From Draft Final Rule Endangered and Threatened Wildlife and Plants; Threatened Status for Eriogonum codium (Umtanum Desert Buckwheat) and Physaria douglasii subsp. tuplashensis (White Bluffs Bladderpod) and Designation of Critical Habitat

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from five knowledgeable individuals with scientific expertise that included familiarity with the species, regional botanical knowledge, the geographical region in which the species occur, and conservation biology principles. We received responses from four of the peer reviewers.

We reviewed all comments received from peer reviewers for substantive issues and new information regarding the listing and designation of critical habitat for the two plant species. The peer reviewers generally concurred with our methods and conclusions, and provided editorial comments, taxonomic clarifications, additional citations, and information on species distribution, arid lands ecology, geology, and habitat associations to improve the final rule. These comments have been incorporated into the final rule, but have not been individually addressed below. The more important peer reviewer comments are addressed in the following summary and have been incorporated into the final rule as appropriate.

Peer Reviewer Comments

(1) Comment: One peer reviewer presented recommendations with regard to the control of invasive plant species and the use of herbicides, in light of their effects on pollinators. He also recommended the development of a detailed plan that explicitly describes how noxious and invasive weeds such as cheatgrass (Bromus tectorum) would be managed, to minimize risks to Umtanum desert buckwheat, White Bluffs bladderpod, and their supporting habitat's native flora.

Our Response: We appreciate and agree with the comment. In accordance with section 4(f)(1) of the Act, recovery plans for the conservation and survival of both species will be developed and implemented after publication of this final rule. The plans will describe site-specific management actions and objective, measureable criteria, which, when met, would result in the recovery of these species. The recovery plans will address each of the threats described in the listing rule, including invasive species, and propose a series of prioritized actions (which could include pollinator conservation measures) to address those threats.

(2) Comment: For Umtanum desert buckwheat, one peer reviewer suggested it may be difficult to identify trends in the size of the population using the data presented in Table 1, because there are apparent differences in census methodologies and no statistical estimate of uncertainty in the values, making the figures less precise than one might normally expect in census counts of plant populations. As a result, he commented that the figures appear not to support the contention that the population is gradually declining. The peer reviewer suggested that it may be a clearer and more convincing argument to present trends from the demographic monitoring in the subpopulation over the entire 15 year monitoring record, rather than only 9 years. The reviewer also recommended the development of a more rigorous monitoring program to improve the accuracy of population estimates.

Our Response: We agree that the total population counts for Umtanum desert buckwheat in Table 1 reflect considerable uncertainty, and that the method for estimating the total population needs to be improved in the future. Section 4(b)(1)(A) of the Act requires that we make determinations based on the best scientific and commercial data available. Demographic monitoring of a subset of the total population indicates a slow decline based on 9 years of high quality data, in contrast to the census estimates shown in Table 1. That high quality data represents the best available scientific information, and has been applied in this determination. The next population viability analysis is anticipated within or near 2016, and will be based on at least 15 years of annual data from the demographic study sub-population, which will improve data precision.

(3) Comment: For Umtanum desert buckwheat, one peer reviewer indicated that while the summary of factors in Table 4 is comprehensive and accurate in assessing individual threats, he did not feel that adequate consideration was given to how the threats interact collectively. The reviewer suggested that because Umtanum desert buckwheat is vulnerable to single catastrophic events such as wildfire, it should be listed as endangered rather than threatened.

Our Response: Pursuant to section 3(20) of the Act, a species is listed as threatened if it is likely to become an endangered species within the foreseeable future, throughout all or a significant portion of its range. Under section 3(6) of the Act, a species is endangered if it is in danger of extinction, through all or a significant portion of its range. Therefore, the key statutory difference between threatened and endangered status is the timing of when a species may be in danger of extinction (i.e., either now (endangered) or in the foreseeable future (threatened)). The primary threats to Umtanum desert buckwheat include wildfire, nonnative plants, and increased fuel loads resulting from nonnative plants becoming established. We have considered the combined effect of these threats. (See Cumulative Impacts below.) The Hanford Reach National Monument Comprehensive Plan (CCP) was developed to protect and conserve biological (and other) resources, and includes several management objectives, including treating invasive species and restoring upland habitat (USFWS 2008 pp. 19–22). In addition, the species is in a very gradual decline, and access to the area where the population occurs is prohibited without special authorization from the Department of Energy. The above factors collectively reduce the likelihood that extinction is imminent and certain. Accordingly, we have determined threatened status is appropriate for Umtanum desert buckwheat. Please refer to the “Cumulative Impacts” section for a discussion of how we view the collective interactions of each of the threats to this species.

(4) Comment: One peer reviewer commented that delineating critical habitat for Umtanum desert buckwheat based on the presumed range of pollinators was questionable, as there is little evidence regarding the relative importance of pollinators for this species in comparison with any other critical aspect of its natural history. The reviewer recommended that the boundary be revised to include a several thousand acre polygon around the population, with focused actions to make the area less fire-prone (e.g., establishing firebreaks and controlling cheatgrass). Another peer reviewer commented that the proposed critical habitat would adequately provide for the needs of the species and potential pollinators as long as funds are allocated to minimize invasive species and increase the native flora that may have been reduced by invasive species.

