



February 2, 2024

Ms. Jacque Buchanan, Regional Forester
Pacific Northwest Region
United States Forest Service
1220 SW 3rd Avenue
Portland, OR. 97204

RE: Region 5 and Region 6; California, Oregon, and Washington; Forest Plan Amendment for Planning and Management of Northwest Forests Within the Range of the Northern Spotted Owl

Submitted via: <https://cara.fs2c.usda.gov/Public//CommentInput?Project=64745>.

Dear Ms. Buchanan,

Thank you for the opportunity to submit scoping comments for the Draft Environmental Impact Strategy for the Amendment to the Northwest Forest Plan, Washington, Oregon and California. (the "DEIS").

Sierra Club was founded in 1892 and is the nation's oldest grassroots environmental organization. Sierra Club is incorporated in California, and has more than 3.7 million members and supporters nationwide and chapters in every state including Washington, Oregon and California. The organization is dedicated to the protection and preservation of the environment. Sierra Club's mission is to explore, enjoy and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments.

Sierra Club has worked for many decades to ensure protection of the Pacific Northwest's mature and old growth forests and listed species dependent upon those forests, including the northern and California spotted owl, marbled murrelet, and others. Over many years, our members have deeply engaged in development of the individual forest plans under the National Forest Management Act, designation of wilderness, and with the Northwest Forest Plan and related processes. We were an active participant in the petition to list the spotted owl and other old growth dependent species.

I. INTRODUCTION AND OVERVIEW OF THE SIERRA CLUB'S RESPONSE TO THE NOTICE OF INTENT AND SCOPING FOR THE DEIS TO AMEND THE NORTHWEST FOREST PLAN.

The challenge for this amendment process to the Northwest Forest Plan (NWFP) will be to strengthen protections, while at the same time addressing any issues that may need adjusted direction that includes and/or relies upon vegetative management.

Increasing the intensity and scope of vegetative management actions, suggested by the NOI, will increase the conflict between meeting “primary Plan objectives” (i.e. “Protecting and enhancing biodiversity of mature and old growth ecosystems [that] is a central tenet of the NWFP”) and the Forest Service’s stated goal of increasing fire resistance in a climate change world.

As suggested by the NOI, expanding logging opportunities by raising or eliminating the stand age direction for no cutting in LSRs to greater than 80 years and/or increasing the diameter limit on allowable cutting, in order to ‘improve fire resistance’ or increasing ecosystem adaptability, conflicts with the objective “to meet the original intent of the NWFP to conserve mature and old-growth ecosystems and habitat for the Spotted Owl and other species, protect riparian areas and waters...” We are concerned that “clarifying direction” is code for raising the planned cut levels across land use allocations (LUA) where cutting is now prohibited or limited. The findings of the Bioregional Assessments appear to raise the “above all” emphasis of the amendment so as to adjust management direction to permit that the Probable Sale Quantity (PSQ) levels, last adjusted in 2001 may now be met, by virtue of such ‘clarifying direction’.

It would seem that a major aspect of the rationale for “*Strengthening the capacity of for the NWFP ecosystems to adapt to the ongoing effects of climate change and to mitigate impacts of climate change*” is to provide greater management flexibility in order to facilitate an increase in cutting levels that will allow the 2001 PSQ *or more* to be met.

Our review of this NOI and supporting documents (including the Bioregional Assessments), which invoke “clarified” management direction,” “active management,” and/or “nuanced direction”, concludes that the changes outlined in the NOI may not “Improve sustainability of mature and old growth ecosystems by providing plan direction to maintain and expand mature and old growth forest conditions and reduce loss risk across all land use allocations.” We conclude that the changes outlined in the NOI and the Background Documents (defined below) would effect a wholesale change of the original emphasis of NWFP.

The Sierra Club requests that its comments in this Letter, together with the specific issues that the Sierra Club raises with the proposed amendment, be included in the DEIS. The Sierra Club’s comments and issues are set out below in the following five (5) sections:

II. Economic Analysis

- III. Comments on Chapter 1 of the Supplemental Report to the Bioregional Assessment
- IV. Endangered Species Analysis
- V. Fire and other Analyses
- VI. Have the Original Goals of NWFP been met?
- VII. Conclusion

II. ECONOMIC ANALYSIS.

A. Changes in economy and jobs, 1970 – 2022

The implication in the NOI and the Bioregional Assessments and Supplemental Reports, *that the FS wishes to revise the NWFP so as to achieve the PSQ of 600 million Board Feet per year which had been predicted after revisions to the 1994 Plan*, must be rigorously examined in the DEIS. If the FS intends to increase the PSQ to a level greater than 600 mmbf, the DEIS must describe this intention as well. In either case, the FS must provide the rationale for how greater cutting levels than recent historic levels will meet the original objectives of the 1994 Plan.

PSQ goals must be based on data readily available and the *existing* ‘tentatively suitable’ forest land base, rather than unrealistic expectations. Establishing a realistic PSQ goal based on current forest land availability, properly accounting for the need to protect the habitat of endangered species and maintain ecological integrity, is necessary. By adhering to these requirements, USFS may be able to meet the desire for sustaining predictable cutting levels that may contribute to a stable economic base for both urban and rural communities of the NSO Region that have been historically reliant on forest resource extraction activity from adjacent forest lands of all ownerships.

We note that first, both the national and regional cutting levels in National Forests has been in decline since the late 1980’s.

Secondly, we note that, in so far as economic vulnerability of NWFP Area communities is concerned, economic trend data shows that the reliance on forest-based jobs has dramatically decreased throughout the NSO Region since the 1970’s, and that many communities have diversified their economies and grown since the 1990’s. Some factors that have facilitated these trends include the spillover effects from explosive growth that occurred in the Region’s urban areas and long-term growth in the service sector, along with some offsetting effects of tourism and recreation. Some additional assistance has come with the harvesting of non-timber forest-based products such as mushrooms and moss.

In addition, the NOI states “*While important progress has been made, changed ecological and social conditions are challenging the effectiveness of the NWFP.*”

The Sierra Club notes that the conclusion that “Social conditions are changing...” is a substantial understatement when it comes to describing the developing and maturing of the economy of the Region of the NWFP.

The NOI states that the NWFP has not largely achieved its timber production goals. The original PSQ estimate in the NWFP FEIS was 1.1 billion bf (including salvage volumes) in 1994. The 1.1 bb bf included BLM & NF cuts, the NF part of this was 833 bb ft. At initial Plan implementation it was found that these levels could not be met, so there were several revisions made in 1995-2001, reducing the NF PSQ component to 600. In Section II below, we discuss these adjustments in detail, in our comments on Chapter 1 of the Supplemental Report to the Bioregional Assessment . While the NOI’s statement is true, the USFS may be partly responsible for this ‘failure to meet PSQ targets’ due to failures of organization and administration. In any event, the NWFP PSQ has not been revised since 2001 when the cut was reduced to 600 mmbf/year for all NF lands in the range of the NWFP. However, after 2001 when management direction no longer offered sales in LSOG forests in Matrix and AMA, the Forest Service *failed to further adjust* the PSQ to account for the then-current direction. This failure to meet timber targets can be more accurately described as a function of the Agency actively allowing the PSQ to fall out of synchronization with the situation on the ground coupled with actual management policy and direction.

We agree that economic impacts to communities extend beyond direct timber employment impacts. We request that the Forest Service consider the full range of economic responses within the NWFP Region in its DEIS economic analyses of the amendment, including but not limited to the contribution of outdoor recreation to all the economies, as documented by the Department of Commerce, Bureau of Economic Analysis (BEA) in their News Release of 17Nov23. The DEIS must identify the full range of employment sectors that extend well beyond just those associated with the timber industry.

Since 1980, the entire NWFP Region has experienced a total employment growth of at least four million jobs, impacting both urban as well as rural counties.

The DEIS must fully disclose all employment sector trends within each of the 55 counties of the NWFP Region, particularly including the reduction of the dependency of all of these counties on the timber sectors for total employment. The DEIS must analyze these trends, from the 1960’s to the present time (2022), and particularly document how the dependency of the NWFP Region on national forest-generated timber employment has changed. The DEIS should describe the relationship of direct timber jobs generated by national forest-generated timber programs compared to all forest extraction jobs across all forest ownerships in the NWFP Region.

The DEIS must analyze these employment trends, from the 1960’s to the present time (2022) and include an evaluation of at least the following metrics:

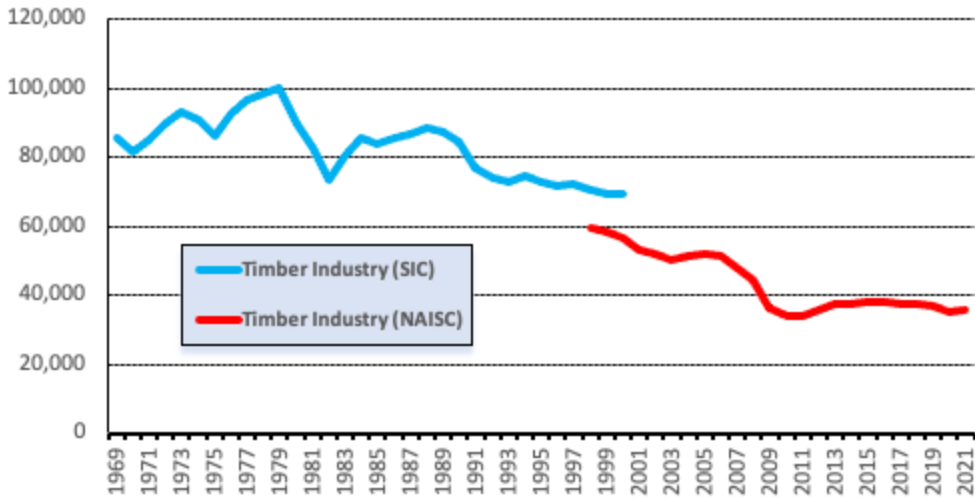
- o Employment trends that include total employment (including full-time and part-time workers including proprietors) for each county;
- o Employment trends for full-time and part-time workers that include each major sector for each county. Timber must be evaluated as a sector of manufacturing and agriculture;
- o Metrics for “key indicators” for each NWFP county for the entire period that include but not limited to:
 - unemployment rates, average earnings, per capita income,
 - non-labor employment as a per cent of personal income,
 - services employment as a per cent of total employment,
 - government employment as a per cent of total employment
 - direct timber employment as a per cent of total employment
 - travel and tourism employment as a percent of total employment.

