

**U. S. FISH AND WILDLIFE SERVICE**  
**NEPA ENVIRONMENTAL ACTION STATEMENT**  
**for**  
**CATEGORICAL EXCLUSION**

**I. Project Information**

**A. Project Name:**

Amended Willamette Valley Native Prairie Habitat Programmatic Safe Harbor Agreement for Fender's blue butterfly

**B. Affected Species:**

Fender's blue butterfly (*Icaricia icarioides fenderi*)  
Kincaid's lupine (*Lupinus sulphureus* ssp. *kincaidii*)  
Willamette daisy (*Erigeron decumbens*)  
Bradshaw's lomatium (*Lomatium bradshawii*)  
Nelson's checker-mallow (*Sidalcea nelsoniana*)

**C. Project Size (in stream miles and acres):**

The geographical area covered by this programmatic Safe Harbor Agreement (Agreement) includes the range of the Fender's blue butterfly, which occurs on prairie habitat associated with Kincaid's lupine and two other lupine species within the Willamette Valley in Benton, Lane, Linn, Polk, Yamhill and Washington Counties of Oregon. We are also including Marion County, because it is possible that Fender's blue butterfly may be discovered or may recolonize or be returned to sites there in the future. Properties that are eligible for enrollment are non-Federal lands where the butterfly occurs or could occur through colonization, translocation or reintroduction. They are almost always found on drier upland prairies. However, one population has been found in wet, Deschampsia-type prairie (Willow Creek). Fender's blue butterflies occupy sites located almost exclusively on the western side of the valley, within 33 km (21 mi) of the Willamette River<sup>1</sup>.

**D. Brief Project Description** (including minimization and mitigation plans as appropriate):

- The need (for the project): As a large portion of the remnant prairie habitats within the range of these species is in private ownership, recovery will to a large extent depend upon the successful development of partnerships with private landowners and support of their

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<sup>1</sup> U.S. Fish and Wildlife Service. 2000. Endangered Status for "*Erigeron decumbens*" var. "*decumbens*" (Willamette daisy) and Fender's blue butterfly ("*Icaricia icarioides fenderi*") and Threatened Status for "*Lupinus sulphureus*" ssp. "*kincaidii*" (Kincaid's Lupine); Final Rule. Federal Register 65:3875-3890.

efforts to protect, restore and manage native prairie habitats in the region.

- The purpose (of the project): The primary objective of the Agreement is to encourage restoration activities designed to benefit the Fender's blue butterfly and associated species, including Kincaid's lupine, on non-Federal lands.
- The proposed project: The proposed action is to amend a section 10 "Enhancement of Survival" permit (TSE208532-0) to the Oregon Fish and Wildlife Office (OFWO) associated with the Agreement. This programmatic Agreement covers associated prairie conservation and restoration activities that are designed to result in a net conservation benefit for the Fender's blue butterfly on non-federal lands, while providing assurances to landowners that they may return their enrolled property to baseline conditions for the butterfly after they have undertaken voluntary efforts to benefit the species.
- The duration (term requested for permit): Based on the limited extent of remaining prairie habitat, the amount of designated critical habitat in private ownership, and expected landowner interest in supporting recovery efforts and enrolling in the Agreement, a conservative (i.e., high) estimate of the maximum area that will be enrolled under this Agreement during its 26 year term is 1052.19 hectares (2,600 acres), based on enrolling an average of 40.47 hectares (100 acres) per year. The associated section 10(a)(1)(A) permit is proposed to have a term of 36 years.
- The lands covered under the programmatic Safe Harbor Agreement: The permit area under this programmatic Agreement includes the geographical range of the Fender's blue butterfly, which occurs on prairie habitat associated with Kincaid's lupine and two other lupine species within the Willamette Valley in Benton, Lane, Linn, Polk, Yamhill and Washington Counties of Oregon. We are also including Marion County, because it is possible that Fender's blue butterfly may be discovered or may recolonize or be returned to sites there in the future. Properties that are eligible for enrollment are non-Federal lands where the butterfly occurs or could occur through colonization, translocation or reintroduction. The maximum area covered under the Permit and Agreement is 1052.19 hectares (2,600 acres).
- Species occupation and baseline: The geographical range of the Fender's blue butterfly currently occurs on prairie habitat associated with Kincaid's lupine and two other lupine species within the Willamette Valley in Benton, Lane, Linn, Polk, Yamhill and Washington Counties of Oregon. As of 2014, Fender's blue butterfly was found at an estimated 92 sites in Oregon with a total species abundance estimate of 16,664 adults (Fitzpatrick, 2014)<sup>2</sup>. Parties agree that prior to the enrollment of a Cooperator through a Cooperative Agreement under this Agreement, a current baseline determination will be made for the covered species. The baseline(s) will be established by mutual agreement between the Parties, and, if greater than zero, will be described and mapped as occupied habitat in each site-specific plan. If desired by any of the Parties, or deemed necessary by

