



# United States Department of the Interior

OFFICE OF THE SECRETARY  
Office of Environmental Policy and Compliance  
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IN REPLY REFER TO  
ER13/7

*Electronically Filed*

February 22, 2013

Adam Rush  
Idaho Department of Transportation  
ITD Office of Communications  
3311 W. State Street  
Boise, ID 83707

Dear Mr. Rush:

The Department of the Interior (Department) has reviewed the Federal Highway Administration's (Administration) Draft Environmental Impact Statement (DEIS) and Section 4(f) Evaluation for the Proposed Realignment of Thorncreek Road to Moscow, Latah County, ID. The purpose of this project is to improve public safety and increase highway capacity on US-95 south of Moscow between Thorncreek Road (MP 337.67) and the South fork Palouse River Bridge (MPO 344.00). The Department offers the following comments for your consideration.

## **SECTION 4(f) EVALUATION COMMENTS**

The Department concurs that the preferred alternative selected E-2 would avoid Section 4(f) resources. We acknowledge your consultation with the SHPO and recommend continued consultation with the SHPO to ensure that all measures have been taken to minimize harm to Section 4(f) resources should the preferred alternative change.

## **GENERAL COMMENTS**

These comments are provided pursuant to the Endangered Species Act (ESA), as amended (16 U.S.C. § 1531 *et seq.*); Fish and Wildlife Coordination Act, as amended (16 U.S.C. § 661 *et seq.*); the Migratory Bird Treaty Act (MBTA), as amended (16 U.S.C. § 703); and the National Environmental Policy Act (42 U.S.C. § 4321 *et seq.*). Our comments reflect considerable concern about the environmental impacts of the proposed action, and for potential project-related impacts should the Administration's preferred alternative be selected for construction.

## Mitigation Recommendations

In addition to the mitigation recommendations provided in our Specific Comments, we are providing some additional mitigation measures that are applicable to any alternative selected by the Administration. We recommend that the following measures be included in the Final Environmental Impact Statement (FEIS) for the proposed action:

- 1) Native Vegetation: Native grasses, shrubs or trees should be used to restore disturbed areas requiring the removal of native vegetation during construction. In addition, these sites should be monitored in subsequent years to ensure the success of the restoration effort. The U.S. Fish and Wildlife Service (Service) would be willing to provide a list of native plants for consideration in a planting program.
- 2) Weed Control: An integrated weed management plan should be developed and funded to prevent weed establishment and spread in Palouse prairie remnants throughout the 0.6 mile weed impact zone identified by the Administration technical documentation.
- 3) Accommodation for Wildlife Migration Corridors: See our comments 12, 13, and 23 below (Specific Comments), pertaining to wildlife crossings.

## **SPECIFIC COMMENTS**

- 1) Section ES.6, Table 1, Summary of Alternatives' Benefits and Effects, page 13: According to Table 1, 3.61 "*wetland (acres)*" would be affected by alternative E-2; however, the 2006 Wetlands Functional Assessment prepared by Shelly Gilmore for the Idaho Department of Transportation (ITD) for this project (Gilmore 2006) documented 4.9 acres of wetland impact for the same alignment. The FEIS should disclose the source of this discrepancy and provide documentation to support the different numbers. The 2012 Wetland Delineation Technical Report provided with the DEIS does not explain the discrepancy (Gilmore 2012).
- 2) Section ES.8, Topics of Concern or Controversy, page 16: "*IDFG, EPA, and USFWS prefer the C-3 Alternative to the E-2 Alternative. This is primarily due to the perceived effects of the E-2 Alternative on wildlife habitat and movement based on its proximity to Paradise Ridge.*"

The Service has determined that implementing the E-2 alternative would result in the greatest impact to Palouse prairie habitat, including wildlife, sensitive plants, and high value wetlands, therefore the remaining two action alternatives (evaluated in the DEIS) would have lesser impacts to resources of concern to the Service. Please see our Summary Comments, below.