For the last 50+ years, the entire NWFP Region has experienced significant employment growth and diversification. This growth is not limited to urban areas but has produced growth in many rural counties as well. The NOI suggests that the DEIS will instead narrowly focus its economic analyses on timber and the timber related sectors only. *The Sierra Club* disagrees with this narrow emphasis.

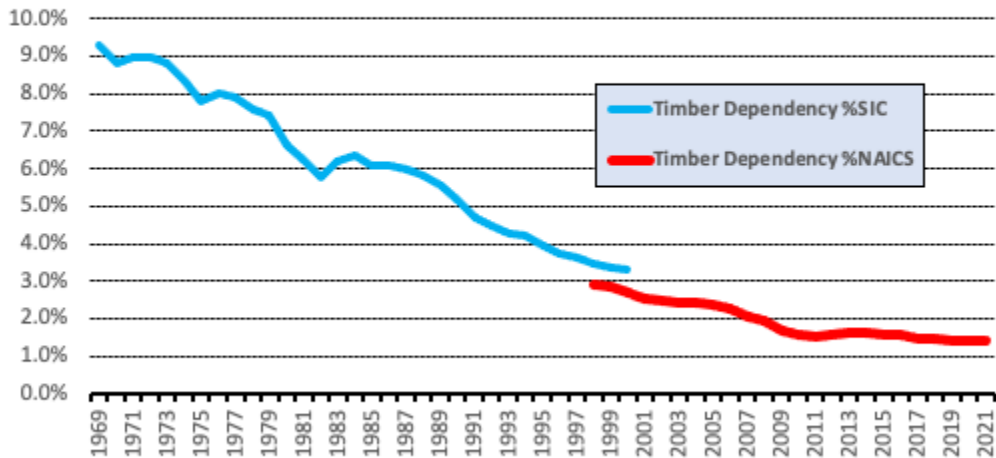
The following charts depict the trends in both direct timber employment sectors and the share of those sectors for the states of OR and WA for the period covering 1969-2022. Note that direct timber sectors in each state reached peak employment in the late 1970’s. Also note that the share of total employment (full-time and part-time) provided by the timber sector in both states has also been in steady decline since 1969.

While these charts utilize state level data, these trends are highly representative of trends for the NWFP Region because the timber employment within the NWFP Region Counties comprise 91% of OR’s statewide timber employment and 86% of WA’s statewide timber employment (Headwater Economics EPS data). The source for all data in charts is from **US Department of Commerce, Bureau of Economic Analysis, Regional Accounts Data**.

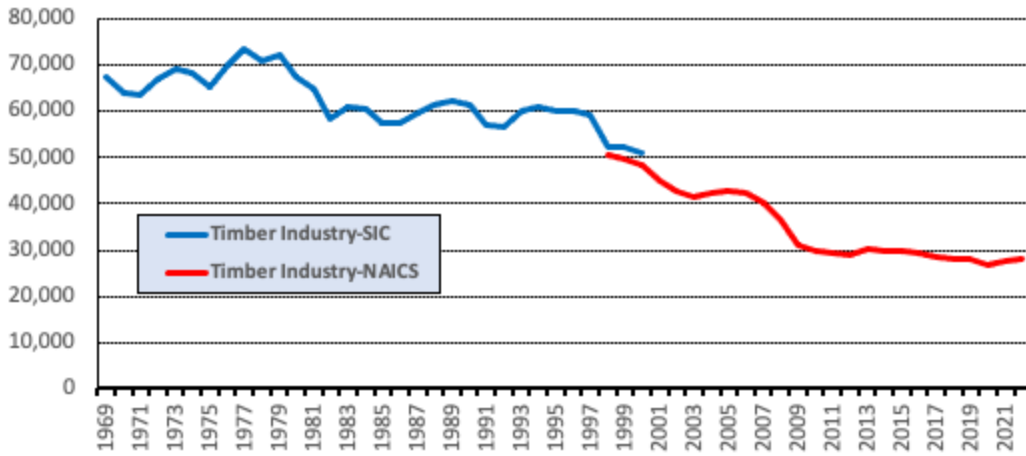
Employment Trends, Timber Industry (SIC & NAICS), Oregon, 1969-2021



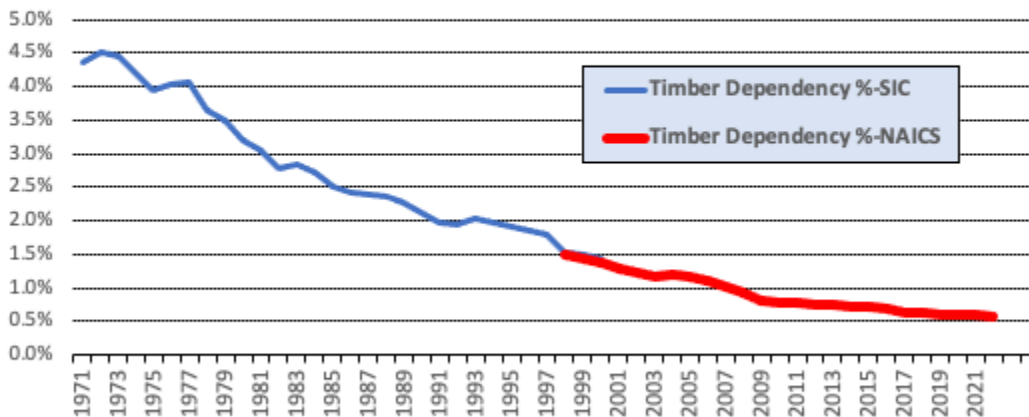
Dependency Trends, Timber's Share of Total Full-Time & Part-Time Employment, Oregon, 1969-2021



Employment Trends, Timber Industry (SIC & NAICS), Washington, 1969-2022



Dependency Trends, Timber Industry's Share of Full-Time & Part-Time Employment, Washington, 1969-2022



The “Covid Effect” has apparently been to increase lumber demand. However, this has not resulted in a measurable employment response. The major agencies (US Dept of Labor and State

Agencies (WA Dept of Employment Security)) are not predicting an expansion of the direct timber sectors.

The Sierra Club requests that The DEIS must evaluate, as part of the Changed Condition, the ‘changed conditions’ that have occurred in the structure of both local and regional economies, from the period where all forest ownerships were rapidly liquidating LSOG forests to the present time within the NWFP Region.

A key measure of these shifts is the substantial reduction of timber dependency at the county level. ***The Sierra Club requests that*** the Forest Service should evaluate and incorporate these changes in employment from the 1970’s to the present time and include them in the DEIS.

In Jerry Franklin’s book *The Making of the Northwest Forest Plan* trend analyses show, for example, that during 1970-74 nearly half of the 55 counties making up the NWFP Region were more than 20% reliant on timber for employment, compared to 2022, where only three counties in the entire NWFP Region are now more than 10% dependent on timber (Headwaters Economics EPS data). ***The Sierra Club requests that*** The DEIS must fully disclose this type of trend data to allow the public to evaluate this massive economic shift that has taken place. The Synthesis of Science (GTR-966 Volume III) fails to provide any useful trend data that evaluates timber dependency trends at the county level.

The Sierra Club requests that these findings be incorporated into the DEIS and address all the significantly changed conditions over time including the structure of local economies down to the county level. This analysis should include trends over the period of time that encompasses the situation prior to NWFP implementation to the present time.

In addition, ***The Sierra Club requests that*** the DEIS must include the projected economic effects across the NWFP Region of any incremental increase in timber supply and related forest products and then relate those incremental increases to the current economic situation that is now found in the counties that could be affected. In addition, we request that the DEIS evaluate the socioeconomic resiliency of all counties within the NWFP Region per the 2004 Daniels Study. This study assessed the socioeconomic resiliency of Washington counties. Similar studies can address OR and CA counties to determine the extent of economically vulnerable counties in the Region. (See Daniels, Jean. 2004 General Technical Report PNW-GTR-607. U. S. Forest Service, Pacific Northwest Research Station. Portland, OR. 35 p).

Providing a ‘sustainable supply of timber’ is not a matter of simply increasing the cut on NFS lands within the NWFP Region to match the 1994-2001 PSQ estimates as the NOI alludes. ***The Sierra Club requests that the PSQ must be realistic and reflect all aspects of the current management direction of an amended NWFP as well as be consistent with conditions on the ground of each national forest.*** Part of the reason that the PSQs from the 1990’s have not been met is that management direction was changed after 1994, but the PSQs were not then amended to reflect those policy revisions.

The Sierra Club requests that “non-forest products” must be defined in the DEIS and they must include the values of outdoor recreation and other closely associated ecosystem services. To

focus on “timber and non-timber products” alone and exclude other sectors is far too narrow with results that may well have the effect of locking counties with smaller, less diverse economies into the long-term cycle of ‘boom or bust’ that is so characteristic of economies with undue reliance upon the fortunes of timber.

The Sierra Club advises taking a broader view that includes leveraging from the several expanding service sectors, which should at minimum include the values of outdoor recreation and other ecosystem services.

