

WDFW RESPONSES TO SEPA AND PSR PUBLIC COMMENTS

WDFW received responses to public comments during the 90-day concurrent public review periods for the draft *Periodic Status Review for the Lynx in Washington* conducted from July 12, 2016, to October 10, 2016. WDFW received 188 individual comment letters from citizens, and 176 of these were form-letter emails. We also received more extensive comments from three organizations. Only one commenter opposed the recommendation to up-list the lynx. The comments presented here are summaries of the remarks provided by one or more people or organizations.

Report Section	Comment and Response
Recommendation and Conclusion	<p>WDFW received 176 form letters that included the following text: I'm writing to support the recommendation to list Canada lynx in Washington state as endangered. Lynx are the most elusive and rare of the three wild cats that live in Washington, and I want to see lynx recover and rebound in the North Cascades and Kettle River Mountain Range.</p> <p>We need to do more for lynx in Washington, such as getting more lynx into the Kettle River Mountain Range, reducing trapping pressure in British Columbia, and protecting the North Cascades population. Uplisting to endangered status is a crucial step in the conservation and recovery of lynx that make their home in Washington.</p> <p><i>WDFW is recommending that the status of the Lynx be up-listed from state threatened to state endangered. Thank you for your comments.</i></p>
	<p>WDFW received comments from individuals that stated support for up-listing the lynx from a state threatened status to a state endangered status in Washington.</p> <p><i>WDFW is recommending that the status of the Lynx be up-listed from state threatened to state endangered. Thank you for your comments.</i></p>
	<p>In sum, given the historic loss of lynx habitat due to logging and development, the fragmentation of habitat that aggravates the effects of reduction of habitat extent, recent degradation of habitat to wildfires, projected reductions in snowpack due to global warming, as well as the danger described above from inbreeding depression and genetic drift stemming from the small population, there is no doubt that lynx in Washington State should be up-listed to endangered status.</p> <p><i>WDFW is recommending that the status of the Lynx be up-listed from state threatened to state endangered. Thank you for your comments.</i></p>
Habitat and Population Status	<p>The WDFW is considering listing this species as endangered because of one element that is “anticipated threats to lynx population persistence.” The ESA is not a prophylactic that can be invoked when there is a hypothesis of a habitat effect on a population. This is an unreasonable use of the state and federal program as it was designed.</p> <p><i>The federal ESA listing of lynx is outside the scope of this document. WDFW is proposing that state up-listing to endangered be considered because of 5 elements that could affect the continued existence of lynx in Washington: 1) reduced range, 2) smaller population size as a result of reduced range, 3) loss of habitat as a result of</i></p>

large wild fires, 4) the threat of future loss and fragmentation of habitat due to large wildfires, which could exacerbated by climate change, and 5) limitations to immigration of lynx from BC because of lynx trapping in BC, and habitat loss or fragmentation. Because of the current status of the lynx population and the number and severity of threats affecting the population and it's habitat in Washington, a recommendation for up-listing the lynx in Washington is warranted.

While the WDFW periodic review suggests a decline in the population over the last 20 years, it also states clearly that there “is little information available to estimate the size of the lynx population that was present in Washington historically.” Having a historic population estimate is a metric necessary for elementary mathematics. Changing the listing status of this species to endangered because of nebulous speculation that they might be declining is unreasonable.

While we lack precise estimates for the lynx population that historically occurred in Washington, we do know the historic distribution of the species has greatly reduced. We recommend that the lynx be considered for up-listing based on the best available science which includes sound data that showing a significant reduction from the historical range to the current range in Washington. These data were obtained through numerous surveys within their historical range to detect lynx presence and from ongoing lynx research in western Okanogan County. In addition, a reduction in the range is expected to directly relate to a reduction in population size.

The WDFW report also states that the majority of suitable habitat loss was caused “largely from extensive wildfires that have occurred in [their hypothesized habitat] since 1992.” To suggest the state elevate the listing of the lynx because they’ve been negatively impacted (so it is presumed) by wildfires is an unreasonable remedy to a problem that isn’t known with certainty to even exist.

There is significant agreement among lynx scientists that the extensive wildfires in western Okanogan County in the last 20 years have reduced the amount of suitable lynx habitat.

The current population estimate is that there are 87 lynx in Washington, and this estimate is entirely based on speculation of habitat characteristics, not actual population counts. Listing this animal as endangered because of an entirely hypothesized number based on an area being somewhere a lynx might live making a regulatory decision based on biological uncertainty. There should be some semblance of structure in the listing process by the WDFW, and listing this species on such an outstanding guess would be a complete divorce from that process.

In the periodic status review we explained in detail how we estimated the population size at ~54 lynx, not 87 (Table 2, page 6). We acknowledge that the estimate is not precise but based upon sound research and that we consider the estimate valuable and representative of a small population at risk.