- 3) Section ES.8 Topics of Concern or Controversy, page 17: "*In December 2010, ITD transmitted the findings to IDFG in a report titled Assessment of Potential Big Game Impacts and Mitigation Associated with Highway Alternatives from Thorncreek Road to*

*Moscow (Sawyer 2010) which concluded that ...mitigation for direct habitat loss, indirect habitat loss, or loss of connectivity for moose or elk was not warranted.*"

Given that ITD commissioned four different wildlife experts (Melquist, Ruediger, Sawyer and Idaho Department of Fish and Game (IDFG)) that came to differing conclusions regarding impacts to large ungulates and mitigation recommendations, the FEIS should discuss how the Administration reconciled what the project impacts to ungulates will be and what mitigation is, or is not, warranted.

- 4) Section 2.5.2, Screen Alternatives, Eastern Corridor, page 45: *"The E-2 Alternative was forwarded for further consideration because it . . . . was the only alternative not to affect rare plant communities."*

On the contrary, due to its close proximity to Paradise Ridge, the E-2 alternative would have the highest impact on Palouse prairie remnants and rare plant restoration efforts being conducted by the Service and other resource entities such as the Latah Soil and Water Conservation District and the IDFG. This statement should be modified in the FEIS to reflect that E-2 will have the greatest impact on rare plant communities.

- 5) Section 2.6, Comparison of Alternatives, E-2 (Preferred Alternative): *"The primary disadvantages of E-2 compared to the other alternatives are that it would be located closer to the base of Paradise Ridge . . . ."*

This paragraph should be modified in the FEIS to show that the Paradise Ridge area is also considered a key conservation area for *Silene spaldingii* (ESA listed threatened) and that the weed effects of implementing alternative E-2 would extend all the way to the top of Paradise Ridge, thus affecting the largest remaining Palouse prairie remnant in Latah County.

- 6) Section 3.8.2, Methodology, Vegetation Studies, page 95:  
Additional information was provided to the ITD by the Service concerning vegetation found in the action area, including a 2012 report entitled *"Conservation of the Palouse Prairie Ecosystem, Phase 3, Site Assessment of Potential Remnants of Palouse Grassland in Latah County, Idaho"* (Hill 2012). Associated GIS data layers and maps were also provided to ITD in 2012. The FEIS should incorporate this additional data where applicable.
- 7) Section 3.8.3, Existing Conditions, Palouse Bioregion, page 96: *"The Palouse Grasslands are considered by the Idaho Natural Heritage Program to be one of the most endangered ecosystems in the US (Noss et al. 1995)."*

The referenced document (Noss et al.) was published by the National Biological Service (now Biological Resources Division, U.S. Geological Survey) and therefore reflects the scientific determination by the Department (with concurrence by the State of Idaho Natural Heritage Program) that Palouse prairie is critically endangered (>98% decline). In addition, several of the Palouse Grassland plant associations are considered globally

imperiled by The Nature Conservancy and Natural Heritage/Conservation Data Center network (Grossman et al. 1994). The FEIS should include a discussion that addresses the consensus of multiple agencies and organizations that the Palouse prairie is a critically endangered ecosystem.

- 8) Section 3.8.3, Existing Conditions, Invasive Plants, page 100: “...*five species of noxious weeds were found in the project area (Lass and Prather 2007).*”

Lass and Prather also found 27 other invasive plant species of concern in the project area and specifically identified the Palouse prairie remnants east of the proposed alignments as being the most vulnerable, especially from wind dispersed seed. Because of this, the E-2 alignment would have the greatest weed impact on Palouse prairie remnants. The Administration’s analysis of the effects of invasive plant species associated with the implementation of the various alternatives on native plant communities is incomplete throughout the DEIS. The potential loss of the few remaining Palouse prairie remnants through conversion to non-native vegetation due to increased weed pressure from the various alternatives should be thoroughly discussed in the FEIS. The FEIS should also include a detailed discussion of measures to implement weed spread and establishment prevention, monitoring and mitigation for the entire 0.6 mile weed impact area identified by Lass and Prather (Lass and Prather 2007).