Some rural communities are also looking at expanding into new forest-based activities such as biomass extraction. *Any expansion of forest extraction activities must* be evaluated for their impacts on late successional habitats and be addressed in the DEIS, and that the DEIS:

- 1) require ongoing monitoring of ecological impacts of extractive activities, and
- 2) set limits on extractive activities, including but not limited to biomass and "any current or future use of our public resources that may impact the late successional habitat and associated species within the NWFP Region",

in order to maintain healthy forest ecosystems for seven generations or more.

"Other economic opportunities" must be defined in the DEIS. These opportunities are expected to be broadly focused and not reflect supporting aspects for industrial timber production.

Direct timber employment in the NWFP Region has been steadily declining since the late 1970's as the publicly available data shows. The NWFP implementation was just one step in that entire process of maturing, restructuring, and diversifying and growing the regional economy. The DEIS must describe this economic evolution that added about 4 million jobs in virtually all of the 55 counties since 1980, *with the effect that all of the Region's counties are no longer as dependent upon timber as was the case in 1985-1989.*

B. Changes in Societal Valuation of Public Land use by the Public and sustainable contribution of tourism and recreational use to local economies, 1994 – 2022

The Sierra Club requests that the DEIS address one of the primary underpinnings of this massive expansion in public use of public land which is the **quality of public lands** that draws people and then retains them in the NWFP Region. This expansion, occurring not only in urban but also in many rural areas, must be addressed in the DEIS, and recognition of the intrinsic value of quality public lands.

The Sierra Club requests that the DEIS must document and account for the value of ecosystem services including community water service, recreation and tourism when evaluating the goods and services provided by the National Forests in the NWFP Region. These values are part of the *Changed Conditions* that must be addressed before making any changes or amendments.

III. COMMENTS ON CHAPTER 1 OF THE SUPPLEMENTAL REPORT TO THE BIOREGIONAL ASSESSMENT.

The Sierra Club has the following comments to Chapter 1 of the Supplemental Report to the Bioregional Assessment (referred to herein as “*Ch1 of the Suppl Rpt*”). All page references are to pages of the Chapter 1 unless otherwise noted.

Pages 7 & 8-Benefits to People & Communities

- *“In 2016 NWFP federal lands supported 25,000 local jobs.”* **Comment:** The DEIS needs to provide critical information about the jobs that are supported by federal lands within the NWFP Region. For instance, what is the context for how these 25,000 jobs relate to the full labor economy of the NWFP Region? Are the recreation-based 7800 jobs included as part of the 25,000 local jobs figure? What is the share of the 25,000 jobs that occur in the metropolitan counties and how many are located in nonmetropolitan counties? What share of the 25,000 local jobs are supported by the NF timber sale program? The DEIS should integrate its findings on the share of gross state product (GSP) that outdoor recreation contributes to State economies into the NWFP Region’s economy. The DEIS should also compare the GSP that is supported by the timber sector with total state economies. And compare the timber sector GSP with the GSP for outdoor recreation for each state.
- *Figure 2.* **Comment:** The DEIS should clarify the definition for the job figures defined as supported by “Federal Timber harvest 2016.” Are these direct jobs? Or are they direct, indirect, and induced jobs? The DEIS should evaluate the importance of the direct federal harvest jobs (2016) and compare that figure to all direct timber-based jobs in the NWFP Region for all ownerships. The DEIS should ensure the figures used for comparison include only similar categories.

Page 9-Forest Products.

- **Comment:** The DEIS should provide data for current timber-based employment (separating direct from indirect and induced) for (1) federal timber-based jobs; (2) national forest timber program-based jobs; and (3) all timber-based jobs supported by all ownerships within the NWFP Region. The DEIS should evaluate direct timber-based employment trends since the 1970’s to the present and compare these trends with similar total employment trends for the NWFP Region. These data should separately evaluate direct timber employment for WA, OR, and CA.

Page 9:

- *“These job losses are likely to have a more pronounced effect in small rural communities where up to 10 percent of employment in the community can be in the forest products manufacturing sector.”* **Comment:** This comment represents a substantial overstatement of the dependency of individual counties within the NWFP Region on timber. The DEIS should provide current estimates for the dependency of all 55 counties within the NWFP Region on timber. Headwaters Economics EPS data shows that of the 55 counties in the Region, only 3 had a timber dependency of more than 10% in 2022. This compares to

1985-89 when 30 counties had timber dependencies greater than 10% (J. Franklin, *The Making of the Northwest Forest Plan*).

- **Figure 3-Northwest Forest Plan (NWFP) timber harvest and employment from 1995 to 2016**
 - **Comment:** The DEIS must provide definitive timber supply information for all major ownership classes including national forest, BLM, state, and private for each State within the Region. These data for at least WA and OR are available from the WA Department of Natural Resources and OR Department of Forestry respectively. The DEIS must describe the share of timber supply provided each ownership, particularly national forest so as to allow an understanding of how dependent the NWFP Region is upon NF timber for its log supplies. Additionally, the DEIS must provide direct timber employment data for all direct timber jobs as well as jobs generated by national forest timber programs. This employment information must be provided by state. In addition, the timber employment data must at least cover the period 1969-2022.
 - *“Despite the overall reduction in traditional timber sector jobs in rural communities in the NWFP area...”* **Comment:** The DEIS must disclose long-term trend data for timber in the NWFP Region. The Department of Commerce BEA data shows that the long-term trends of the reduction in timber jobs is not limited to the period of time when the NWFP was implemented as the Forest Service descriptive materials would indicate. These job reduction trends have occurred steadily since the 1970’s for OR & WA continuing to the present time. These changes have resulted in lower timber dependencies for the Region. These trends were not evaluated in the GTR 966 Volume III.

Page 11-National Forest Road System

- **Comment:** The extensive road systems on national forest lands have contributed to local and anadromous fish species decline. The Aquatic Conservation Strategy (ACS) guidance needs to be both followed more rigorously as well as strengthened.
- **Comment:** Declines in road maintenance funding need to be reflected by an increased reduction in the road systems so as to further improve aquatic health and further ACS objectives.

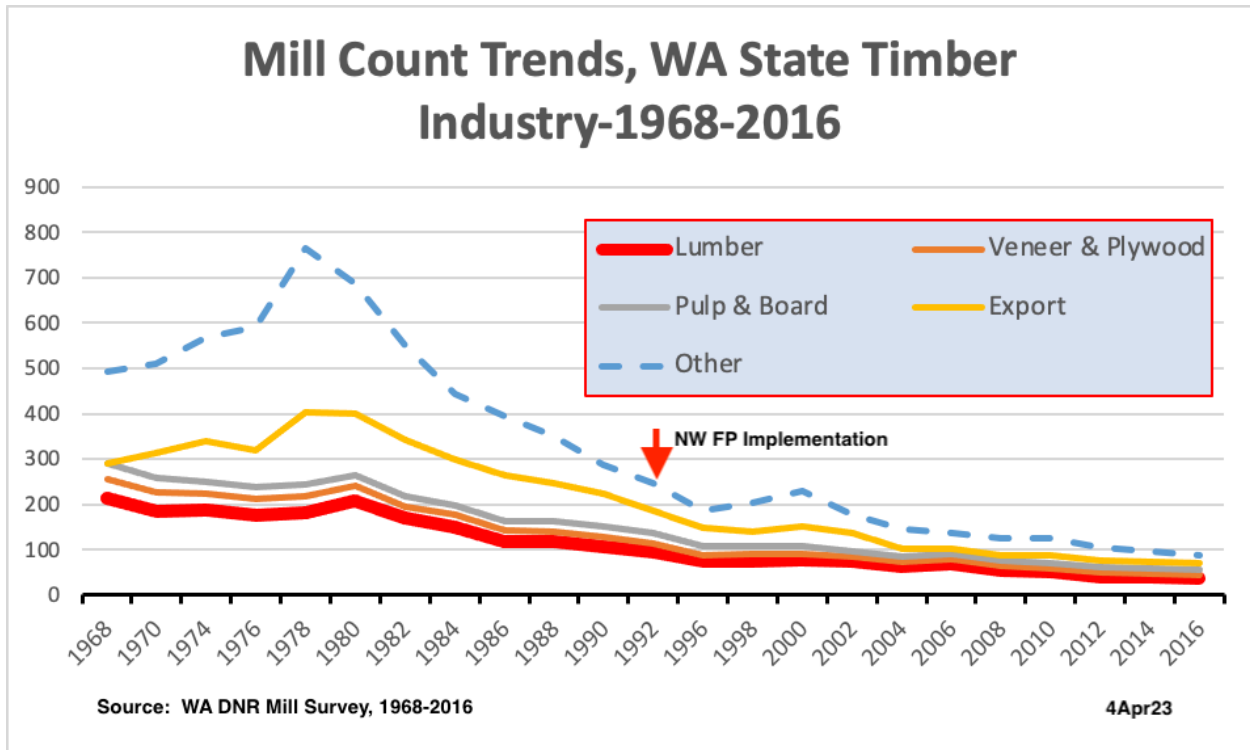
Page 12-Sustaining Local Benefits

- Providing forest products to local mills. **Comment:** The DEIS is expected to provide numerical data to describe the current extent of the share of timber supply from NFS lands that is being utilized by local mills within the NSO Region. Broad generalizations of the desirability of federal lands supporting the local workforce must be replaced with more precise evaluations and analysis. Mill surveys are available for both WA & OR to assist in these analyses.

Page 13-Communities, Wood Processing, Infrastructure, Restoration

- “The lower concentration of sawmills and a lack of local workforce make implementing forest restoration activities particularly challenging in the eastern part of the BioA area.”

