

The Service finds that the taking of the OSBs under the Agreement will be incidental to otherwise lawful activities. The activities for which incidental take coverage is sought under the

permit include primarily land management activities associated with coastal meadow restoration. They include commonly used agricultural practices such as planting, weed management, mowing, and, prescribed-fire burning. A return to baseline conditions would involve vegetation management that eliminates early blue violets and/or a change in land use that would involve construction associated activities. Any take of OSBs resulting from these activities will be incidental to, and not the purpose of, these lawful activities.

B. The implementation of the terms of the Agreement will provide a net conservation benefit to the affected species by contributing to their recovery.

By eliminating competition from invasive plant species, setting back succession, restoring native coastal meadow vegetation, and planting adult nectar sources and larval host plants, suitable habitat acreage will increase as will the quality of any existing habitat. Newly available or higher quality habitat will increase the likelihood of OSB movement between two existing populations and hopefully establish new breeding sites that will increase the local population of OSBs. Restored areas between the two known population sites will provide needed habitat connectivity that will make it easier for dispersing OSBs to find new habitats. Having additional populations will increase the likelihood of the species' persistence and provide an opportunity for a new source population, should a catastrophic event, poor weather conditions, or similar events result in the loss of the existing populations. A larger population of OSBs will also increase the likelihood of successful colonization of sites both inside and outside of the Agreement area since a larger number of OSBs are likely to reach nearby habitats. Improved connectivity should encourage the transfer of genetic material and reduce the likelihood of in-breeding depression that is a concern when relatively small populations are isolated for long periods of time from other gene pools.

The Agreement stipulates that written notice will be given prior to any activities that might incidentally take OSBs such that larval host plants or adult butterflies can be removed and placed into another site, if determined to be feasible and practicable. This will reduce the likelihood of the loss of any OSB individuals and, hopefully preserve the larval host plants so that they may be used by other OSBs.

Coastal meadow restoration and OSB translocation techniques are still being developed. Lessons learned by the actions undertaken as a result of the assurances to Cooperators provided by the Agreement, CI, and permit that would otherwise not occur for fear of future regulation should OSBs occupy their properties, will be valuable for future restoration efforts both inside and outside of the Agreement area. Monitoring reports will provide details of restoration actions taken and the outcomes of those actions during the life of the Agreement for that enrolled property.

The Agreement term of 35 years will provide adequate time for TNC to contact landowners, to conduct restoration activities, and to create or improve habitat conditions. There should also be sufficient time for OSBs to discover and use those new sites for many years until the end of the permit term.

Based upon the above, the Service believes a net conservation benefit will be achieved within the 35 year Agreement period. The cumulative impact of this Agreement and the activities it covers, which are facilitated by the authorized take, will provide a net conservation benefit to the species. The net conservation benefit will contribute, directly or indirectly, to recovery of the OSB and to increasing knowledge of successful habitat management techniques which will be applicable to the management of other OSB sites. Without this cooperative effort, these lands would not otherwise be utilized by OSBs in the foreseeable future. The Agreement is a mutually beneficial relationship to benefit this threatened species.

C. The probable direct and indirect effects of any authorized take will not appreciably reduce the likelihood of survival and recovery in the wild of any species.

The Service finds that the taking to be authorized under the proposed permit will not appreciably reduce the likelihood of the survival and recovery of OSBs in the wild. The ESA's legislative history establishes the intent of Congress that this issuance criterion be identical to a finding of "no jeopardy" pursuant to section 7(a)(2) of the ESA and the implementing regulations pertaining thereto (50 § CFR 402.02). The Service has reviewed the Agreement under section 7 of the ESA. In our biological opinion (Fish and Wildlife Service 2007b), which is incorporated herein by reference, the Service has concluded that the issuance of the proposed permit is not likely to jeopardize the continued existence of the OSB, nor adversely modify its critical habitat. This determination was based upon reviewing the current status of the species, the environmental baseline for the action area, and the direct and indirect effects of the proposed action.

D. Implementation of the terms of the Agreement is consistent with applicable Federal, State, and Tribal laws.

The Agreement does not preclude the need to comply with any Federal, State, local, or Tribal laws, but solely serves as an instrument to comply with certain provisions of the ESA under which an enhancement of survival permit is being sought. The Agreement involves many activities for which any legal compliance measures have not changed as a result of the Agreement. Continued operations and future operations will continue to be regulated by applicable laws.

E. Implementation of the terms of the Agreement will not be in conflict with any on-going conservation or recovery programs for the covered, listed species.

This Agreement is an extension of on-going efforts by TNC in the area to restore coastal meadows. Safe Harbor Agreements are specifically intended to address situations like this one involving voluntary actions that encourage federally-listed species to occur on private lands. We are not aware of any other on-going conservation programs within the Covered Area, or involving the OSB for which the Agreement might be in conflict.

F. The applicants have shown capability for and commitment to implementing all the terms of the Agreement.

The applicant, TNC, has all shown capability for, and commitment to, implementing all the terms of the Agreement through their work in the area and elsewhere. TNC is a national organization with locally operating offices. They devote many of their resources to habitat restoration activities and have experienced staff available to devise and carry out these activities. TNC has already begun restoration and monitoring activities in the area. TNC has agreed to at least partially fund future work themselves and/or seek additional conservation program awards or grants.

IV. GENERAL CRITERIA AND DISQUALIFYING FACTORS - FINDINGS

The Service has no evidence that the permit application should be denied on the basis of the criteria and conditions set forth in 50 CFR § 13.21(b) through (c). The applicant has met the criteria for the issuance of the permit and approval of the Agreement, and does not have any disqualifying factor that we are aware of that would prevent the permit from being approved under current regulations.

V. RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the proposed action, I endorse the approval and issuance of an enhancement of survival permit (Permit Number TE 154037-0) to authorize the incidental take of the Oregon silverspot butterfly in accordance with the Agreement.

State Supervisor
Oregon Fish and Wildlife Office

06/14/07
Date

References

Fish and Wildlife Service. 2007a. Environmental Action Statement Screening Form. Portland, Oregon. May 2007.

Fish and Wildlife Service. 2007b. Intra-Service Biological Opinion For Issuance of an Endangered Species Act Section 10(a)1(A) Permit for the Proposed Oregon Silverspot Butterfly Central Coast Safe Harbor Agreement. May 2007.

The Nature Conservancy and Fish and Wildlife Service. 2007. Safe Harbor Agreement with The Nature Conservancy, and Private Property Owners for Voluntary Enhancement/ Restoration Activities Benefiting Oregon Silverspot Butterfly Central Coast Populations in Lane County, Oregon. May 2007.