Okanogan County is where the vast majority of the (yet to actually be observed) population is expected to inhabit. While critical habitat designations on private lands that would accompany an endangered listing is obviously the aim of this proposed

	<p>status elevation, it states that habitat loss “may also” be a factor because of timber harvesting, but that the “bulk of habitat loss is due to large wildfires that burn subalpine” forests. Designation of critical habitat on private lands is only going to encourage the magnitude of destructive forest fires in the region, should they occur.</p> <p><i>The lynx status review does not address the designation of critical habitat (a federal action) and as such WDFW (a state agency) has no authority in this matter.</i></p> <hr/> <p>If wildfires are actually the main source of habitat loss and harm to the lynx population in Washington, how then could proposing restrictions on private lands do anything to mitigate that?</p> <p><i>The status review does not propose restrictions on private lands.</i></p> <hr/> <p>This proposed listing is entirely based upon speculation and “loss of habitat” that no one even knows is actually lynx habitat.</p> <p><i>The classification of certain forests in Okanogan County as lynx habitat has been based on scientific data collected by several researchers and published in peer-reviewed scientific journal. WDFW considers these data and the classification of lynx habitat to be highly credible.</i></p> <hr/> <p>“Given the reduced distribution, small and restricted population, and an increase in the number and severity if threats to lynx in Washington...” are all speculations based on habitat characteristics that don’t even enjoy a confirmed lynx population.</p> <p><i>Our conclusions are based on habitat analyses, numerous and extensive surveys, research studies involving numerous collared lynx, and sound biological principles.</i></p> <hr/> <p>Currently the Okanogan region is dominated by older forest and recent burns, except perhaps on DNR land, and is thus suboptimal for lynx.</p> <p><i>We agree that there are substantial areas within the Okanogan Lynx Management Zone that are currently not optimal for lynx. The loss of habitat as a result of fire was one of the significant factors that prompted our recommendation to up-list the lynx.</i></p>
<p>Factors Affecting Continued Existence</p>	<p>The low number of lynx in the state and the reduction in their estimated numbers from 87 in 2008 to 82 or fewer last year, based on calculations of habitat suitability, suggest the population may be imperiled for genetic reasons – in addition to the other threats it faces. Viability is compromised and weakened by genetic drift and inbreeding depression stemming from small population size. Given the trapping mortality that the larger lynx population in Canada is subject to, and that likely curtails lynx immigration to Washington, fewer than 100 animals is not nearly enough (nor even on the right scale of magnitude) to maintain viability.</p> <p><i>We recognize the importance that the genetic characteristics of a small population can have on its likelihood of persistence, as well as the degree to which a small population is supported by immigration from a neighboring area. Unfortunately we have very little data to currently address the genetic characteristics of the</i></p>

Washington lynx population and no data to address the amount of immigration or emigration that occurs in this population, however research is currently underway to address these questions We agree with your assessment of the significance of these factors and we hope to have more data in the future to evaluate them. Until that time, we recommend the lynx be up-listed based on the best data available.

For example, while it is true that fires in the West have gone up over the past few decades (Westerling et al. 2006), the levels are still far below those seen prior to human settlement (Everett et al. 2000). Thus, it is premature to take management actions to account for future habitat conditions which cannot be reliably predicted and within the range of natural variability.

While the commenter's observations are valid, our concern with fire is based on the reduced area of habitat now available to a relatively small number of lynx in the Okanogan Lynx Management Zone and the significant percentage of habitat that could be lost if a large fire or a number of fires was to occur within this LMZ now.

Lynx habitat suitability across large areas in the Okanogan region was recently reduced due to fire. We posit that over the next few years, lynx habitat suitability in areas burned in the fires of 1992 and similar early years should increase as it takes 10 to 20 years following a stand-replacement fire for high quality habitat conditions to develop (Koehler 1990).

We agree that some forest stands that reach 10-20 years old can provide suitable habitat for lynx and snowshoe hares, however, the Interagency Lynx Biology Team (ILBT 2013) uses a broader range of ages (10-40 years), because a significant percentage of forest stands do not become suitable for lynx and snowshoe hares until they are older than 20 years of age. While some areas of Washington that were burned in 1992 may now be suitable, other areas are not yet providing habitat.

The Interagency Lynx Biology Team (ILBT 2013) identified maintenance of lynx habitat corridors between Canada and the contiguous US as crucial for genetic flow of lynx in northeastern Washington. Hence, the genetic and population risk typically associated with small population size may not apply to lynx. Lynx are also a species that would be a good candidate for reestablishment into historical ranges that are currently unoccupied.

The commenter states that the genetic and population risk associated with small population size may be less applicable to lynx or the Washington lynx population because the Washington population is considered continuous with the lynx population in southern British Columbia. However, we lack data to address this observation and could not evaluate it in-depth in the status review. We agree that an evaluation of lynx reestablishment merits consideration, especially if a reintroduction feasibility assessment indicates that a reintroduction could be successful at reestablishing a self-sustaining population.

Lynx management plans have been developed for two private landowners and WDNR lands (Stinson 2001, WDNR 2006). The WDNR policy is to provide a mosaic of forest successional stages for lynx habitat. Since lynx require early seral forest for optimum hare populations, we fully support this management policy. Policies that view lynx habitat as a permanent feature of a zone on a map will

misjudge what lynx need and lead to suboptimal population performance. Engagement by WDNR with other land owners, especially federal land managers in the lynx habitat zone, to implement a similar policy would likely result in greater availability of high quality habitat conditions.

We agree.