Comment: The DEIS must document mill closure trends that have occurred in the NWFP Region since the 1970’s. Mills have regionalized, utilizing much longer haul distances. Lower concentrations of sawmills in the eastern part of the area appears to be a function of demand. This is another aspect of the long-term trends associated with the maturing of the regional timber industry. Note the trends chart for WA State below depicts a steady pattern of mill closures dating from the late 1970’s.



- “Planning at the land management plan level provides the Forest Service an opportunity to determine broad strategies to encourage investment [emphasis added] in local mill facilities and the workforce that would be needed to successfully implement timber sales and restoration to improve the ecological integrity of forests and support the socioeconomic health of communities.”

Comment: We do not agree that the Forest Service should bias land management decisions for the purpose of augmenting private resource extraction facilities and activities, particularly when scarce and threatened public values are placed at risk, in this case late successional species habitat.

Page 14:

- “Figure 4 illustrates the strength of county economic and social ties to federal forest activities in 1990, prior to the NWFP era.”

Comment: Selecting 1990 as a base year to establish “the strength of county economic and social ties to federal forest activities” is a biased and misleading selection of time frames and conditions that

describe a relationship that was not sustainable. The J. Franklin book *The Making of the Northwest Forest Plan* clearly shows that the timber dependency of the NWFP Region had started its decline much earlier in 1970-1974 when 16 counties within the Region were more than 30% dependent on timber for employment. Furthermore, extolling the virtues of “county and economic ties to federal forest activities” to a time when federal cutting levels were clearly not sustainable, *by nearly any measure*, thus inviting the inevitable collapse with all its social implications is hardly a history to consider fondly.

- The DEIS must include, and the NWFP amendment must be based upon, data that is current and reflects the current timber economy situation within the entire NWFP Region as well as provide trends of information since the 1970’s.

For instance, Headwaters Economics EPS data shows that by 2022 the timber dependence of the NSO counties in SW OR and Northern CA had declined dramatically since the late 1980’s, for example:

- The 8 NSO counties in CA: In 1985-89 Seven of eight counties were at least 15% dependent or more on timber jobs. By 2022 the highest timber dependence of any county was 4.8%, with the remainder much less dependent.
- The 7 NSO Counties in SW OR: In 1985-89 five of seven counties were more than 20% dependent on timber and two of seven were less than 10% dependent on timber. By 2022 only two of seven counties were more than 10% dependent on timber, the remainder were less.
- Furthermore, Modoc County CA (outside the NWFP Region) showed no direct timber W&S jobs in 2022
- Lassen County CA (outside the NWFP Region) showed only 25 direct timber jobs in 2022, a dependency of merely 1.2%.
- These trends are coupled to the large reduction in total direct timber job shrinkage that started in the late 1970’s and spread across the Region.

Page 16-Happy Camp CA. **Comment:** The DEIS must include an explanation that the socioeconomic impacts noted in Ch 1 of the Suppl Rpt were the result of several interrelated factors and not solely caused by reductions in federal timber sales. The DEIS needs to describe and explain the following:

- Direct timber employment in WA and OR had begun to decline well before 1990, and continued until at least the early 2010’s.
- Cutting levels on NF lands in the NSO region prior to the 1990 were unsustainable and such management practices were found to be illegal several times in court.
- The share of the total timber supply in the NSO Region provided by the several ownership classes, particularly the Forest Service.
- Cutting levels on private lands declined after 1990, adding significantly to declines in historic timber supplies.
- The vast overcutting and resulting socioeconomic dislocation were, in part, the product of Forest Service irresponsibility.

Page 16-Leavenworth WA. **Comment:** The DEIS must include an explanation of the socioeconomic impacts of the timber economy on small local economies that are dominated by timber.

- This illustration provided describes the impact of the boom-bust cycle that is associated with a high reliance of local economies on timber.
- The illustration provided focuses too heavily upon economic conditions that were prevalent prior to 1960, when many rural economies, including Chelan County, were highly dependent upon timber. The DEIS should provide detail about the diversified growth that has occurred over the last 50 years when Chelan County outperformed many timber dependent communities in terms of population, employment and personal income growth.

Page 17-Mill City OR. **Comment:** The DEIS must include an explanation of the socioeconomic impacts and benefits when local economies diversify and move beyond timber.

- Ch 1 of the Suppl Rpt focuses too heavily upon economic conditions that were prevalent when the Forest Service was cutting LSOG forests in an unsustainable manner.
- While the counties (Marion and Clackamas) near Mill City experienced the boom and bust of a highly timber dependent economy, they have since become more diversified and grown.
- These two counties, currently with a low timber dependency, have experienced greater population, employment, and personal income growth than the State of Oregon since 1970

Page 20-*What is working well-Designated Areas*. **Comment:** DEIS must provide a complete list of Designated Areas as well as administratively protected areas such as “Administratively Withdrawn” areas as defined by the 1994 NWFP, as well as Congressionally Reserved Areas.

- The DEIS must list all “Designated Areas as well as administratively protected areas” as well as Congressionally Reserved Areas that were designated after 1994 to ensure that any tentatively suitable forest land is not counted as part of the forest base for the PSQ. All roadless areas, both inventoried and non-inventoried, must be included in the requested list.
- **The PSQ must be updated to account for all ‘tentatively suitable’ forest land withdrawals, including areas that are no longer accessible.**

Page 26- *What is Working Well-National Forest Road System*.

- **Comment:** The DEIS must define a process to evaluate the entire road system in order define those segments that are surplus to public benefits or administrative needs but pose undue risks to local and anadromous fish stocks and are inconsistent with the ACS objectives.

Page 27-Key Change Issue 1-Aquatic Strategies and Late Successional Reserves.

Comments:

- The DEIS should provide clarified direction to further minimize the potential for new roads or reconstructed roads within Late Successional Reserves to meet ACQ objectives, and should only consider action alternatives consistent with that direction
- The DEIS should also direct that once forest stands in Late Successional Reserves approach 80 years of age, that specific plans for road removal must be part of any vegetation management planning action, and should not consider any action alternatives inconsistent with that direction.

Page 33-*Open Roads on Motor Vehicle Use Maps, Figure 7*

Comments:

- The DEIS must require an evaluation of the open road backlog that will allow an adjustment to the projected road inventory based upon reasonable expectation of the financial resources that will likely become available in the future to address road maintenance. Consequently, the action alternatives must be developed in accordance with such a requirement. The road system appears to demand a level of funding that excludes the possibility of a significant backlog reduction. Therefore, the road system should be planned for further downsizing. Such downsizing should be consistent with ACS objectives.

Page 35-*Sustainable Timber, What is Working Well.*

Comment: The DEIS must address the comments and questions noted below:

- The DEIS should acknowledge that previous logging on NFS lands was occurring at an unsustainable level and detail the consequences of those unsustainable practices
- *Figure 8:* The DEIS must fully describe the PSQ trend chart.
 - The DEIS must describe all the log volume definitions included in the PSQ trend lines provided.
 - The PSQ for 1994 is shown as approximately 820 mmbf/yr. This figure does not match PSQ figure listed in the Final Supplemental EIS page 3&4-268 (dated February 1994) which shows 757 mmbf for NFS lands within the NSO Region. If Figure 8 curves include “other wood” volume, the DEIS must clearly state.
- *Figure 8:* The USFS predicted a harvest level of 600 mmbf/yr from NFS lands in the NSO Region.

Comment: The DEIS must provide the following information:

- Fully document the NFS PSQ levels predicted in 1994 (from Figure 8) based upon the then current assumptions as what LUAs would produce what volumes by national forest administrative unit by Administrative Region (in the same fashion as the volume data produced for the 1994 Final Supplemental EIS volume I (page 3&4-44).

- o For each of the three subsequent PSQ revisions (1995, 1999, & 2001), the detailed rationale for each PSQ reduction must be fully documented as to why the PSQ was changed.
- o Describe the rationale for why the PSQ was not further adjusted when it became apparent well after 2006 that the PSQ volume, as predicted in 2001, could not be met. Why does the Forest Service think the LUA management direction should now be adjusted to allow for *additional logging* rather than reduce the PSQ as was done in 1995-2001? We believe the PSQ should be adjusted downward to reflect all actions that have reduced the tentatively suitable forest land base as well as the inability of the Forest Service to meet timber targets.
- o Several administrative and legislative decisions have in fact occurred from 2001 until the present time that have affected the “timber base.” The Figure 8 data confirms the Agency has made no PSQ adjustments to account for these changes to the tentatively suitable forest land base. The DEIS must provide the rationale for this ‘no action’ response to these changes.
- o Figure 8: The DEIS must clearly define if the proposed revisions to lessen the protections currently provided by the 1994 FEIS direction for the LSRs will limit the cut volume increase to only 600 mmbf? Does the Forest Service intend cutting levels greater than 600 mmbf for NFS lands within the NSO Region?

Page 41- What is Working Well-Shift in harvest methods,

“Harvest methods that retain significant structure elements of the preharvest stand largely have replaced clearcutting.” **Comment:** These are not new claims. In essence, such a claim suggests that ‘modern harvest practices’ are substantially less harmful than prior practices. Ch 1 of the Suppl Rpt is apparently asking for the elimination of cutting limitations so USFS can begin cutting in LSR stands 80-200 years old, many of which are inventoried as roadless.

Page 41 to Page 61-Key Change Issues

Page 41 – page 44 Key Change Issue 1-Timber Processing Infrastructure and Forestry Workforce.