- 9) Section 3.9.3, Existing Conditions, Spalding’s catchfly, page 110: “*The next closest known occurrences of the species are 10 miles from the project area in Genesee and 15 miles west of the project area in Colton, Washington (ITD 2005). USFWS completed additional surveys from 2008 to 2010; however no new plants were identified in the project area (Hill 2012).*”

Although no new occurrences of Spalding’s catchfly (*Silene spaldingii*) were found in the project area by Hill, new occurrences of that plant species were found closer than 10 miles from the project area. Hill’s 2011 report documents a new occurrence found in 2008 approximately 8 miles from the project area and another new occurrence documented in 2009, also approximately 8 miles from the project area. This documentation was provided to ITD by the Service in November 2012. The Administration should incorporate this updated information into the FEIS.

- 10) Section 4.2 Land Use and Recreation Effects, E-2 (Preferred Alternative), page 143: “*E-2 would affect the same types of land use categories as the other alternatives; but would affect more CRP land than other alternatives.*”

The difference in impacts to the Conservation Reserve Program (CRP) land among the alternatives is significant; 43.5 acres along the E2 alignment versus 9 acres each along the C3 and W4 alignments. Breeding Bird Surveys indicate that no other avian habitat group or guild has as many declining populations as do grassland nesting birds (Peterjohn and Sauer 1999). Studies show that some grassland nesting species prefer CRP land to other available habitat (Johnson and Igl 1995, Cunningham 2000), thus loss of CRP land could cause declines in these species’ local populations.

Given that the E-2 alignment will disproportionately affect CRP lands, the Administration should include an analysis of project alternatives on migratory bird nesting habitat on CRP lands in the FEIS for this action.

11) Section 4.6.2, Wetland Effects, Table 45, Page 155:

According to the DEIS, the E-2 alignment is the only alternative that impacts palustrine scrub-shrub (PSS) wetlands. Additionally, it is the only alignment that impacts a wetland adjacent to a pine stand. The temporal loss of the functions and values associated with PSS wetlands are typically longer than that of emergent wetlands. This is because the plant community associated with PSS wetlands is dominated by woody vegetation, such as trees and shrubs up to 20 feet in height. This vegetation takes longer to mature to a point that replaces the existing functions and values (Cowardin et al. 1979). The FEIS should show the extent of this temporal loss and how these losses will be mitigated.

12) Section 4.6.2, Wetland Effects, E-2 (Preferred Alternative), Avoidance, Minimization and Mitigation, Page 158: *“404(b)(1) Guidelines require all appropriate and practicable steps be taken to minimize adverse effects to the aquatic system, including compensatory mitigation. Wetland impacts that cannot be avoided or minimized further will be mitigated through a compensatory mitigation process.”*

The Service has adopted the same definition and sequential approach to mitigation as found in the NEPA regulations. First, avoid the impact altogether by not taking a certain action or parts of an action; second, minimize impacts by limiting the degree or magnitude of the action and its implementation; third, rectify the impact by repairing, rehabilitating, or restoring the affected environment; fourth, reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action; and last, compensate for the impact by replacing or providing substitute resources or environments. This sequential approach is similar to that used by the EPA (USFWS 1981, EPA 2013). The Wetland Effects section of the FEIS should include a thorough analysis using NEPA’s sequential approach to mitigation for wetland impacts, by first avoiding impacts and second, minimizing impacts, before discussing compensatory mitigation for those impacts. Minimizing the impact of the action to wetlands could include implementing measures that would not degrade their function and value (e.g. bridging wetlands to allow the movement of wildlife through the road prism).

