ERRATA Environmental Assessment Fisher Reintroduction Plan

Olympic National Park October 2007

The public scoping process undertaken to inform preparation of the fisher reintroduction plan EA was conducted during January-February, 2006. The completed EA was released for public review on September 9, 2007 through October 10, 2007. An electronic version was available via the internet, and printed copies were sent to approximately 150 individuals, organizations, governments, and interest groups on the project mailing list. An additional 75 interested parties and media outlets were notified of the opportunity for public review by letter or email. A public meeting to expand the opportunity for public comment was held in Forks on September 18, 2007. Additional information on the proposed fisher reintroduction was published in the Peninsula Daily News on September 17, 20, and 28.

A total of 197 comments were received during the plan/EA public review period. Three participants attended the September 18 meeting but did not provide comments at that time. Park staff review of all comments, and preparation of selected responses, was completed in collaboration with Washington Department of Fish and Wildlife Service (WDFW), Olympic National Forest (ONF), and the National Park Service (NPS) Environmental Quality Division (EQD).

This Errata, compiled as an attachment to the fisher reintroduction plan EA, consists of two sections below.

Several respondents provided questions and/or concerns regarding points that were already addressed in the EA, but which needed clarification or further discussion. Slight modifications of the EA related to editorial corrections and clarifications are itemized in section I.

Ten respondents were opposed to reintroducing the fisher. Several respondents expressed concern that reintroducing fishers would have a negative impact on the local economy and/or private landowners. The remaining respondents were generally supportive of the project, or did not advocate for a particular alternative. Responses were received from individuals, interests groups, organizations, town governments, local businesses, and from the Lower Elwha Klallam tribe. No responses provided any new information, raised unforeseen issues, nor addressed critical omissions that would require revising and reissuing the plan/EA for additional public review, or that would change any determinations of environmental effects. Detailed responses to substantive comments and other concerns are included section II.

Section I. Changes to the Environmental Assessment:

On page 6, third paragraph, after the fourth sentence add, "Private landowners are prohibited from hunting/trapping, possessing, or harm of a state endangered species, and knowingly cutting down or disturbing an occupied fisher den tree would be a violation of state law."

On page 145, second paragraph, first sentence, change to read *"Private landowners would be subject to the provisions of the Endangered Species Act and state regulations regarding harm to listed species."*

On page 151, second paragraph, sixth sentence, change to read *"For these reasons, fishers may have a negligible beneficial economic impact on timber harvesting that could offset adverse impacts described above, depending on the extent, if any, of porcupine damage on the Olympic Peninsula."*

Section II. Comment and Response Summary:

In the comments below, those enclosed in quotations are direct quotes from commenters; comments without quotations are paraphrased.

Need and Purpose

1) Comment: (Area Resident) "I certainly question the need for reintroduction - to reintroduce –something has to be gone and I know for a fact that fisher are not missing. I have seen three. One on the 56 hundred near a swamp on the side of the road west of Forks. Another sitting on the road edge at the park boundary on the Oil City Road, again near water. And the third, near the old Huelsdonk Bridge site on the upper Hoh 1 ½ miles below the park boundary. It was sitting on the road side but got up and ran off into the woods."

Response: Although there have been occasional reports of fisher observations in recent years, there has been no verifiable fisher recorded since 1969. All recent efforts to obtain verified records have failed (Plan/EA pages 1-2). NPS and WDFW have therefore concluded that fishers are extirpated from Washington State. In the unlikely event that a few individuals still exist in the state, there is no viable population of fishers in Washington (Hayes and Lewis 2006: State of Washington Fisher Recovery Plan).

2) Comment: (Area Resident) "Shortly after the Fisher Cat was hunted to extinction in this area, we were busy bringing in Roosevelt Elk, which we are now spending large amounts of money studying and protecting. Why the fragmented management style, bringing one "native species" back and protecting another "non-native" species, both at great expense?"

Response: Roosevelt elk are native to the Olympic Peninsula. The proposal is consistent with both NPS and WDFW policies (Plan/EA pages 16-21).

3) Comment: (Organization) "Our Association is anxious to learn the reasons for wanting to re-introduce a fisher population. As you know, the number of animals being trapped annually has plummeted since 1980 the height of the fur trapping season. In British Columbia, the number of animals trapped annually has decreased from 300,000 down to 30,000 in recent years as pelt prices have become so low due to fewer and fewer fur purchases...We ask therefore to learn of the reasons for re-introduction of fisher."

Response: The purpose and need for the project is elaborated on the Plan/EA pages 7-8. Because fishers used in the reintroduction will be diverted from fur harvest, and purchased from willing sellers, the project will have no impact on the British Columbia fisher population.

4) Comment: (Area Resident) "...does it make sense to anyone that the predator is disappearing because it has eaten itself out of house and home? Namely the prey."