- **Comment:** The statement that “*timber processing infrastructure and workforce have declined in recent decades*” is not new information. The DEIS needs to provide the appropriate context for such statements. Some of the Ch 1 Suppl Rpt data defines information from a time dating prior to NWFP implementation. We question the relevance of this information to a 21st Century NWFP amendment. Ch 1 of the Suppl Rpt appears to be calling for the Forest Service to return to cutting patterns that approach those of the 1980s where the management objectives were the conversion of nearly all LSOG forests that were not withdrawn from cutting were to be converted to young stands. It is unclear what upper limit of cut volume for NFS lands in the NSO Region is being called for and must be clarified in the DEIS.

- **Comment:** The DEIS should provide a full and comprehensive description of the declines in direct timber employment within the NSO region driven by all circumstances that began well prior to the NWFP implementation and continued well after the NWFP was fully implemented. Ch 1 of the Suppl Rpt appears to associate NWFP implementation with all or most direct timber employment losses and mill closures. This is clearly not the case.
 - The US Department of Commerce Bureau of Analysis (US DC BEA) Regional Accounts data show that direct OR timber employment (92% of which is located in the NSO Region) declined steadily from 1979 until 2021 by more than 64,000 direct jobs (64%).
 - In WA, direct timber employment (86% of which was from the NSO Region) declined from 1977 to 2022 by 45,600 direct timber jobs or 62%. Only a portion of these losses can be attributed to NWFP implementation (See *The Making of the Northwest Forest Plan*, Jerry Franklin, et al.; see pages 260 & 261).
 - “*The Making of the Northwest Forest Plan*” clearly states that the Forest Service’s PNW Research Station’s NWFP social science monitoring team estimated that something less than 12,000 direct timber job losses were attributable to federal timber supply reductions in the NSO Region. It is critical that the DEIS correctly assesses these economic impacts for the full time period in question.

- **Comment:** Mill operations have steadily declined within the NSO Region for a very long period, clearly pre-dating and post-dating the NWFP implementation. Ch 1 of the Suppl Rpt appears to attempt to tie mill closures to NWFP implementation. However, in WA State the DNR Mill Survey reports show a steady decline in WA mill operations covering the period from 1976 until 2016, or a reduction of about 600 mills or about 86%. Again, these mill closures began well before the NWFP implementation and have steadily continued well after NWFP implementation. The DEIS should provide the proper context of mill operation trends within the NSO Region. These trends should include a description of mill closures, by State, and type of operation, covering the period from 1968 until 2022.

- **Comment:** The DEIS should provide a full and clear description of the total timber supply within the NSO Region and the share of this supply volume from federal timber volumes.
 - *Figure 3* (page 9) does not describe or disclose the share of NSO Region timber supply provided by federal lands (breaking out NFS and BLM lands) compared to volumes from all other ownerships.
 - The DEIS should also analyze the mills of the NSO Region’s dependency on federal timber. The WA State DNR Mill Survey reports show the dependency by log ownership source by mill type. These data show that in 2016 3.7% (84.3/2252.5) of the logs consumed locally by WA mills originated from NFS lands. Similar data is available for the State of OR.

Page 44. *“Updates to land management plan direction, while unable to resolve all issues, can help to improve social and economic sustainability and better reflect the needs of local communities throughout BioArea, especially those in hard-hit rural communities across southern Oregon and northern California”.*

Comment: Ch 1 of the Suppl Rpt fails to provide any numerical basis for evaluating the claim that updates to land management direction, possibly expanding the timber supply in the NSO Region from 450 mmbf to 600 mmbf (*Figure 8* page 37), will “improve social and economic sustainability and better reflect the needs of local communities.” The Ch 1 of the Suppl Rpt data provided suggests that an additional 150 mmbf in the NSO Region will be significant. We note that a 150 mmbf/yr represents a timber supply increase of about 2.1% (150/7000) based upon Ch 1 of the Suppl Rpt data supplied in *Figure 3*. It is difficult to understand how such a small increase in the cut will have a measurable impact on economic sustainability, even in the more rural counties. See *Figure 3*, page 9.

- o The DEIS should disclose if the NWFP amendment is intended to produce a much larger logging increase, resulting from a larger increase in the PSQ than 150 mmbf.
- o The DEIS must provide clarifying analysis to answer these questions.

Page 44: *Key Change Issue 2: “Timber harvest below projected levels restricts our ability to achieve restoration objectives and support local communities and infrastructure.”*

- **Comment:** The Ch 1 of the Suppl Rpt data in *Figure 8* (page 37) and *Figure 13* (page 48) suggests that an additional PSQ volume of 150 mmbf will allow the Forest Service to support local communities.
 - o It is unclear how a potential increase of 2% of the NSO Regional timber supply from NFS lands will result in a measurable impact across the 55 counties of the entire NSO Region. It can be estimated that if the 150 mmbf generated an additional 1301 jobs in the region, these direct jobs could potentially increase the current direct timber economy employment in just WA & OR by about 2% (1301/63,968). Such changes are within the range of typical annual variations of employment in these sectors that follow changes in demand and other economic conditions. (For direct job multiplier of 8.67 jobs/mmbf, see Marbled Murrelet Long-Term Conservation Strategy FEIS, WA DNR, dated September 2019, pages 3-71 & 3-72 [8.67 times 150])
 - o The DEIS must demonstrate numerically that an incremental increase of 150 mmbf/yr is critical for “providing raw materials and other resources that are needed to sustain the health and economic well-being of the people of this country (per page 49).”

Page 44: *“Harvest levels are unlikely to increase under current plans because the objectives for timber production and restoration often conflict with habitat protection objectives.”*

Comment: The 1994 NWFP established the critical importance of late successional forest habitat protection that resulted in the reduction of the then existing levels of cutting. The history of the NWFP development was based upon the clear need to establish habitat protection, where previously the overriding consideration had been given to maintaining high cut levels, even though they were unsustainable.

- o If PSQs cannot be met, then the PSQ's must be adjusted to lower levels to ensure the persistence of late successional species to meet the original objectives of the 1994 Plan.
- o It is also apparent that since 2001, numerous decisions have been made by the Agency and Congress that impact the land base available for timber cutting. It is imperative that the PSQ be adjusted, as part of the amendment process, to account for these decisions as a part of the update process.
- o The DEIS must analyze these previously unaccounted for forest lands withdrawal decisions and revise the 2001 PSQ accordingly.

Page 44: *"Restrictions on harvesting trees that are more than 80 years old in late-successional reserves of the NWFP means that restoration that coproduces timber will be more difficult for the next couple of decades,..."* **Comment:** We do not agree that the over 80-year stand age limit for cutting should be revised, particularly for moist forests on both the west and east slopes in order to increase logging. The data provided in Ch 1 of the Suppl Rpt on page 43, Map 6, clearly shows that moist forests would not benefit from 'disturbance restoration.' Do not revise the over80 stand age prohibition on cutting in moist forests. Restoration treatments are not appropriate in moist forests that are older than 80 years or roadless (inventoried or not) since "modern harvest methods" are not definitively proven to increase ecological integrity and/or climate resilience. We refer you to Section V, SubSection G *Efforts to reduce WildFire Risks in Dry Forests*, for our discussion on Dry Forests on the issue cutting in Dry Forests.

Page 44: *"...social values related to land management have begun to shift toward recognition of the broad benefits associated with our natural resources and the importance of balancing resource protection with timber production..."*. **Comment:** Proposals for Forest Service vegetative management projects in LSRs or elsewhere on public lands have been met with strong opposition by the public. The statement that 'social values' have begun to shift toward recognition that timber production has become more acceptable on public lands is pure speculation that is apparently underpinned by Forest Service wishful thinking. Increasing the cut volume from NFS lands within the NSO Region is highly socially controversial and is highly unlikely to be greeted with much public support.

Page 45: *Figure 12*. **Comment:** Ch 1 of the Supplemental Reports suggests by implication that millions of acres of National Parks, designated Wilderness, other Congressionally Reserved Areas, Administratively Withdrawn areas, etc. can produce timber as a coproduct of mechanical treatments that may or may not improve ecological resilience. This lack of an explanation must be corrected to make it clear that USFS will not pursue mechanical treatments in these sensitive and protected locations.

Page 46: “*conflict between underlying forest plan management direction, inventoried roadless area designation and NWFP assumptions;*” **Comments:** Ch 1 of the Suppl Rpt implies that logging in Inventoried Roadless Areas (IRA) on many national forest units is needed to close the “*significant gaps between projected production outputs [timber] and actual output.*”

Comment: The roadless area network was reasonably well defined, understood, and analyzed at the time the 1994 NWFP was implemented. The effect of the IRAs should have been accounted for at the initial implementation of the NWFP. However, later when the Roadless Area Conservation Rule was adopted in 2001, the Forest Service was again remiss in not removing the tentatively suitable forest acres within the IRAs *at that time*. When the PSQ did not reflect the effect of the Roadless Rule, the PSQ was clearly in error and thus significantly overstated the projected log volume to be cut. This DEIS must account for the effect of the 2001 Roadless Area Conservation Rule and revise the PSQ within the NSO Region accordingly. It is inconceivable that the Forest Service would call for violations of the Roadless Conservation Rule at this time since it reflects a long-settled policy. In addition, the NWFP amendment process has no authority to revise the Roadless Area Conservation Rule. The Sierra Club suggests adding clarity to make it clear the USFS will not pursue actions in Roadless Areas.

Page 46: “*unforeseen complexity and unpredictability for timber production given unmapped riparian reserves, the Survey and Manage program, and northern spotted owl critical habitat...*”. **Comment:** During the implementation phase of the NWFP in 1994-2001, the Forest Service made several adjustments to the PSQ on NFS lands. These revisions reduced the PSQ from about 820 mmbf to 600 mmbf (*Figure 8*). The fact that the PSQ was not correctly adjusted more than 20 years ago represents an oversight on the part of the Agency. This error in management does not provide justification for revising fundamental elements of the late successional reserve system management direction to cover an Agency miscalculation.