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<sup>2</sup> Fitzpatrick, G. 2014. 2014 status of the Fender's blue butterfly (*Icaricia icarioides fenderi*) in the Willamette Valley, Oregon. Report to Oregon Natural Heritage Program and the U.S. Fish and Wildlife Service. 44pp.

the Permittee to obtain a baseline determination, a survey or site review will be conducted at the appropriate time of year by a qualified biologist.

- **Goals and objectives for covered species:** Goals and objectives for the Fender's blue butterfly are conserving existing populations and actively maintaining, enhancing and expanding the size of existing butterfly habitat patches to provide for the recovery of the Fender's blue butterfly. In addition, reestablishing habitat connectivity by creating stepping stones of habitat between existing butterfly populations will improve the prospects for individuals to reach other suitable habitats for reproduction, dispersal and recolonization. Cooperators must carry out habitat restoration and/or management activities that are anticipated by the Parties to produce a net conservation benefit to Fender's blue butterfly.

While Kincaid's lupine is not a covered species under this Agreement, it is recognized as critical in providing for the conservation and recovery of the Fender's blue butterfly since it is a larval host plant and nectar source. Being a federally-listed species, it is also in need of management actions to ensure its long-term survival. Therefore, actively restoring and managing butterfly habitat will typically involve actions designed to benefit both listed species.

- **Land and benefiting management activities (including avoidance, minimization and mitigation measures):** The on-the-ground activities listed below serve as a menu of all activities that are covered under the Agreement. Activities will be chosen selectively and incorporated into site-specific plans as appropriate for each property to be enrolled.

Removal of invasive non-native species and woody vegetation: Management and site treatments to control undesirable species may include manual methods, mechanical methods, prescribed fire, herbicide use, solarization and infrared radiation. Best Management Practices (BMPs) have been developed and must be followed for these activities, as applicable, to reduce the risk of impacting non-target species, including Fender's blue butterfly and Kincaid's lupine.

Revegetation: Native plants may be seeded or planted to increase the cover and diversity of native vegetation on a project site, discourage potential spread and establishment of exotic and woody species and improve habitat for Fender's blue butterfly and other associated prairie species.

Collection of Kincaid's lupine seed and plant material: The collection of some leaves, flowers, and seeds from Kincaid's lupine plants found on the enrolled lands may be allowed to support various seed banking, propagation and scientific research efforts designed to benefit the species.

Reintroduction and augmentation of Kincaid's lupine: Kincaid's lupine may be reintroduced to suitable habitats or to augment existing populations on enrolled properties by seeding or planting in order to support its recovery efforts and improve habitat for the Fender's blue butterfly.

Reducing threats: Land use practices and site conditions may be changed to improve conditions for the Fender's blue butterfly, Kincaid's lupine, and other associated species. Opportunities to include measures that reduce threats and further improve conditions for listed species will be determined on a site-specific basis using available information, including recovery plans and an understanding of landowner interests and needs.

- Monitoring: Surveys may be conducted for Fender's blue butterfly and Kincaid's lupine to determine the baseline for the covered species, to monitor responses to management activities, and to assess population health and trends.