Response: As elaborated in the EA on pages 1-2, all evidence suggests that fishers did not disappear due to a shortage of prey. Their decline was due to unsustainable levels of fur harvest, mortality associated with predator control efforts, and effects of habitat loss and fragmentation.

Fisher Ecology, Biology and Habitat Analysis

5) Comment: (Area Resident) "Did fishers not make a come back here because this was marginal habitat for them in the first place? Were they ever a very viable ecosystem player here, even before the white man? Might reintroduction efforts here now be a case of shoving round pegs in square holes, (i.e. are they going to have a rough time finding enough to survive)?"

Response: Because fisher populations were diminished so early in the century, we have little modern scientific data to assess their role prior to extirpation in the Olympic ecosystem. Early trapping reports compiled by early researchers, however, indicate that fishers once were common in some portions of the Peninsula (Plan/EA page 57). Because they once were present in the ecosystem, and have been successfully reintroduced in other similar ecosystems in the west, we fully expect the population will survive and thrive in suitable habitat on the Olympic Peninsula.

6) Comment: (Area Resident) "Will Fishers eat carcasses of spawned out salmon?"

Response: Since so many other species have been observed foraging on spawned out salmon, we suspect that fishers will also.

7) Comment: (Organization) "The Park should describe in more detail the small number of fisher proposed to live in the park (86 to 175) and discuss the costs vs. benefits. How will that small population be significant? What do you consider a healthy, sustainable population of fishers? What is the number necessary to keep them off the ESA?"

Response: In western North America, fisher populations are characterized by low population densities. The fisher population in the Southern Oregon Cascades, for example, is estimated to consist of fewer than 50 individuals, and has persisted for over 20 years. Consequently a population of >100 fishers on the Olympic Peninsula would be considered relatively large, and would be expected to exhibit stability. We expect that a population of 86-175 fishers is large enough to (1) be self-sustaining, (2) occupy a large portion of Olympic National Park and Olympic National Forest, and (3) restore the ecological functions that were lost when the fisher was extirpated from the forest ecosystems of the Olympic Peninsula. Because a population of 86-175 fishers is seen as significant, the benefits of reestablishing a population of that size is seen as cost effective by Olympic National Park and Washington Department of Fish and Wildlife. While a fisher reintroduction conducted by Olympic National Park and Washington Department of Fish and Wildlife may ultimately reduce the need for an ESA listing, it is the responsibility of the USFWS to determine if/when a species is in need of listing.

8) Comment: (Individual) The existing prey-predator relationship is currently in reasonable balance. How will introducing a new predator affect this balance?

Response: The effects of a restored fisher population on the current predator-prey system were analyzed in the Plan/EA on pages 119-125. We expect that following the establishment of a fisher population, the predator-prey system will be restored to its original balance. There have been 23 successful fisher reintroductions out of 28 evaluated in the past 60 years. In no case was there observable evidence of detrimental effects on prey or other predator populations, with the exception of porcupine populations (where reducing porcupine populations was the objective of several reintroductions).

9) Comment: (Area Resident) "Much of the plan to reintroduce these animals into the west side of the peninsula (park) here appears to be crafted on models using geophysical data and maps based on forest types. Experience in the east [coast] would say this could be mostly irrelevant. In the east, fishers use and thrive in very young forests."

Response: Although fisher in the east coast may do well in young forests, the composition and structure of young, deciduous forests in the east coast differs greatly from the structure and composition of young coniferous forests found on the west coast. In western coniferous ecosystems, fishers are most often associated with forests that contain trees old and large enough to have cavities that fisher require for denning, and other structures required for rest sites.

10) Comment: (Organization) "...prey abundance, rather than tree species composition has been found to be the most important habitat characteristic for fishers, which may indicate that commercial forestlands (particularly in lower elevations) may in fact support fishers."

Response: The complete quote from the reference cited is "Buskirk and Powell (1994) hypothesized that tree species composition is less important to fishers than aspects of forest structure which affect prey abundance and vulnerability and provide denning and resting sites. Such forest structure can be characterized by a diversity of tree sizes and shapes; light gaps and associated understory vegetation; snags; fallen trees and limbs; and limbs close to the ground" (Powel and Zeilinski 1994). Such forest conditions are not prevalent in short rotation, regeneration forest stands typically found in commercial forests on the Olympic Peninsula.

11) Comment: (Local Government) "...the City renews its concerns and frustrations in noting that no eastside ONP site was identified and fully evaluated for the mammal's reintroduction."

Response: Habitat throughout the Olympic Peninsula was evaluated by WDFW in their feasibility study. That evaluation did not identify large tracts of suitable fisher habitat on the east side of the park. Using the adaptive management process, if, following the first year of reintroduction, we observe that fishers make greater than expected use of east side habitats, future release sites may be designated there.