Page 46: “*...Both social acceptability of timber harvest in old forest and regeneration harvest were assumed when the original PSQ calculations were made.*” **Comment:** When the decision was made to cease offering sales in LSOG forests, it is logical to conclude that the Forest Service would have at that time revised the PSQ to fully account for this NWFP Region-wide management decision. However, Ch 1 of the Suppl Rpt makes it clear that a proper adjustment was not made at that time. It is inappropriate now to ask for major adjustments to critical aspects of the NWFP management direction in order to cover an error in a 20-year old PSQ calculation that would allow an undefined expansion of cutting plans.

Page 48: Probable Sale Quantity Context. “*The total PSQ for all federal lands for option 9 (selected) was 1.1 billion board feet (plus or minus 10 percent) for the first decade.*”

Comment: While the PSQ was not defined in the ROD, it was certainly defined in the 1994 Final Supplemental EIS volume I, Table 3&4-44 (page 3&4-44). This Table 3&4-44 figure was the starting point for implementation of the NWFP. It soon became apparent that the PSQ as initially defined could not be met and adjustments were made in 1995-2001 as shown in *Figures 8 & 13*. The initial PSQ was based upon assumptions (continued cutting of LSOG forest in Matrix and AMA, see page 49, Johnson quote.) that could not be implemented. However, the Forest Service did not adjust the PSQ to account for this important change in

management direction. Subsequently, further changes were made to the forest base including, but not limited to, the Roadless Area Conservation Rule. And still the PSQ was not revised. Now it seems that the Forest Service wants to revise basic management direction so the PSQ based upon incorrect assumptions from the 1990's can now be met.

Page 48: *Figure 13. "Individual forest plans calculated an allowable sale quantity and sale schedule for each forest under the 1982 Forest Service planning rule. These have never been updated."* **Comment:** It is difficult to understand the reason for providing this statement in Ch 1 of the Suppl Rpt. The Forest Service is the responsible agency and establishing a timber management plan for individual forests is without doubt part of their remit. The fact that the 1994 PSQs, as revised, have not been converted to ASQ equivalents for the NFMA regulations is a decision solely in the hands of the Forest Service. Prior to 1990, when adjustments in land management direction were made to National Forest land uses in a number of instances, such as Wilderness Designations, timber management plans were routinely revised. However, in the case of the NWFP and its implementation, the Forest Service has consistently chosen to leave the 2001 PSQ unchanged. We expect the DEIS to explain the rationale for this non-action.

Page 49: *"In 1994, the Forest Service's historic practice and paradigm of harvesting old-growth forests and cutting the largest, often oldest, trees with a singular purpose of wood production, was set against the environmental movement and ecosystem stewardship."* **Comment:** In 1994 a public policy decision was made, as defined by the NWFP direction, that emphasized "ecosystem stewardship," thus reversing an existing Forest Service policy that functionally embraced the liquidation of old growth forests in the Northwest. Ch 1 of the Suppl Rpt appears to support a reversal of that 1994 policy decision based upon the supposition that *"What has changed most dramatically since 1994, besides timber output, is the idea that these two objectives are not necessarily in conflict, especially (Pipkin 1998) at landscape scales (Page 49)."* We strongly disagree that timber cutting, particularly in mature and older forests, is compatible with the protection and persistence of late successional species.

- o The DEIS must clarify and reaffirm the objectives of the 1994 NWFP.
- o Additionally, the DEIS must definitively state the expected volume output objectives for an updated PSQ that accounts for the *currently available* tentatively suitable land base for timber.

Page 50-Conflicting Management Direction:

"...primary reasons that timber outputs from the NWFP area have been below anticipated levels (PSQ estimates) is that the plan expectation that matrix lands under the NWFP would emphasize timber production has not been met." **Comment:** When it became clear that the original estimates of the PSQ could not be met, and the policy decision was made (at a high level of Forest Service management) to cease offering timber sales in LSOG forests within Matrix and AMA LUAs, it was the responsibility of the Forest Service to then revise the PSQ accordingly. The DEIS must fully explain why the Forest Service did not revise the PSQ.

Pages 51-52: *“All forest plans in the BioA Area have been affected by one or more large-scale amendments. In addition, each forest includes areas that have been designated or administratively withdrawn/Congressionally reserved throughout the years since 1994, including wilderness designations that prohibit timber harvest, or designations that allow limited or no vegetation management (national recreation areas, research natural areas, wild and scenic rivers).* **Comment:** The Forest Service clearly recognizes that the tentatively suitable land base for timber has been affected by the noted decisions that have been made since 1994. These decisions have certainly affected the PSQ as originally defined. The DEIS must explain the rationale for why the Forest Service has not adjusted the PSQ in accordance with the changed timber land base, and must so change the PSQ calculations.

Page 52: The NWFP defines the explicit priority when conflicts occur between the 1990 forest plans and 1994 NWFP direction (See NWFP ROD, page 8). That direction clearly states that conflicts will be resolved by the direction that “...provides greater benefits to late successional forest-related species...” The Ch 1 of the Suppl Rpt discussion starting on the bottom of page 51 and continuing onto page 52 *“summarized the entire BioA area into four broad categories”* and, however, **does not even include late successional forest-related species as one of those categories.** That summary on pages 51 and 52 appears to support the reversal of that 1994 direction. The DEIS must restate the importance of meeting 1994 NWFP objectives that emphasize the protection and persistence of “late successional forest-related species.”

Page 52: *“Forest Plan multiple objective emphasis: areas where mechanical treatments may be restricted by forest plans or an amendment such as the NWFP for multiple objectives and Map 7.”* **Comment:** A review of Map 7 shows that the ‘multiple objectives’ category of management includes areas that are roadless (inventoried and not inventoried), Administratively Withdrawn areas, or LSR over 80 years old where mechanical treatments are either not to be scheduled or otherwise prohibited by existing direction. The ‘multiple objectives’ category also includes areas where limitations on mechanical treatments would be nominal at best, such as LSR less than 80 years old and AMA. If these data are used in the DEIS, greater specificity is required in defining categories to be mapped in order to avoid confusion over the intent of the description of what activities are allowed.

Page 54 and 55: *“Figure 15-Acreage of inventoried roadless area by Northwest Forest Plan land use allocation”.* **Comment:** It is clearly understood that the Inventoried Roadless Area (inventoried and non-inventoried) “land use allocation” overlaps with several LUAs that were intended to produce timber per the 1994 NWFP (Matrix and AMA), as well as those LUAs that were not intended to produce timber such as Administratively Withdrawn Areas and LSR over 80 years of age. Figures 15 and 16 illustrate why the Forest Service is overdue to revise the PSQ to account for all relevant changes to the tentatively suitable land base for timber. The DEIS must explain the reason for this inaction. By not adjusting the PSQ, the remaining forest base will be theoretically overcut.

Page 55: *“Figure 17-Designated northern spotted owl critical habitat in each land use allocation”* **Comment:** Given the significant share of NSO Critical habitat contained in

Matrix and AMA (37%), the 20-year old decision to cease putting up timber sales in LSOG forests in these LUAs was certainly justified.

Page 58: “*Figure 19-Road miles by maintenance level and national forest...*”. **Comment:** Figure 19 shows the significant mileage of Level 1 and 2 road segments on NFS lands. The DEIS should evaluate the expected level of resources likely available for maintenance along with the threats that too many of these road segments pose to watersheds and fish. Consequently, the DEIS must produce a plan that will reduce the road system to a size commensurate with what can be reasonably maintained while not posing undue danger to the aquatic resources.

Page 59: “*Forest Plan Elements that Reflect Underlying Trust Issues*”. The Ch 1 of the Suppl Rpt states that “*public’s underlying differing values around old forests and trust issues surrounding federal land management that existed when the management direction was developed, and which still exist to some extent today. We acknowledge that land management planning alone will not resolve conflicts in values.*” **Comment:** Given the public’s negative reaction to most Forest Service proposals for timber sales on NFS lands, we believe that the lack of trust in the Agency’s stewardship responsibilities continues to the present day and exists at a level that is considerably greater than the statement “...still exist to *some extent* today.”

Page 59. “*It is important to point out that depending on the ecosystem and landscape, there is a tipping point somewhere between 80 and 200 years where forests tend to take on the characteristics of old forest. How and what we define as old forest has important implications for management and implementation.*” **Comment:** We are concerned that the Forest Service is laying the groundwork for eliminating existing protections for forest stands in LSRs that are 80-200 years old, particularly in moist forests on both the west and east slopes. This Ch 1 of the Suppl Rpt statement is certainly in conflict with the NOI commitment that the “New plan direction would improve conservation and recruitment of mature and old growth forest conditions and associated habitat for NSO and other vulnerable species in moist forest settings”. Eliminating the protection for LSR stands that are 80-200 years old will not improve recruitment of mature and old growth forest conditions. The DEIS must confirm and retain the existing LSR protections for forest stands over 80 years old, as well as protection in other LUAs which has been provided for the Spotted Owl, including but not limited to protection in Matrix.

IV. ENDANGERED SPECIES ANALYSIS

A. The DEIS must evaluate the effects of alternatives on all listed Species in the NWFP region; ESA Requirements

The existing protections under the NWFP are not ‘single species’ oriented (*as asserted on page 231, as Recommendation 8 (Referring to BioA Chapter 2 Management Recommendations) found in Chapter 4 of the Supplemental Reports to the Bio regional Assessment*) as the species

protected by the NWFP include, in addition to the Northern Spotted Owl, a long list of other protected species including the Marbled Murrelet, the Wolverine (recently listed), various salmon and steelhead as well as other species. In addition, there are the species which must be monitored and protected under the Survey & Manage Requirements under the S&G of the NWFP. ***The DEIS must evaluate the effects of the alternatives on all listed endangered and threatened species.***

The DEIS must evaluate compliance of the alternatives with ESA requirements for all listed species, and the DEIS must also evaluate compliance of the alternatives with applicable legal requirements associated with State issued listings.