13) Section 4.6.2, Wetland Effects, E-2, Avoidance, Minimization and Mitigation, Page 158. *“For the Action Alternatives there will be between 0.99 and 5.45 acres of unavoidable wetland impacts.”*

According to Table 2 in the DEIS, a total of 3.61 acres of wetlands would be affected by the implementation of the preferred E-2 alternative. Of this total, 0.92 acres are classified as PSS wetlands, a wetland type that is unique to the E-2 alignment. This wetland type can provide habitat for an array of wildlife including migratory birds. Because of the cover they provide and availability of water, PSS wetlands are often used as movement corridors for various wildlife species, including large and small mammals. At a

minimum, the continuity of PSS wetlands at two locations along the E-2 alignment will be fragmented if the preferred alternative is implemented. The DEIS does not indicate what measures would be taken to avoid or minimize the impact to these wetlands and associated wildlife habitat function and value. For example, the FEIS should show if there are any provisions in project design, such as bridging or sufficiently sized culverts at these locations (PSS), which would allow the movement of large and small mammals through the road prism.

- 14) Section 4.6.2, Wetland Effects, E-2, Avoidance, Minimization and Mitigation, Page 158.  
*“Mitigation will be implemented according to 33 CFR 325 . . . . and will replace any lost functions and values.”*

This sentence should be modified by adding the word “*compensatory*” preceding the word “*mitigation.*”

- 15) Section 4.8.3, Palouse Restoration Project Effects, page 167:  
This section does not discuss the significant Federal investment in habitat restoration and easement acquisitions in the area of Paradise Ridge and the effects of increased weed establishment risk from the E-2 alignment’s proximity. Significant Federal funds have been spent controlling weeds in existing Palouse prairie remnants that are within the 0.6 mile weed impact area identified in the DEIS. An analysis comparing the weed impacts of the three alternatives to federally funded habitat restoration within the 0.6 miles weed corridor should be included in the FEIS. The Administration should analyze the increased cost of weed control and new weed invasion risk to these restoration efforts in the FEIS for this action.

- 16) Section 4.8.5, Pine Stand Effects, Page 169: *“The pygmy nuthatch is protected under the Migratory Bird Treaty Act . . . . .”*

In addition to protection provided under the MBTA, the pygmy nuthatch (*Sitta pygmaea*) is considered a protected nongame species designated critically imperiled (S-1) by the IDFG and a species of conservation concern by the Service. The declining population trend for this species within Idaho has been attributed to the loss and degradation of ponderosa pine forest habitat (IDFG 2005). The FEIS should provide an analysis of the E-2 alignment effects to the pine stand. This detailed analysis should determine whether either of the two remaining fragments will be large enough to support pygmy nuthatch nesting, or if the fragmentation and road disturbance will result in the functional loss of the entire pine stand as habitat for the pygmy nuthatch. A study at Harvard University (Foreman 2000) found that road noise has a major effect on forest nesting birds by its interference with bird communication during incubation and fledgling phases of reproduction. For forest birds as a whole and for the most sensitive species, effect-distances in woodland extend hundreds of meters from a busy road. The population density of the most sensitive forest-interior species is reduced in woods up to 650 m from a main road. In this zone the population is one-third lower than that at greater distances.

- 17) Section 4.8.5, Pine Stand Effects, Page 169: “...could offer potential nesting habitat for...pygmy nuthatch...”

The technical document provided with the DEIS (Melquist 2005) states on page 11 that pygmy nuthatches are already known to nest in this pine stand. The FEIS should be consistent with this technical document that pygmy nuthatches are already known to nest in the pine stand, or provide the rationale for the discrepancy.

- 18) Section 4.8.5, Pine Stand Effects, Page 169: “The loss of this habitat is considered minor and there is an abundance of suitable habitat nearby at Paradise Ridge.”

There is no data provided in the DEIS or the technical documents to support this conclusion. To support this conclusion, the Administration should provide documentation in the FEIS. Pygmy nuthatches are year-round residents; in order for the nuthatches from the affected pine stand to move to suitable habitat on Paradise Ridge, there must be suitable, but unoccupied pygmy nuthatch habitat available on Paradise Ridge. The technical document (Melquist 2005) recommends avoiding construction along the E2 corridor; the FEIS should be consistent with technical documents, or explain the rationale for the discrepancy.