Fisher – Porcupine Interactions

12) Comment: (Organization) "The plan also suggests that fishers would have a beneficial economic impact on timber harvesting that could offset adverse impacts...by reducing porcupine damage to commercial forests. While porcupines can have a negative impact on commercial timber in Washington, it is relatively minor in this region, and there is

absolutely no evidence to suggest that the fisher's impact on porcupine populations would offset the likely adverse economic impacts of reintroduction."

13) Comment: (Area Business) "The nearest porcupines or porcupine damage that I have seen was near the town of Raymond-far from the Peninsula. Porcupines essentially do not exist on the western or northern Olympic Peninsula. The porcupine control benefit presented in the FRP is an example of either the author's biological disconnect or of the author's biological "spin" in order to advocate fisher reintroduction."

Response to comments 12 & 13: In the discussion on page 151 of the Plan/EA pertaining to porcupine/ forestry interactions, we intended to call to light some positive impacts fishers have had on commercial forests in other regions. We agree with the commenter that, due to low numbers of porcupines on the Olympic Peninsula, positive economic impacts from fisher predation on porcupines will be negligible. For clarification the word "*negligible*" has been added to the following sentence in the EA on page 151 "*For these reasons, fishers may have a negligible beneficial economic impact on timber harvesting that could offset adverse impacts described above, depending on the extent, if any, of porcupine damage on the Olympic Peninsula." This addition will not change the level of impact as described on page 151, which was adverse, long term, and minor.*

Implementation Plan

14) Comment: (Area Resident) "...these plans posted by the WDFW should have stood review by disinterested peers outside of Washington State. Were they, and if so, what were the impressions?"

Response: WDFW's documents were reviewed by independent scientific experts in the field, consistent with the normal peer review processes. Changes to those plans were made, as appropriate, per comments from outside reviewers. Lists of reviewers can be found in each document.

15) Comment: (Area Resident) Will there be an adequate genetic sample of fishers from areas throughout their range for this reintroduction so the "founder effect" can be minimized?

Response: We believe that using approximately 100 individuals from a broad region of BC or Alberta supplies enough genetic diversity to avoid the founder effect. As discussed on page 57 of the EA, fishers mate soon after giving birth, but due to delayed implantation, do not give birth until almost a year later. Consequently, several translocated females may be pregnant by males not part of the translocation, further providing additional genetic diversity.

16) Comment: (Area Resident) Will adequate numbers of fishers be introduced into each region to establish self-sustaining populations? In particular, their rate of reproduction needs to exceed their combined rates of dispersal and mortality.

Response: Although the plan calls for reintroducing fishers into three areas of the park, those 3 areas are contiguous. We expect that the animals released in these three areas will interact and mate, effectively forming one population. Population modeling reported in the feasibility study (Lewis and Hayes 2004) indicates that the population will be stable and self-sustaining.

17) Comment: (Individual) "...I am concerned about the concept of getting the fisher from captivity. I believe the fishers from a wild population in B.C. Canada would likely adapt better and be more successful in the Olympics of Washington State."

Response: Both alternative B and C entail using wild fishers from closely related genetic stock, either from British Columbia or Alberta. Alternative C, which entails using fisher from captivity, would only be used if there were insufficient numbers of animals available from wild stock, and would still use a founder population from wild stock with close genetic relationship to the fishers that formerly occupied western Washington.

18) Comment: (Individual) "I would simply urge you to acquire stock for reintroduction from locally available captive population, rather than from outside of the region."

Response: Both alternative B and C entail using wild fishers from closely related genetic stock, either from British Columbia or Alberta. Alternative C, which entails using fisher from captivity, would only be used if there were insufficient numbers of animals available from wild stock, and would still use a founder population from wild stock with close genetic relationship to the fishers that formerly occupied western Washington. There is no locally available captive stock that would be a good genetic fit for the area and which would be readily adapted for survival in the wild.

19) Comment: (Individual) The program should have a "criterion for failure." In particular, a lower threshold should be set, which, should their population drop below that threshold, the program will be terminated.

Response: If the program is not as successful as we would wish in its first year (e.g., low survival of translocated fisher or low rates of home range establishment), the plan calls for using an adaptive management approach (pages 39-41), using data gathered through the monitoring program to guide mid-course adjustments in the reintroduction strategy. In addition, the plan calls for translocations to continue for only 3 years.

20) Comment: (Area Resident) "...no matter how you mingled or mixed them, fisher would not breed in captivity."

Response: Although fur farmers in the past had difficulty breeding fishers, recent captive animal facilities have been successful (Plan/ EA page 38).

Threatened and Endangered Species

21) Comment: (Area Resident) Fully disclose how the fisher reintroduction will result in added negative impact to environmentally sensitive and threatened and endangered wildlife species.