The DEIS must also consider whether alternatives satisfy USFS obligations under the ESA to ensure that the ecosystems supporting those listed species are also resilient in the face of climate change, and not only avoid jeopardy, but also satisfy the obligation to further conservation of the species.

By way of example, ***the DEIS must document all US F&WS listings of threatened and endangered fish species within the NWFP Region and evaluate the effects of the alternatives on those species.***

In addition, the proposed alternatives and analysis of the effects of alternatives in the DEIS must address the continued decline of anadromous fish within the Region. While the initial listing of anadromous fish was developed in the early 1990's in the Snake and Columbia Rivers, it was clear that salmon and steelhead were also at risk throughout their historic range much of which overlaps with the Region addressed by the NWFP. Indeed, between 1997 and 1999 key runs of salmon and steelhead were listed, including: California Coastal Chinook, Puget Sound Chinook, Upper Willamette River Chinook, Upper Columbia River Spring Chinook, Upper Columbia River Steelhead, Northern California Coast Steelhead, Oregon Coast Coho, Southern Oregon/Northern California Coho, Ozette Lake Sockeye. However, fish stocks continue to decline. In addition, Bull Trout were listed throughout their range in the lower 48 states. And, just recently, on Dec. 7 2023, a petition was filed with NOAA Fisheries to list Washington Coast Chinook.

The ACS was incorporated into the 1994 NWFP to help address the significant decline in salmon and steelhead runs occurring in the Northwest and Northern California in advance of these F&WS listing of species.

Maintaining and strengthening the ACS in order to address the ongoing challenges of endangered native fish throughout the area of the NWFP is clearly necessary, and even more important due to climate change impacts ***The DEIS must evaluate alternatives that involve strengthening the ACS, including but not limited to the following requirements for the ACS and for habitat protection:***

- i) sedimentation from legacy roads that have not been eliminated; and

- ii) impacts to watersheds from logging, which contribute to warming water temperatures, and scouring of streambeds from increased rain; and
- iii) EPA and other government agencies are working to restore shading along watersheds and create/recreate cold water refugia; and
- iv) improperly sized and located culverts must be removed to restore historic habitat.

Recently, President Biden issued an MOU committing his administration to restoring healthy and abundant salmon, steelhead and other native fish runs throughout the Columbia Basin - which includes the eastern Cascade province of the NWFP area. This MOU directs all federal agencies to assess current programs and budgets to align with this goal and directive. ***This DEIS and the NWFP amendment must incorporate this presidential directive.***

The Sierra Club requests that the DEIS require new surveys occupied and potential nesting habitat of all listed species and other habitat for foraging prior to consideration and/or adoption [implementation] of any boundary changes of LSRs or Matrix or AMAs, as well as any management changes from those included in the original 1994 NWFP.

The Forest Service must consider whether alternatives satisfy USFS obligations under the ESA not only to avoid jeopardy, but also satisfy the obligation to further conservation of the Northern Spotted Owl, the Marbled Murrelet, the Wolverine, the Canadian Lynx as well as listed salmon and steelhead, as well as all other listed species living in the region of the NWFP.

Additionally, the Forest Service must consider the likelihood that in the near future, grizzly bears will be reintroduced into the North Cascades ecosystem. Currently, the U.S. Fish and Wildlife Service and the National Park Service are considering transporting grizzly bears from the Northern Continental Divide in Montana, or Canada, and reintroducing them into the North Cascades grizzly bear recovery area. A final EIS is expected this summer. If reintroduction proceeds, a small number of grizzly bears will be reintroduced over the next several years and likely initially released into the North Cascades National Park Service Complex in Washington State. Grizzly bears have a wide range and will, in time, undoubtedly move onto adjacent lands administered by the Forest Service, such as the Mount-Baker Snoqualmie National Forest. Grizzly bears need large areas undisturbed by human activities to find food, mates, hiding cover and to establish dens. Given that the revised NWFP will be in place for decades, the DEIS must analyze potential impacts to grizzly bears as a listed species likely to be present in the foreseeable future.

The Sierra Club requests that the DEIS evaluate alternatives that will avoid and minimize any take, as defined in the ESA of ESA-listed species, and will also avoid and minimize take of state-listed species in the NWFP region.

As stated in “THE WORLD’S LARGEST ECOSYSTEM MANAGEMENT PLAN: THE NORTHWEST FOREST PLAN AFTER A QUARTER-CENTURY”, *Environmental Law* [Vol. 52:151, 206] “... *the revised NFP should establish a permanent control program and, similar to*

*BLM's approach in 2016 RMPs, only authorize timber harvests that do not result in incidental take of spotted owls until population numbers stabilize.*³⁵³

USFS must consider alternatives that will require avoidance of incidental take not only for the spotted owls, but also for the marbled murrelet, the Wolverine and the Canadian Lynx, and all other state and /or federal listed species, regardless of whether such take is, or potentially could be, authorized pursuant to an incidental take statement under ESA section 7 or an incidental take permit under ESA section 10.

B. Impact of Fire, natural or prescribed, and other management activities on the Spotted Owl and the Marbled Murrelet, and critical habitat designation protection.

Specifically, regarding the impacts of fire on the Northern Spotted Owl, and on the Marbled Murrelet, see the quotes below taken from *the Synthesis of Science* [note that bold emphasis was added by the Sierra Club]

The following comments from the *Synthesis of Science* in sum provide substantial support for minimizing disturbance by natural fire, which clearly would be applicable to prescribed fire, or other management, in critical nesting and roosting habitats for these two listed species. The DEIS should incorporate these analyses from the *Synthesis of Science* into decision making on forest management, and minimize the impact of fire on these two species.

Spotted Owls:

Page 264

“Recent research on disturbance effects on spotted owls indicates that disturbances such as mixed-severity fires that generate heterogeneity at landscape and stand scales are not necessarily adverse, **provided that adequate nesting and roosting structural conditions remain after the disturbance** (Clark et al. 2013, Comfort et al. 2016).”

Page 267 - 268

“Most studies focused on wildfire effects evaluated the short-term response of spotted owls to wildfire, but in one of the few studies of the long-term effects of wildfire on spotted owls Rockweit et al. (2017) **used 26 years of demographic data in a landscape with several wildfires and found that moderate and high burn severities negatively affected spotted owl apparent survival.** They also found that burned territories functioned as ecological sinks where recruitment was high, but survival was lower than in nearby unburned territories. **Several shorter post-wildfire studies have seemingly contradictory results regarding spotted owls and wildfire.**”

“**Coupling wildfire and salvage logging results in a high probability that a site becomes unoccupied after the first year postfire, especially if the core area burns at high severity and is subsequently logged** (Bond 2016, Ganey et al. 2011, Lee et al. 2013).”

“The long-term (>5 years) effects of wildfire on spotted owl survival, reproduction, recruitment, and interactions with barred owls are not well documented.”

Page 269

“Landscape managers implementing forest restoration treatments in drier, mixed- and low-severity fire regime forests **face substantial challenges in balancing the tradeoffs between known short-term forest cover impacts on spotted owls** from restoration and fuel reduction treatments versus potential benefits of reducing losses of forests with larger trees from high-severity, large-scale wildfire (Hessburg et al. 2015, 2016; Lehmkuhl et al. 2015; Stine et al. 2014).”

Page 274

“Research is needed in both dry and moist forest landscapes to evaluate the short- and long-term effects of silvicultural treatments and wildfire on spotted owl occupancy, forest dynamics, and prey, but **research questions differ between forest types.**”

Page 280

“The optimization of forest restoration and conservation of spotted owls **will require more knowledge about the conditions under which restoration activities can benefit spotted owls in the long term without significant detrimental impact in the short term.**”

Page 281

“Conversely, disturbances that **substantially simplify stands or landscapes often have long-lasting negative** impacts on spotted owls and their habitat. **Finally, we emphasize the importance of conserving sites currently occupied by spotted owls as well as those that are known to have been historically occupied by the subspecies.**”

[underlining added]

As Sierra Club noted in its January 14, 2024 comments on the Draft Environmental Impact Statement for the Barred Owl Management Strategy; Washington, Oregon and California, destruction of old growth forest habitat has been a leading- and, arguably, the primary - cause of the decline of the northern spotted owl. Despite attempts to address habitat destruction through development and implementation of the Northwest Forest Plan, spotted owl populations continue to be in free fall in large part due to delayed effects of habitat destruction and loss of existing suitable habitat to wildlife and other climate-related stressors. The Northwest Forest Plan amendment must address existing habitat loss by conserving all remaining mature and old growth forest throughout the spotted owl’s range and through landscape level forest restoration, including corridors for connectivity, in seasonally dry forests to increase the resilience of these habitats to frequent fire events. Nesting areas for spotted owls must be protected from logging and forestry practices. Barred owls are edge area nesters, and forest fragmentation contributes to their establishment in forests.

Not only Barred Owl territorial incursions but also forest management policies, logging, fire and disease and insects contributed to habitat loss for the Spotted Owl, both the Northern and the California subspecies.

Marbled Murrelet:

Page 334

“One caution should be recognized: managing forest cover to reduce fire risk could also lead to better habitat for corvids (nest predators); **silvicultural practices near suitable murrelet nesting habitat may need to be fine-tuned to ensure they do not inadvertently impair nesting success of murrelets by increasing the rate of nest depredation.**”

Page 337.

“Because it can take many decades for murrelet nesting habitat to develop, **protection of existing habitat for the next several decades will continue to be key to minimizing habitat losses, both within and outside of reserves.**”

That comment on page 337 clearly supports the conclusion that logging and prescribed fire in existing Marbled Murrelet habitat should be avoided.