- 19) Section 6.1.3, Existing Conditions, Indirect Effects, Vegetation, Page 206: “Intensively managed cropland is believed to provide a more efficient buffer to new weed invasion compared to native vegetation or CRP.”

This statement is not supported by Lass and Prather nor does the DEIS include citation to support this statement. Therefore, supporting documentation for this statement should be provided in the FEIS.

- 20) Section 6.1.3 Existing Conditions, Vegetation, page 207:

In addition to the discussion concerning impacts to currently extant Spalding’s catchfly plants, this section should also include a discussion concerning the project’s impacts to the Paradise Ridge/Gormsen Butte Key Conservation Area (Key Conservation Area) identified in the Spalding’s catchfly recovery plan (USFWS 2007). Portions of Alternative E-2 are adjacent to this Key Conservation Area and could limit the ability to meet the recovery goal of 500 Spalding’s catchfly plants sustained over 20 years in this area. This Key Conservation Area is one of only three Key Conservation Areas within the Palouse Physiographic region for recovery of this plant. The Service has been working with numerous landowners and conservation partners in preparation for reintroduction, protection and long-term recovery of Spalding’s catchfly in this area. The analysis in the DEIS of project-related effects to this recovery effort does not adequately evaluate the impact of increased weed pressure on the long term viability of this Key Conservation Area. Thus, the discussion should be expanded in the FEIS to thoroughly address this issue.

Also, this section does not include a discussion concerning the significant Federal investment in habitat restoration and easements in the area of Paradise Ridge, nor the

effects of increased weed establishment risk from the E-2 alignment's proximity. Significant Federal funds have been spent controlling weeds in existing Palouse prairie remnants within the 0.6 mile weed impact area identified in the DEIS. The FEIS should include an analysis of the increased cost of weed control and new weed invasion risk to these restoration efforts.

- 21) Section 6.2.3 Cumulative Effects to Resources, Wildlife and Vegetation, page 210: *"The remaining Palouse remnants continue to be eliminated through conversion to cropland..."*

This statement is not accurate, due to the fact that there is little, if any, on-going conversion of Palouse prairie remnants to cropland. Starting about 1880, farmers began to convert Palouse grasslands to row crops and by about 1910 all areas that could be plowed were brought into cropland (Daubenmire 1940; Buechner 1953; Tisdale 1961). The text in the FEIS should be modified to reflect this information.

- 22) Section 6.2.3 Cumulative Effects to Resources, Wildlife and Vegetation, page 211: *"Because of their isolation, gene flow is restricted, which may contribute to reduced diversity and genetic fitness of the populations."*

The DEIS does not provide any documentation or citation to support the above statement, which we consider inaccurate. Researchers at both the University of Idaho and Washington State University have secured significant funding to investigate Palouse Prairie remnants from multiple perspectives. Their work to date indicates an extremely high species diversity and abundance of pollinators, ground-dwelling beetles, and soil biota – even despite the small patch size of remnants – when compared to adjacent conventionally-tilled and minimum-tilled croplands. The rate of endemism of the ground-dwelling beetles is particularly remarkable, and suggests that loss of Palouse Prairie remnants could result in the loss of populations and species (Shepherd and Debinski 2005), (Niwa 2001), (Hatten 2006), (Hatten et al 2006), (Looney and Eigenbrode 2003). This section should be modified in the FEIS to reflect the high biodiversity of Palouse prairie remnants in the project area.

- 23) Section 9, Environmental Commitments Table 68, Mitigation Measures, Vegetation, Fish and Wildlife, Page 231: *"Tree removal will be accomplished during a "work window" provided by the Idaho Department of Fish & Game . . . ."*

The Department agrees that the proponent should avoid any activity such as land clearing involving removal of vegetation that may provide nesting habitat for avian species during migratory bird nesting season. Avian nesting generally occurs in northern Idaho from April 1<sup>st</sup> through August 1<sup>st</sup> each year, although these dates may vary based on species and location (FSA 2010). Administration commitment to this conservation measure in the FEIS would help minimize impacts to avian species protected under the MBTA.