Response: The effects of the proposed fisher reintroduction on environmentally sensitive and threatened and endangered wildlife species were analyzed on pages 103-119 in the Plan/EA and in the accompanying BA (EA Appendix B). The conclusion of that analysis was that the fisher reintroduction plan is not likely to adversely affect listed species, and effects would be negligible to minor on other sensitive species. The NPS received a letter of concurrence from the USFWS on 16 October 2007 concurring with the NPS determination that the proposed fisher reintroduction is not likely to adversely affect threatened or endangered species. **22) Comment:** (Area Resident) "One can imagine here a scenario of reintroduction, followed by meager survival and a precarious prognosis. Could this somehow lead to a threatened or endangered status for Fisher for all of the Peninsula, with consequences to industries outside of the Park?"

Response: The current listing status of fishers was determined when no fishers were present in Washington. An unsuccessful fisher reintroduction program should not lead to a change in fisher listing status because failure of this program can't make the situation any worse. The more likely scenario is that the program will be successful. The successful implementation of this project, in addition to several other efforts that are currently underway for fishers in the west coast, would reduce the threat factors that lead to the USFWS listing determination, and would most likely lead to removal of fishers from the candidate list.

23) Comment: (Area Resident) "You do not detail a plan to deal with negative impacts the fisher may have on listed endangered species such as the spotted owl and marbled murrelet."

24) Comment: (Organization) "The Park should detail how they will handle potential negative impacts the fisher may have on the spotted owl and marbled murrelet."

Response comments 23 & 24: The effects of the fisher reintroduction program on spotted owls and marbled murrelets is analyzed on pages 111-119 of the Plan/EA and in the BA in Appendix 2. After thorough analysis we anticipate that the project will not adversely affect either species. The NPS received a letter of concurrence from the USFWS on 16 October 2007 concurring with the NPS determination that the proposed fisher reintroduction may affect, but is not likely to adversely affect threatened or endangered species. If we gather evidence that that analysis is incorrect, we would reinitiate consultation with the USFWS.

25) Comment: (Organization) "We are also skeptical of the reintroduction plan's conclusion that the fisher would have a negligible potential impact to the northern spotted owl. This conclusion is based on the finding that: "...fishers and northern spotted owls coexisted on the Olympic Peninsula for millennia prior to the extirpation of the fisher on the Olympic Peninsula. Because the habitat in the Park is largely intact, it is expected that these two species would co-exist as they did prior to the extirpation of the fisher. Although fishers and spotted owls both prey on some of the same animals, this is not likely to reduce the prey base for either species." (9) While the species may have coexisted prior to the fisher's extirpation, such interactions would have occurred before the introduction and prominence of the barred owl. Private forest landowner's experiences on the Olympic Peninsula indicate that the barred owl is dramatically suppressing the northern spotted owl. There is little scientific information regarding the interrelationship of these two owl species, but competition for prey is widely hypothesized. It does not make sense to reintroduce a species that is likely to compete for some of the same prey as a species that is already struggling against a competitor."

Response: The effects of the proposed fisher reintroduction on northern spotted owls were analyzed on pages 112-113 in the Plan/EA and in the accompanying BA (EA Appendix B; pages 23-31). The conclusion of that analysis, based on an evaluation of many factors (including potential effects from competition for prey, competition for nest sites, fisher predation on spotted owls, habitat selection overlap, synergistic effects of

barred owls) was that the fisher reintroduction plan is not likely to adversely affect northern spotted owls. The return of the fisher into the ecosystem is also not expected to influence spotted/ barred owl interactions, due to many factors (including low densities of both species, different foraging strategies, high availability of nesting structures, and different diets). The NPS received a letter of concurrence from the USFWS on16 October 2007 concurring with the NPS determination that the proposed fisher reintroduction may affect, but is not likely to adversely affect northern spotted owls.

26) Comment: (Organization) "...third-parties would undoubtedly seek listing of the species once it is established in Washington."

Response: The fisher is already state listed as endangered; this project, if successful, would contribute to delisting in the state, not listing. Federally, the USFWS has already been petitioned to list the West Coast distinct population of fisher. That request was evaluated and listing found to be warranted, but precluded by the USFWS due to higher listing priorities. The successful implementation of this project, in addition to several other efforts that are currently underway for fishers in the west coast, would reduce the threat factors that lead to the USFWS listing determination, and would most likely lead to removal of fishers from the candidate list.

Impacts to Adjacent Landowners

27) Comment: (City Government) "...how will the ONP and WDFW address the situation of a fisher taking down a pet or livestock?"

Response: Due to their small size, fishers are not expected to prey on large livestock. Fishers may prey on small outdoor pets and farm animals, such as poultry, however these incidents are expected to be extremely rare (see Plan/EA page 153). The park does not allow pets or private livestock to be loose in the park. Fisher interactions with livestock outside of the park come under the jurisdiction of WDFW. Their anticipated response is described in the Plan/EA on page 153. WDFW biologists would provide expertise to aid the landowner in remedying the problem. If the problem could not be solved, an effort would be made to capture and relocate the offending animal.