## **II. Does the programmatic SHA fit the following Department of Interior and Fish and Wildlife Service categorical-exclusion criteria?**

### **A. Are the effects of the programmatic SHA minor or negligible on federally listed, proposed, or candidate species and their habitats covered under the programmatic SHA, prior to implementation of the minimization and mitigation measures, if any?**

Yes. None of the proposed management actions proposed under the programmatic SHA are likely to permanently decrease reproduction, numbers, or distribution of Fender's blue butterfly (*Icaricia icarioides fenderi*), Willamette daisy (*Erigeron decumbens*), Bradshaw's lomatium (*Lomatium bradshawii*), Kincaid's lupine (*Lupinus sulphureus* ssp. *kincaidii*), or Nelson's checker-mallow (*Sidalcea nelsoniana*). In fact, habitat conservation and restoration activities are likely to increase the reproduction, numbers, and distribution of the five species.

The federally-listed plants (above) will generally be dormant during management activities, and thus, the effects of management activities covered under this programmatic SHA when plants are dormant will have negligible impact, and will provide enhanced growing conditions. Management activities that are implemented when plants are growing will be done in a manner that minimizes effects to listed plants. Spring mowing may only occur in areas unoccupied by Fender's blue butterfly and only occur outside a two meter buffer (6.6 feet) from federally-listed plant species. Raking may result in the death or injury of one percent of the estimated adult Fender's blue butterfly population and of larvae and eggs in the action area due to crushing or removal from habitat during removal of duff and litter layer. Effects to Fender's blue butterflies associated with raking are expected to be minor to the population overall.

Prescribed burns may kill a small but minor number of Willamette daisy, Bradshaw's lomatium, or Nelson's checker-mallow; studies have shown however, that the species respond positively to fire, and populations tend to increase in two to three years following a fire. Mortality of Fender's blue butterfly by monitoring, habitat maintenance and restoration activities are expected to be very low and therefore negligible. Recent research indicates that few larvae are killed by mowing, and the population generally rebounds in the year after treatment. Effects from these actions are expected to be negligible to the population, overall. Planting of nectar plants will improve habitat and benefit the viability of Fender's blue butterfly populations over time, and techniques used to control woody and weed plant expansion will improve management quality.

for Fender's blue butterfly and the federally-listed plants.

The majority of the anticipated mortality to Fender's blue butterfly from restoration activities is associated with prescribed fire. Although some take is expected from certain management actions such as prescribed fire, implementing burns in accordance to project description provides reasonable certainty that, following treatments, Fender's blue butterfly will not only rebound but will likely increase in size. We believe any take associated with prescribed fire activities will be minor and negligible. This is based upon the current enrolled lands where to date, no take associated with prescribed burns has occurred under this Agreement, and the ability to conduct a prescribed fire on private lands is highly constrained by regulations.

Chemical treatment activities have been designed to reduce the risk of harming butterflies, their host plants and nectar sources, and minimize exposure of larval Fender's blue butterflies to herbicides. We expect a small number of Fender's blue butterfly larvae to be killed or injured by incidental exposure to herbicide, or adults that will be harmed by the loss of host or nectar plants, but given the targeted application methods specified in the Agreement, we expect any death or injury to be less than five percent of larvae or adults in the action area. Effects from these actions are expected to be negligible to the population overall. Effects of herbicide treatment on federally-listed plants are only minor given the targeted methods and timing of activities specified in the proposed action.

While Fender's blue butterflies and federally-listed plants may be lost on properties that are returned to baseline conditions, the Agreement does not permit losses of the butterfly below baseline levels. In fact, a net conservation benefit for the butterfly must be expected in order for lands to be eligible for enrollment under the Agreement. Also, return of participating properties to baseline condition is not expected to occur all at the same time; therefore, the loss at any one time during return to baseline condition would be restricted to those butterflies and federally-listed plants on individual properties as they are returned to baseline conditions. While any landowner may choose to return his or her enrolled lands to baseline conditions, we anticipate that many landowners will have a continued interest in conserving the species and will opt to maintain their native prairie habitats well into the future. In addition, landowners are required to notify the OFWO 60 calendar days in advance of any planned activity that the Cooperator reasonably anticipates will result in "take" (i.e., death, injury or other harm) of the covered species on the enrolled property. We anticipate this will help to minimize potential losses, since in these instances the OFWO will have the opportunity to collect and relocate any remaining butterflies or listed plants from areas to be affected if appropriate and feasible. The OFWO is also to be notified of any proposed or pending transfer of ownership so that the new owners can be contacted and invited to continue the existing Certificate of Inclusion or enter into a new agreement that would benefit listed species on the enrolled property.