24) Section 9, Environmental Commitments Table 68, Mitigation Measures, Vegetation, Fish and Wildlife, Page 231: “Where practicable, culvert designs may include box culverts, bottomless box culverts . . .”

Although not specifically mentioned in this section of the table, these measures appear to be intended partly to accommodate the movement of wildlife through the road prism. We recommend that the Administration provide wildlife crossing structures to accommodate the migration of small and large mammals that may be present in the project area, such as elk, moose and white tailed deer. These crossing structures would provide connectivity between habitats and should add a measure of safety for vehicular traffic using any of the three proposed alignments. An overview of conceptual designs for various wildlife crossings can be found in the Administration’s online publication “*Critter Crossings – Linking Habitats and Reducing Roadkill*.” Wildlife road crossings should receive full analysis in the FEIS for this action (FHWA 2013).

Additionally, two of the wildlife technical reports provided with the DEIS recommend wildlife crossing structures. Ruediger (2007) recommends both small and large mammal crossing structures for all three alignments. Melquist (2005b) recommends at least one wildlife crossing structure for all three alignments. Additional mitigation is recommended by Melquist if the eastern alignment is selected including providing secure habitat (through easements or land acquisition). The FEIS should either explain why these recommendations were not incorporated into the project as mitigation measures or they should be incorporated as such.

25) Section 9, Environmental Commitments, Table 68, Wetlands and Tributaries:

Under the Service’s mitigation policy, the “*First priority will be given to the recommendation of a mitigation site within the planning area.*” (USFWS 1981).

Although some conceptual mitigation proposals are listed in Table 68, this section does not commit to a specific location for the compensatory wetland mitigation, nor whether it would be in-kind or out-of-kind for the unavoidable loss of wetland function and value. For example, if the E-2 alternative is selected, 0.92 acres of PSS type wetlands would be directly impacted. The following statement under section 3.6.1 (Regulatory Framework and Policies) in the DEIS, “*Lands meeting the definition of wetland, but which are not considered jurisdictional by the USACE are still considered under 23 CFR 777 Mitigation for Wetlands and Aquatic Habitats which requires a no net loss of wetland functions and value*” indicates that the Administration will provide full replacement of function and value for unavoidable loss of wetlands due to the project. This commitment warrants full disclosure in the environmental commitment section of the FEIS.

## **SUMMARY COMMENTS**

Based on our review of the information provided in the DEIS, and other pertinent information obtained to date, the Department has concluded that of the three action alternatives evaluated in the DEIS, the E-2 alignment or “*preferred alternative*” would have the greatest impact to the Palouse prairie, a nationally recognized critically endangered ecosystem, as well as to associated habitats and plant species, including the recovery of Spalding’s catchfly, an ESA listed plant

species. Additionally, other wildlife, that has been observed, or may be present, in the project area include long-eared myotis (*Myotis evotis*), northern alligator lizard (*Elgaria coerulea*), and pygmy nuthatch (*Sitta pygmaea*). These species are considered Protected Species by the IDFG (IDFG 2013). Pygmy nuthatch is also protected under the MBTA. As mentioned in our comments above, the Federal government, including the Service, has invested considerable funding and effort to protect and restore Palouse prairie habitats, which would be impacted more by the preferred alternative than the other two action alternatives evaluated in the DEIS.

The Department appreciates the opportunity to comment on the proposal and looks forward to our comments and concerns being addressed in the FEIS. Technical assistance requests, comments, and additional documents, should be directed to Juliet Barenti, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, Northern Idaho Field Office, 11103 E. Montgomery Drive, Spokane, Washington 99206, telephone: 509-893-8005. Should you have questions about the Section 4(f) Evaluation comments, please contact Alan Schmierer, National Park Service, Pacific West Regional Office, telephone: 415-623-2315. If you have any other questions, please contact me at 503-326-2489.

Sincerely,

A handwritten signature in cursive script that reads "Allison O'Brien".

Allison O'Brien  
Regional Environmental Officer

cc:

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