28) Comment: (Area Resident) "...even though private land bordering the subject area is 'fragmented and minimal,' it is still owned by individuals who would be adversely affected should the Fisher Cat prey on their farm animals or be listed as endangered."

Response: The impacts to adjacent private landowners have been analyzed on pages 140-147 of the EA. Because private lands contain little suitable fisher habitat, and the parcels that do are small, fragmented and widely dispersed, it is expected that fishers will use few to no private lands. Under the most likely scenarios, where fishers are either delisted or their listing status does not change, impacts are expected to be negligible. In the unlikely event that fishers are federally listed, and they occur on private lands, the impacts are expected to be moderate. Fishers may prey on small outdoor pets and farm animals, such as poultry, however these incidents are expect to be extremely rare (see Plan/EA page 153).

29) Comment: (Organization) If the introduction of the fishers impact private timber lands, how will the park deal with this?

30) Comment: (Organization) How will the reintroductions be coupled with a conscientious strategy to mitigate economic impacts on private landowners?

31) Comment: (Organization) "While the reintroduction plan appropriately points out the options for private landowners in securing federal protection from the regulatory impacts of listed species (Habitat Conservation Plan, Safe Harbor Agreement, and Candidate Conservation Agreement), none of these options are either easy or inexpensive to obtain. Once obtained, these arrangements are expensive to monitor and implement. It is simply unfair for state and federal government agencies to be pursuing a reintroduction plan that places these kinds of burdens on private parties."

Response to comments 29, 30, 31: As analyzed in Neighboring Landowners on pages 139-148, the predicted impacts to private timber lands under the scenario most likely to occur (fisher listing status does not change or they are state delisted) there would be no impacts. There is currently no Forest Practices Rule for the fisher and the state does not anticipate asking for one. In the unlikely event fishers are federally listed, the impacts to private landowners would be moderate. However, the park will assist landowners with the development of an HCP or safe harbor agreement by sharing information from the fisher reintroduction program and providing fisher expertise.

32) Comment: (Organization) What would be the impacts of fisher reintroduction to small or large private landowners, or state trust beneficiaries, who may have specific actions (e.g., timber sales) delayed as a result of fishers denning in areas originally expected or believed to be suitable for their use? Would a delay in certain transactions, timber sales, road building, etc., have significant financial impacts on private land owners?

Response: See response to comments 29, 30, 31.

On state trust lands under the current listing status, seasonal and operational restrictions would be applied (pages 27-28). If an active known fisher den is located on state land there could be a delay in operations that were scheduled to occur during the denning season, however similar activity outside the area restriction could continue without restriction and once the denning period was complete the operation could return to the area where the fisher were denning.

Currently the HCP for state lands outlines conservation measures for species that have similar habitat requirements (e.g., northern spotted owl and marbled murrelet) that are incorporated into a contract for such actions as timber harvest and associated activities, including road building. Interest and bid offers on a timber sale are dependent on a multitude of items including current market price, fuel prices, and provisions included in the contract, such as seasonal restrictions. Fishers are predominantly associated with forests that have older forest structures and for this reason we anticipate that they will use the park or national forest exclusively or nearly so. There is a slight possibility that they would locate a den on state or private land. In that case, we anticipate that the likelihood of a denning event coinciding with planned timber harvest activity is very small. The effects of the seasonal restriction would be negligible to minor, and would not be additive to restrictions already in place for spotted owls and marbled murrelets.

33) Comment: (Organization) "It appears that this conclusion is based on two assumptions, neither of which are warranted. The first assumption is that the fisher will not occupy private forest lands, because 95% of the suitable habitat on the Olympic peninsula

occurs on federal or state land, and where suitable habitat does occur on private land, it is only in small, fragmented amounts."

Response: The habitat analysis conducted by WDFW (Lewis and Hayes 2004) quantified and mapped the spatial extent of suitable fisher habitat on the Olympic Peninsula. That analysis concluded that only 5% of suitable fisher habitat on the Olympic Peninsula was on private land (11160 ha; page 34 Lewis and Hayes 2004). The mapping analysis revealed that potential fisher habitat on federal lands occurs in large, contiguous blocks. However, habitat patches on private lands were small and fragmented, making it unlikely that fisher would find them and be able to establish a sustainable home range using them. Current management practices that employ short rotations and regeneration harvests are not likely to create habitat conditions needed by fisher in the future.

34) Comment: (Area Business) "State laws that implement the Forest Practices Habitat Conservation Plan FPHCP heavily regulate private forestland management. These laws mandate various site-specific waterway buffers and protections measures for the protection of fish and amphibians. Our experience to date, on the North and Western Olympic Peninsula, is that these measures disallow timber harvest on about 25% of our (private) forestland. For at least the 50 year FPHCP plan duration, these riparian buffers will contribute low elevation late successional-like and second growth habitat that is very likely to be used by fishers. Additionally, since these riparian areas are necessarily contiguous, they provide contiguous corridors in direct contrast to the Fisher Plan's allegations of the fragmentation of private forest lands. This habitat, combined with the fact that the historical record indicates that fishers were most numerous in the western lowlands, lead us to believe that reintroduced fishers will quickly inhabit our timberlands. We believe that the authors of the FRP have enormously and speciously "played down" the potential for fisher dispersal to private forest lands."