We expect some mortality to those individuals that are not captured and successfully relocated when the landowner returns to baseline. Return to baseline conditions may also reduce the quality and quantity of host plants and nectar sources, reducing the likelihood of butterfly survival and successful reproduction. Assuming 75 properties may become enrolled during the term of the Agreement, and Agreement activities lead to the occurrence of 144 butterflies above baseline conditions, which was found to be the average number of per non-federal site surveyed

between 2000 and 2007 (Fish and Wildlife Service, unpublished data, 2008)<sup>3</sup>, losses due to return to baseline are estimated at 144 butterflies per property. However, we believe this estimate of losses may overestimate potential losses because: 1) enrolling 75 properties and increasing butterfly populations by 144 individuals on each property is a high aspirational goal; 2) we anticipate that many landowners will likely continue their efforts to benefit Fender's blue butterfly and its habitat, including Kincaid's lupine as its host plant, such that net gains in butterfly and lupine populations are expected rather than returning their properties to baseline conditions; 3) landowners that return their properties to baseline conditions might not impact 100 percent of the population on their lands; 4) return of participating landowners to baseline condition will occur individually over the duration of the Agreement; and 5) efforts will be made to collect and relocate butterflies to mitigate potential losses. We believe habitat improvements associated with the implementation of the Agreement are anticipated to increase the butterfly population over time. While the extent to which the numbers and distribution of butterflies or listed plants will improve as a result of Agreement activities is unknown, net increases in butterflies, federally-listed plants and other associated native prairie species are expected to greatly exceed any losses associated with implementation of Agreement activities or return to baseline.

Raking, mowing, and burning will have a beneficial effect on Fender's blue butterfly, Kincaid's lupine and Willamette daisy critical habitat because it would allow the reduction or removal of thick thatch buildup and provide bare soil spaces for seedlings and new vegetative growth of Kincaid's lupine, Willamette daisy and other low growing grasses and forbs to establish.

The remaining prairie restoration and management treatments will ultimately benefit critical habitat for Fender's blue butterfly, Kincaid's lupine and Willamette daisy by acting to reduce the succession of dense canopy vegetation which block sunlight necessary for Fender's blue butterfly to seek nectar and search for mates and which block sunlight necessary for the plants' growth and reproduction. These treatments will increase the availability of stepping stone habitat between natal lupine patches necessary for dispersal and connectivity of Fender's blue butterfly and pollinators of Kincaid's lupine and will reduce the occurrence of invasive plants which compete with Kincaid's lupine and Willamette daisy. In addition, native prairie plant population augmentation and enhancement will increase the availability of larval host plants, adult nectar sources, and other low growing grasses and forbs necessary for Fender's blue butterfly.

Restoration efforts within designated critical habitats may be negated if enrolled lands are returned to baseline conditions. While any landowner may choose to return to his or her enrolled lands to baseline conditions, we anticipate that many landowners will have a continued interest in conserving the species and will opt to maintain their native prairie habitats will into the future.

**B. Are the effects of the programmatic SHA minor or negligible on all other components of the human environment, including environmental values and environmental resources (e.g. air quality, geology and soils, water quality and quantity, socio-economic, cultural resources, recreation, visual resources, etc.), prior to implementation of the**

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<sup>3</sup> Fish and Wildlife Service. 2008. Programmatic Consultation on Western Oregon Prairie Restoration Activities. U.S. Fish and Wildlife Service, Portland, Oregon. 23pp.