Our Response: We acknowledge that the risk of wildfire poses a significant threat to Umtanum desert buckwheat. The larger landscape where this species occurs is within a conservation status, is federally owned, and has restricted public access. Threats, including wildfires, invasive species, and management actions will continue in the larger landscape regardless of whether the area is designated as critical habitat. We believe the critical habitat designation for Umtanum desert buckwheat is based on the best available scientific information regarding the biological needs of the species. We used data regarding flight distances of generalist pollinators to delineate a critical habitat polygon we believe is large enough to support the existing population and ensure its survival and recovery. As previously stated, management actions to improve habitat and reduce the threat of wildfire will be identified and incorporated within the recovery planning process, as required under section 4(f) of the Act. That process will consider each of the threats to the species, and develop recovery tasks necessary address wildfire, invasive species, pollinator habitat, and the other factors impacting the population.

(5) Comment: For White Bluffs bladderpod, one peer reviewer stated that "fully half of the areal extent of the bladderpod population (the southern 5 miles) is immediately abutted by irrigated cropland, and occurs in areas of landslides and slumping bluffs". He commented that the southern area would be particularly vulnerable to landslides and slumping, putting the species in more danger of extinction. Because of this risk, the reviewer suggested the species was worthy of a status of endangered. Furthermore, the commenter stated there has been little or no monitoring of the status and trends of the population in the southern portion of the area where it occurs.

Our Response: The threat of active landslides and slumping is prevalent in approximately 35 percent of the linear extent (range) of the subspecies. The bluffs and cliffs outside of the influence of irrigation water are more stable, and presumably at a lower risk to slumping. Because the risk of landslides is relatively low over the majority of the area where the subspecies occurs (65 percent of the range), we have determined that threatened status is appropriate, in light of the definitions of endangered and threatened species in the Act. Please see our response to Comment (3) above for Umtanum desert buckwheat for additional information regarding the difference between endangered and threatened status under the Act. Regular monitoring in the southern portion of the area has not been conducted to date, which is primarily due to the presence of mixed ownerships and the physical difficulties of accessing the slumped areas. Identifying an appropriate monitoring plan for the entire White Bluffs bladderpod population will be a primary objective of the recovery planning process under section 4(f) of the Act.

(6) Comment: For White Bluffs bladderpod, one peer reviewer stated that although possible effects of pesticides and herbicides on pollinators are mentioned briefly in the text as a potential threat, the use of chemicals is not included in Table 5 as a potential threat. The reviewer states that it seems illogical to define critical habitat using presumed pollinator movement ranges (see Comment 4), but not address adjacent croplands where agricultural activities (e.g., conversion of shrub steppe to cropland, use of herbicides and pesticides, etc.) may be detrimental to pollinators of the species.

Our Response: Agricultural lands do not function as habitat for the White Bluffs bladderpod, but may support pollinators. Although pollinators that forage on agricultural lands may be at risk of being

exposed to pesticides, we do not believe this rises to a level of threat to the overall population for the following reasons: (1) agricultural land use is adjacent to approximately 35 percent (rather than a majority) of the population; (2) we presume pesticides and herbicides have been applied on these lands since their initial conversion to agricultural use; (3) White Bluffs bladderpod persists adjacent to the agricultural areas; and (4) we have no scientific evidence with which to base a conclusion that the application of these chemicals represents an indirect threat to White Bluffs bladderpod.

(7) Comment: For White Bluffs bladderpod one peer reviewer stated it would seem more prudent to define critical habitat in ways that address the most critical potential threats (i.e., slope failure and landslides), and questioned the rationale used to support a conclusion that "lands that are under agricultural use are not included in the proposed critical habitat designation."

Our Response: We appreciate the comment. However, in accordance with section 3(5)(A) of the Act, critical habitat can only be designated for: (1) specific areas within the geographic area occupied by the species at the time of listing that contain the physical or biological features essential to the species' conservation, and which may require special management considerations or protections; and (2) specific areas outside the geographical area occupied by the species at the time of listing that are essential to its conservation. Lands that are under agricultural use do not satisfy either of these definitions, since they do not function as habitat for White Bluffs bladderpod or pollinators, as a result of land conversion, irrigation, loss of the soil horizon, and presence of agricultural chemicals.

(8) Comment: For Umtanum desert buckwheat, one peer reviewer commented that he would rank the severity of threat for recreational activities and/or ORV use as moderate (rather than low), since an ATV or a couple of motorbikes through the population, however unlikely, could have at least moderate impacts.

Our Response: "Magnitude" as applied in our assessment refers to the extent of species numbers or habitat affected by a threat; "Severity" refers to the intensity of effect by the threat on the species or habitat; and "Imminence" refers to the likelihood of a threat currently affecting the species. Although a determined individual could trespass in the area, we believe the deterrents that are in place, including access restrictions, unauthorized entry prohibited signs, fencing, and enforcement, significantly reduce the likelihood of a trespass event. As a result, we have no substantive information that would indicate these activities represent an ongoing threat to the Umtanum desert buckwheat population.

(9) Comment: For White Bluffs bladderpod, one peer reviewer recommended that we provide a statistical test or present the numbers used to draw the conclusion that a comparison of burned and unburned transects indicate that plants in burned transects appear to have rebounded to some extent.

Our Response: The citation used to support this observation has been added. The author of the report acknowledges some uncertainty because the data has too much variability to discern that difference with any confidence; the final rule has been clarified in that regard.

(10) Comment: For White Bluffs bladderpod, one peer reviewer commented that the invasive plant species inventory and management plan developed for the Hanford Monument could be argued to be an inadequate existing regulatory mechanism under Factor D, since threats can be minimized through consistent invasive plant management.

Our Response: The purpose of the Biodiversity Studies of the Hanford Site 2003-2002 study (Evans et al. 2003, entire), was to address some of the outstanding questions related to a previous study, and was not intended to establish a regulatory program or mechanism. Regardless, our determination that the invasive species management plan is not a regulatory mechanism with regard to Factor D does not affect our status determination for this species.