Response: Current riparian areas are not expected to support fishers for two reasons: (1) the current riparian areas are predominantly younger forest, and for that reason, the vast majority of these areas will remain unsuitable for fishers for several decades. (2) The amount of forest in riparian buffers that might be suitable for fishers will be insufficient to support a fisher home range. Where riparian areas provide overhead cover, fishers could use these as travel corridors to access suitable habitat on private land. However, as stated before, for the most part, private timberlands do not contain sufficient suitable habitat (i.e. forest stands with older forest structures) to support fishers.

35) Comment: (City Government) "What happens if the errant/friendly fisher utilizes the Queets or Hoh River riparian area and moves down river onto private property and the land owner does not want to volunteer to cooperate with the program?"

Response: As mentioned on page 143-144 of the EA, despite being listed as a state endangered species, there is no critical habitat rule (WAC 222-16-080) for the fisher under the State Forest Practices Act (RCW 76.09), and thus no restrictions of forest practices activities on state or private timberlands to protect fisher habitat (Lewis and Hayes 2004). Private land owners are prohibited from hunting/trapping, possessing, or harm of a state endangered species, and knowingly cutting down or disturbing an occupied fisher den tree would be a violation of state law. Therefore, a known active den structure (e.g., a tree, snag or downed log), should it occur on private lands, would need to be protected while the fisher was denning in it. However, we anticipate the likelihood of this occurring is very low, and protection of the den structure would only be for a short period (this may only involve 3 months between March and June); it could be harvested once the fisher was no longer using the den.

Fishers are predominantly associated with forests that have older forest structures and for this reason we anticipate that they will use the park or national forest exclusively or nearly so. There is a slight possibility that they would locate a den on private land. In that case, we anticipate that the likelihood of a denning event coinciding with planned timber harvest activity is very small. If it did, with the exception of the den structure itself while it is occupied, cooperation is voluntary for protecting or managing surrounding habitat during denning or during other time periods.

36) Comment: (Organization) "We believe that the reintroduction plan seriously underestimates the potential for impacting private forest landowners, particularly if fishers are to be reintroduced in other National Parks in the state, which is a stated objective of the reintroduction plan."

Response: The analysis of effects to adjacent landowners is on pages 139-148 of the Plan/EA. Impacts of fisher reintroductions in other areas, such as the Washington Cascades, are outside of the scope of this plan/EA. Any other reintroductions involving federal action would require their own plan and impact analysis, including opportunities for public involvement in the planning process. If this project is successful, those conducting future reintroductions could learn from the information gained in this project, and, possibly excess animals from the Olympic Peninsula could serve as a source population. However, future reintroductions do not depend on this action to occur (fishers could also come from other western stock). In addition, this action does not predicate that other fisher reintroduction actions will occur nor does it depend on them occurring.

Socioeconomic Impacts

37) Comment: (Local Resident) "You discuss possible new requirements for protecting fishers and their habitat, if ESA listed, which will have a negative economic impact on an entire region of rural communities. The economic analysis of negative impacts should be addressed. Seasonal buffers and biological assessments prepared for proposed timber harvests add to the costs of the harvest unit."

Response: As analyzed in Impacts to Socioeconomic Conditions (Plan/EA pages 148-153) the predicted impacts to timber lands under the scenario most likely to occur (fisher listing status does not change or they are state delisted) there would be no impacts. In the unlikely event fishers are federally listed, the impacts to other federal, state and private landowners was evaluated to range from negligible to minor. Seasonal restrictions would only occur around natal den sites of known reproductive females; in the west coast female fishers have been found to den only in tree cavities of large trees. We expect that female fisher natal dens will be located on lands already subject to seasonal restrictions for spotted owls and marbled murrelets. See also responses to comments # 29, 32, 38.

38) Comment: (City Government) What would be the economic impacts associated with where the action is taking place? (i.e. impacts on indirect jobs and manufacturing associated with the forestry sector in the western portions of these counties).

Response: As analyzed in Impacts to Socioeconomic Conditions (Plan/EA pages 148-153) the predicted impacts to timber lands under the scenario most likely to occur (fisher listing status does not change or they are state delisted) there would be no impacts. In the unlikely event fishers are federally listed, the impacts to other federal, state and private landowners was evaluated to range from negligible to minor. Since only 5% of suitable fisher habitat occurs on private land, the likelihood of fishers inhabiting private land is low and very few, *if any*, private landowners would be affected. Therefore, under the most likely scenarios, where fishers are either delisted or their listing status does not change, impacts are expected to be negligible. Timber companies that harvest on WDNR lands would not be required to draft additional compliance documents, because of the state's 1997 habitat conservation plan that is already in place. That document may result in the delay of harvesting a stand if it is known that a female is denning there, but the stand would be released for harvest once the female moves.