## **minimization and mitigation measures?**

Yes. The types of activities that will be conducted under the Agreement are primarily designed to maintain or restore native prairie habitat conditions. This will typically involve engaging in management practices that maintain early seral conditions, primarily by reducing encroachment by invasive and woody species and mimicking the effects of fire as a natural disturbance regime. Ground disturbance is expected to be minimal, since heavy earth moving is not typically required for maintaining or improving prairie habitats as described in section I.,D. above. The target species primarily occur on upland prairies, so water quality and quantity should not be affected. In the fall (i.e., mid-August through November), prescribed burns may be performed to discourage woody plant growth, remove accumulated leaf litter and duff, and encourage the spread of native prairie grasses and forbs. However, any projects that involve burning will be appropriately planned and permitted to avoid and minimize any adverse effects on air quality. The proposed activities are not expected to affect environmental, socioeconomic or cultural resources in any major way.

**C. Would the incremental impacts of this programmatic SHA, considered together with the impacts of other past, present and reasonably foreseeable future actions (regardless of what agency or person undertakes such other actions) not result, over time, in a cumulative effect to the human environment (the natural and physical environment) which would be considered significant?**

The impacts, under the Agreement, even considered with other similarly situated projects, are not expected to result in significant cumulative effects to environmental values or resources due to the limited nature of the activities (e.g., very little ground disturbance on the enrolled lands), the limited total area that will be affected overall, and the space between projects over a large geographic area.

**III. Do any of the exceptions to categorical exclusions (extraordinary circumstances) listed in 43 CFR 46.215 apply to this programmatic SHA?**

**Would implementation of the programmatic SHA:**

**A. Have significant impacts on public health or safety?**

No. Public health and safety should not be affected by the proposed activities covered under the programmatic SHA. Any projects that involve burning will be appropriately planned and permitted to avoid and minimize any adverse effects on air quality. Herbicide treatment activities on SHA covered lands are only minor given the targeted methods and timing of activities specified in the proposed action. All herbicides are expected to be applied in accordance with applicable regulations of the Environmental Protection Agency (EPA) and applicable laws of the state of Oregon.

**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 (Executive Order 11990) or**

**floodplains (Executive Order 11988); national monuments; migratory birds, or other ecologically significant or critical areas?**

No. Activities that may occur on the enrolled lands are not expected to result in any major ground disturbance that could affect the types of resources listed above. In addition, all enrolled lands will be in non-Federal ownership, so no Federal resource lands that fit the categories above will be affected. The target species primarily occur on upland prairies. On the more rare sites where they may be found to occur in wet prairies, the aim of those projects would be to maintain or enhance wet prairie conditions, so any adverse effects to wetlands and other water-related resources are expected to be negligible. The Service will ensure that all on-the-ground work is in compliance with the National Historic Preservation Act, as is standard practice for all Service programs, so there should be no adverse effects on historic or cultural resources.

**C. Have highly controversial environmental effects (defined at 43 CFR 46.30), or involve unresolved conflicts concerning alternative uses of available resources?**

No. Eligible properties typically include pastures, hayland, cropland, vineyards, nurseries, Christmas tree farms, woodlands, and urban and rural areas managed as open spaces or left as remnant habitats. Activities that will occur on the enrolled lands are not expected to affect adjacent properties, and improving native prairie habitat is not expected to change the general character of the landscape in any way that would be controversial. Eligible property owners in the vicinity of enrolled lands will have the opportunity to participate in the program and enroll in the Agreement if they become interested in supporting recovery efforts, or if they become concerned about benefits to listed species on or near their properties.

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

No. Prairie habitat restoration has been occurring on both public and private lands in the Willamette Valley and elsewhere for many years. While there is still more to be learned about the effectiveness of various techniques, maintaining, managing and restoring these habitats does not pose highly uncertain, unique or unknown environmental risks.

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

No. As mentioned above, the types of activities that may occur under the Agreement have been occurring for many years and are not uncommon. Establishing an Agreement that will allow landowners to receive ESA assurances for these types of actions where they are expected to benefit listed species and support species recovery efforts is not expected to set a new precedent that could result in potentially significant environmental effects.