The economic impacts on direct and indirect jobs associated with the forestry sector in western Clallam and Jefferson counties cannot be quantified because the number of acres scheduled for timber harvest that could be potentially affected to protect denning fishers is unknown, but it is expected to be low. There might be a slight decrease in the number of direct and indirect jobs associated with the forestry sector in the western portion of these counties if fishers were to be federally listed or fishers were known to occupy a tract of privately-owned land. These decreases in jobs would be associated with delays in land sales. In addition, page 151 states that tree stands harvested on rapid rotation are not used for fisher denning.

39) Comment: (City Government) "...the economic analysis found at FRP/EA pages 88-90 fails to address the impacts associated with where the action is taken place. For example the references to county wide economic data really hides the disparities between eastern and western Clallam and Jefferson Counties. As a result, indicating that only 2% of the businesses in Clallam County were in the forestry sector seems minor, but when manufacturing and indirect jobs are associated with those numbers and those numbers are localized, the impact of that industry to the western portions of these counties is substantially higher and of a greater concern. Subcounty data was used for part of this section, but did not involve any subcounty economic data analysis."

Response: See response to comment 38. On page 153 of the EA we state that socioeconomic impacts would vary with landowner, but are expected to range from negligible to minor. A more site specific analysis is neither possible, nor required.

40) Comment: (Organization) "Lastly, the WFPA takes exception to the Service characterizing commercial forestry as a dying economic sector. For example the reintroduction plan states: 'Although timber extraction industries have declined substantially in recent years, they continue to provide living wage jobs for a small percentage of people in both counties. This industry faces many threats to its continued existence...' While the forest products industry was drastically impacted in the past, what remains today is environmentally, socially, and economically vibrant."

Response: The Plan/EA on pp. 88 – 92 provides a balanced description of the timber harvesting industry in the four counties, including both the continuing importance of the forest products industry and the transition to a more diversified economic base that has emerged more recently. For example, the plan/EA discusses (see p. 92 of the EA) the growing number of specialty value-added manufacturers in Jefferson County. For further

clarification, the NPS has added in the errata a statement that despite harvest declines, the forest products industry has become more efficient in converting raw wood materials to final precuts in order to meet market demand (Washington Forest Protective Association, Committee for Protecting Sustainable Forestry, n.d. *forest facts & figures*, p. 2).

Reintroduction Implementation Plan (private landowner conflicts)

41) Comment: (City Government) "Reintroduction should be concentrated in the southern most reaches of the Elwha-Sol Duc area, the eastern most reaches of the Queets-Quinault areas, and the south-eastern most portions of the Hoh-Bogachiel areas. This should, if the information about the fisher's migrational norms is accurate, highly reduce the likelihood of the errant/friendly fisher situation noted above. In looking at the FRP/EA there appears to be sufficient habitat in these reaches to establish the populations and allow for some down stream/river migration to occur of the various mammals let loose to roam in the Olympics (See FRP/EA). The interactions that would cause the most concern and animosity with local property owners, managers, farmers, and rural remote homeowners would greatly increase if the ONP/WDFW determined that releasing a portion of the Hoh-Bogachiel population (presumably some 35 animals) in and along the Willoughby Ridge areas of the ONP... release sites should be identified that reduce the likelihood of fisher migration out of ONP property and onto other landholders such as the USFS and the DNR where their lands may be subject to other requirements and associated with expectations of revenue production (in the case of the DNR)."

Response: The commenter makes a good suggestion. The program will be most successful if fishers remain in secure habitat within the park. The first releases will be made as deep in the park in suitable habitat as is logistically possible, both to minimize the chance that post release movements will expose fishers to greater chance of mortality (i.e. road kill, incidental trapping), and to minimize potential conflicts with adjacent landowners. Subsequent release sites will be determined once data is evaluated on fisher survival and movement patterns following the first round of releases. Releases will not occur in the Willoughby Ridge area unless post-release monitoring indicates that fishers released in that area will not cause conflicts with landowners outside the Park.

WDFW Management

42) Comment: (Area Business) "Fishers are now listed by the State of Washington as "State Endangered." The management recommendations from the WDFW directly conflict with most of the private forestland management activities on the Olympic Peninsula. Re establishing fishers will give the WDFW an enormously tempting opportunity to argue for increased restrictions on the private forestland management that so many people now depend on for their employment. Our experiences with the WDFW cause us to doubt very much their comment that WDFW is not going to ask the state Forest Practices Board for a critical habitat rule on state and private land."

Response: The fisher was listed as state endangered in 1998. At that time, the WDFW went to the Forest Practices Board and did not ask for a critical habitat rule for fisher in Washington. There is no existing critical habitat rule, and there are no WDFW "management recommendations" for fishers. The DNR already has included fisher in their Habitat Conservation Plan for lands suitable for the spotted owl. Recovery of fisher in

Washington is expected to be dependent on habitat available on public forestland, particularly National Parks and National Forests.

43) Comment: (Area Business) "The FRP reference to "candidate conservation agreements" on private lands gives us serious concerns. If these agreements require WDFW approval, they essentially become state required rules without going through the legislative rule making process. Even if the WDFD delivers on its comment it is very likely that other "kinder and gentler" forestland management advocates will petition for additional state rules for this "cute and fury" creature."

Response: Candidate conservation agreements are federal agreements between the U.S. Fish and Wildlife Service and other parties. The WDFW does not have a role in approving them; it is the US Fish and Wildlife Service that approves them. What third parties might do is highly speculative, and outside the scope of the analysis.

44) Comment: (Organization) "The second objectionable assumption is that if the fisher does occupy private forest lands, such occupancy will not have a regulatory impact. The reintroduction plan asserts that: "The WDFW does not anticipate asking the Forest Practices Board for a critical habitat rule." The reintroduction plan then contradicts itself by asserting that: "If fishers are reintroduced, the department would encourage the protection of den sites if they become known through research and monitoring (Hayes and Lewis 2006)." Even if the state decided not to pursue regulatory restrictions, there is no protection for landowners from third-parties pursuing such restrictions."

Response: As stated in the EA on page 6, WDFW does not anticipate asking the Forest Practices Board for a critical habitat rule. In the absence of a forest practice rule, it seems only prudent for WDFW to work cooperatively with private landowners to protect endangered species. What third parties might do is highly speculative, and outside the scope of the analysis.

45) Comment: (Area Business) "On a more positive note, Green Crow is not opposed to having fishers inhabit our forestlands. We are opposed to efforts to change our forest management activities for fisher protection-in essence, requiring private forest landowners to provide public benefits at the landowner's expense. Here are some things that could be done to make fisher introduction more palatable:

- Classify reintroduced fisher populations as "Nonessential Experimental Populations under the ESA.
- Effect state legislation (not rules which are essentially determined by and changed by state agencies) that disallows protection regulations for reintroduced fisher.
- Affect funding mechanisms and funds to "pay" landowners for their voluntary fisher protection measures."

Response: As stated in the Plan/EA on page 47, informal consultation with the USFWS determined that it was not legally possible to release fishers as an experimental population under section 10(j), as the fisher is only a candidate species for listing under the Endangered Species Act and therefore is not eligible for section 10(j).

Because it is extremely unlikely that a fisher will den on private property, and the economic impact would be negligible even if it did occur (asking a landowner not to cut down or remove one structure that a fisher may be actively denning in), moving a bill through the state legislature is not warranted.

We are not aware of any funding programs that are designed to compensate landowners for voluntary, short term, protection measures.

Linkage to Wolf Reintroduction

46) Comment: (Area Business) "I also have a concern about your comment on pg 1 regarding the other specie[s] that has been lost in ONP, the gray wolf. Will they be your next reintroduction!"

Response: This Plan/EA is for fisher reintroduction only, and is not dependent on any other project, nor is any other project dependent on implementation of the fisher plan/EA. Any effort to reintroduce wolves would be independent of this action, and would require a separate plan and impact analysis, including opportunity for public involvement.

Budget/Impacts to Park Operations

47) Comment: (Area Business) "The ONP continues to struggle with an inadequate budget to support current operations and even with grant funding, may find the fisher an additional financial burden."

Response: Impacts to park management has been addressed on pages 154-158 of the Plan/EA, and were evaluated to be negligible to minor.

48) Comment: (City Government) "...what happens if there are not funds for year 4 and beyond monitoring?"

Response: Given the success of our ability to secure funding for this project to date, the NPS, WDFW and other partners fully anticipate our ability to secure adequate funding for years 4-10 of the project. Just since the Plan/EA was released, we have received an offer from the Lower Elwha Klallam Tribe to assist with post-release monitoring. We have not secured funds for years 4-10 as of yet, because it is too far out in our funding cycles to secure funding that far in advance. In the unlikely event that funding can not be secured beyond year 3, there will be little effect on the fisher restoration effort itself, however we will have lost a valuable opportunity to gather information, inform the public, and facilitate citizen science. We also will be unable to lend full guidance to any subsequent fisher reintroduction efforts, and less able to assess if the Olympic population is robust enough to serve as a source population for subsequent reintroduction in the Cascades, as described in the state's fisher recovery plan. The effects of not being able to secure funding for monitoring for years 4–10 would not change the level of effect on the impact topics addressed in the EA.