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

No. As mentioned above, the impacts of the activities associated with the Agreement, even considered with other similarly situated projects, are not expected to result in significant

cumulative effects to environmental values or resources due to the limited nature of the activities (e.g., very little ground disturbance on the enrolled lands), the limited total area that will be affected overall, and the space between projects over a large geographical area.

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

No. Participation and enrollment of lands under the Agreement should not have significant impacts on properties that are listed or eligible for listing on the National Register of Historic Places.

**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. Landowners may only enroll in the Agreement only if their activities are expected to result in benefits to listed species. Some short-term adverse effects may occur as activities are implemented, but properties will only be enrolled when it is determined that the long-term benefits greatly outweigh the risks. BMP's are outlined in the Agreement, and will be employed for the various activities as applicable and appropriate.

It is expected that any enrolled lands that include designated critical habitat will be enhanced to benefit the Fender's blue butterfly, Kincaid's lupine and Willamette daisy with a focus on the primary constituent elements that comprise suitable habitat for these species. If any other listed species or critical habitat for other species occurs on the enrolled lands, it is expected that they will benefit as well, as the factors that have led to the decline of listed prairie species in the Willamette Valley have much in common and the remedies are similar. Site-specific plans will be developed for all lands to be enrolled, and they will include measures to meet the needs of both the target species (i.e., Fender's blue butterfly, Kincaid's lupine) as well as other listed species as opportunities arise.

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

No. Prior to conducting work, all permits will be obtained and regulations will be followed, as applicable.

**J. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).**

No. Participation and enrollment of lands under the Agreement will have no disproportionately high and adverse effect on low income or minority populations. Properties that are eligible for enrollment are non-Federal lands where the butterfly occurs or could occur through colonization, translocation or reintroduction. Eligible property owners will have the opportunity to participate in the program and enroll in the Agreement if they become interested in supporting recovery efforts, or if they become concerned about benefits to listed species on or near their properties.

**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 (Executive Order 13007).**

No. All enrolled lands will be in non-Federal ownership, so no Federal resource lands that fit the categories above will be affected.

**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 Executive Order 13112).**

No. Management of Fender's blue butterfly habitat requires actively maintaining an open, prairie condition – a condition that ensures the vigor of obligate lupine host plants and other native nectar plants, and which is conducive to butterfly flight in search of food and mates. A variety of tall grasses and herbaceous and woody species, including many that are invasive non-native species, shade and displace the Kincaid's lupine, and competes for water and nutrients. Site-specific plans for enrolled landowners will include active management practices (e.g., prescribed burning, mowing and weed removal) that will maintain, restore and enhance habitat for the lupine and other native prairie species. These active management practices are designed to reduce the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur within the enrolled properties.

#### **IV. ENVIRONMENTAL ACTION STATEMENT**

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

Based on the information and analysis above, I determine that the proposed issuance of an Enhancement of Survival Permit for the Amended Willamette Valley Native Prairie Habitat Programmatic Safe Harbor Agreement for Fender's blue butterfly project qualifies for a categorical exclusion, as defined in 40 CFR 1508.4. Furthermore, no extraordinary circumstances identified in 43 CFR 46.215 exist for the programmatic SHA. Therefore, the Service's permit action for the programmatic SHA is categorically excluded from further NEPA review and documentation, as provided by 40 CFR 1507.3; 43 CFR 46.205; 43 CFR 46.215; 516 DM 3; 516 DM 8.5; and 550 FW 3.3C. A more extensive NEPA process is unwarranted, and no further NEPA documentation will be made.

Other supporting documents:

- Amended Willamette Valley Native Prairie Habitat Programmatic Safe Harbor Agreement for Fender's blue butterfly
- Reinitiation of formal consultation on the Willamette Valley Native Prairie Habitat Programmatic Safe Harbor Agreement

Signature Approval:

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Paul Henson, Ph.D.  
State Supervisor  
Oregon Fish and Wildlife Office

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Date