See Page 73 of Executive Summary of Synthesis of Science:

“Development and implementation of forest management practices that protect (short term) and develop (long term, i.e., over many decades) suitable murrelet nesting habitat on NWFP lands within the murrelet range would be beneficial in recovering murrelet populations.”

V. FIRE AND OTHER ISSUES ANALYSIS

A. Retain the original boundaries of the NWFP, and do not add the additional federal lands that are discussed in the Background Documents

The Amendment and the DEIS must not include lands outside of the original boundaries of the NWFP. Even though the Synthesis of Science, 2018, the Bioregional Assessment 2020, and the Supplemental Report 2021 (collectively referred to herein as the “Background Documents”) addressed not only the National Forests governed by the NWFP but also additional lands of Butte Valley National Grassland, Lassen National Forest, and Modoc National Forest, the Amendment and the DEIS should only address the original 1994 boundaries within the 17 original National Forests governed by the NWFP. The rationale given to justify the expansion of the original NWFP Region because of “connections” between the 55 original counties and other counties is thin and not convincing. Use of the concept of “connection” could apply to the balance of the entire States of OR, WA, and Northern CA. If a connection exists in WA between the NWFP counties in Central WA and the Tri-Cities (Benton & Franklin Counties), then there is

certainly a connection between NWFP Counties and Spokane County, with Spokane being the commercial center of eastern WA.

In addition, since the Background Documents covered two additional National Forests and a National Grassland, the analyses in the Background Documents should be revised to delete associated data from those added areas, and then revise the analyses.

B. Carbon benefits of Mature and Old Growth trees in the NWFP Area

The following article extensively discusses the Carbon Benefits of Mature and Old Growth forests on the East of the Cascade Crest, which includes both Dry and Moist Forests. *The Sierra Club submits that the principles discussed in that article are, in concept, equally applicable to the Moist Forests of the NWFP Area, including those on the West of the Cascade Crest.*

The DEIS must include an alternative maximizing carbon storage and analyze alternatives with regard to their effects on the carbon-storage benefits of our forests, including soils and ecosystems. The alternative and analysis must consider carbon-storage benefits in the context of achieving the reduced greenhouse gas levels necessary to avoid climate change impacts associated with mean temperature increases above 1.5 degrees C.

Large Trees Dominate Carbon Storage in Forests East of the Cascade Crest in the United States Pacific Northwest November 5, 2020

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see page 11:

“Given the rarity of large trees across the landscape, and their outsized role in storing carbon removed from the atmosphere, our findings call into question the value of removing large trees for forest modification in eastside forests. If the 21-inch rule were retained on these lands, continued protection of the existing carbon stock would prevent large quantities of harvest related biogenic carbon from being released to the atmosphere. It is also essential to let a sufficient number of sub-21 inch trees remain to become additional large, effective carbon stores, and assure that carbon accumulation continues in these forests. Rather than weakening the 21-inch rule, we suggest strengthening this important measure and expanding large tree protections to other western United States public lands that have been adversely affected by a similar history of large-tree logging. Protecting and growing more large trees is the most effective near-term option for accumulating more carbon out of the atmosphere, and will benefit other ecosystem services as well.”

In moist forests we need to retain not only large trees, but also “bridge trees” i.e. mature forests that are just starting to develop old growth characteristics in order to provide recruitment for the development of larger/older trees and forests at a later time period. This policy will allow for a loss of older trees/forests caused by unforeseen circumstances.

C. Broaden Protection of Mature and Old Growth Trees, Stands and Forests, and Protecting and enhancing biodiversity of Mature and Old Growth ecosystems, including but not limited to the 80 year Rule, 20” DBH Rule, and East-Side Screening, and Road Decommissioning

Regarding Mature and Old Growth trees, stands and forests, *the DEIS must address all of the following in the alternatives and the evaluation of their effects:*

(1) This process must ensure that all aspects of the amended NWFP, clearly and without reservation, meet the objective of ensuring the persistence of all late successional species, across their historic range, that were intended to be protected in the 1994 NWFP;

(2) This amendment of the NWFP must retain a strong and robust “system of reserves and leave tree requirements” that are not weakened by “clarified” management direction, “active management, and/or “nuanced direction;”

(3) Conservation and recruitment of mature and old growth ecosystems in moist forest settings (including those moist forests on the eastside of the Cascades) requires that the forth-coming amendment does not increase the stand age of cutting (more than 80 years old) in LSRs in these forests. Therefore,

- Retain the existing requirement for Moist Forests to prohibit cutting in LSRs (stand or individual trees) over 80 years old; and
- Retain the existing requirements not to cut trees over 20” DBH in LSRs on the Moist Forests.

(4) In addition, the *Sierra Club stresses that* the existing EastSide 21” Screen requirements must be retained to protect mature and old growth trees, stands and forests in the Dry Forest settings, and incorporated into the DEIS.

(5) We strongly agree with the statement in the NOI that “*mature and old growth stands outside of reserves do not have the same level of protection*” as those in Reserves. That protection must be added in the DEIS for those stands in all other LUAs, including in Matrix, so as to prohibit the cutting of mature and old growth trees and stands in those LUAs;

(6) The protection for mature and old growth stands and trees outside of reserves should be by virtue of extending the 80-year rule and the 20” DBH rule in Moist Forests, and the 21” DBH rule in Dry Forests, to LUAs other than the LSRs;

(7) The REO must no longer have discretion to waive the prohibitions in the NWFP, including REO Memos, and must at minimum enforce the terms and provisions of REO Memo 694, as amended by Memo 801, so as to protect mature and old growth trees in LSRs. *Sierra Club objects to logging trees less than 80 years of age that are in Riparian Reserves where there should be no logging;*

(8) throughout the management discussion in the Bio Regional Assessment, Chapter 3, there is no recognition that such discussion of mechanical treatment and prescribed fire for restoration and rehabilitation of forests must be integrated and consistent with ESA-required protections of listed species, and their habitats, that are found in the NWFP Area. **The DEIS must** include requirements that restoration and rehabilitation of forests must be integrated with and be in conformance with ESA-required protection. All action alternatives must be consistent with satisfying such requirements.

The primary focus of the NWFP, and the amendment process effectuated through the DEIS, must be to attain ecological sustainability of forest and habitat and species. Once that has been achieved, **only then** can management contribute to economic and social objectives.

(9) Chapter 3 of the Bioregional Assessment includes the following statements on page 98:

“The late-successional reserve Workgroup has identified many late-successional reserve assessments that may need to be updated to allow additional beneficial activities that would reduce large-scale wildfire risk and promote maintenance of late-successional forests. The standard for the consistency review is based on how proposed activities in late-successional reserves will protect or enhance old-growth forest conditions. This means that projects with multiple objectives (for instance, old-growth enhancement plus fire-risk reduction near the wildland urban interface) and projects that include portions of a late-successional reserve and other lands such as matrix, may not fully meet the standards set forth in the NWFP.”

The suggested concerns in the above quoted paragraph clearly contemplate significant changes by the Forest Service to the original LSR management requirements, and once again makes no mention that any such suggested changes must first and foremost comply with ESA requirements as well as ensure the persistence of late succession species - a critical objective of the 1994 NWFP.

Beyond the above concerns, there are additional concerns:

First and foremost, as noted elsewhere in this Comment Letter, the Forest Service must provide an inventory of fires occurring prior to 2024 so as to clearly identify where there is fire risk.

Second, the DEIS should evaluate areas of the NWFP Region that are subject to future wildfire risk.

Third, The Sierra Club objects to any such changes to LSRs and urges the retention of existing management requirements for LSR as found in the original NWFP, and strong requirements of compliance with ESA requirements.

(10) Chapter 3 of the Bio Assessment, includes the following statements on page 99:

“The 80-year exemption, which applies to a diverse landscape, lacks the flexibility given our current environments and new insights around how old-forest composition, structure, and development proceed regardless of an age threshold. For example, the 80-year exemption applies to frequent-fire dependent, fire diverse (mixed severity), and fire infrequent systems although old forest develops and manifests very differently across all three of these categories.

New science about frequent-fire dependent and fire diverse (mixed severity) ecosystems (Spies et al. 2018) may suggest the need to modernize the 80-year exemption.”

Please note that the reference above to the 80-year exemption includes the 20-inch DBH restriction, also implemented by the REO.

The Sierra Club argues strenuously that the 80-year exemption has served the Forest well since implemented, and should remain in place for the Moist Forests.

If the Forest Service is considering modifying the 80-year exemption for Dry Forests, such consideration should be limited to ***individual Forest Service projects on a case by case basis not to be aggregated with other projects.***

The Sierra Club also notes that contrary to statements in said Chapter 3, it has observed the REO waive compliance with the 80-year rule and the 20 inch DBH rule, on a case by case basis. Although public participation opportunities associated with case by case waivers should be improved, such case by case review continues to be a more careful, and more prudent, way to authorize any such waivers in diverse ecosystems, instead of implementing comprehensive and broad regional and multi-state changes to the NWFP, its Standards & Guidelines and REO Memos.

Conserving mature and old growth ecosystems, by definition an original NWFP intent, does not include and is not consistent with raising the stand age limit above 80 years and/or raising the diameter limit of trees where logging would be allowed in Late Successional Reserves;

The “conservation and recruitment of mature and old growth forests conditions” will be adversely impacted if “active management” and “nuanced direction” results in opening more areas of LSRs by raising above existing direction in the NWFP the stand ages and diameter limits whereby logging and road construction are allowed, as is advocated by the Bioregional Assessment (see Chapter 3, page 47) for moist forests.

Any adjustments to LSR stand age limits for dry forests must be carefully balanced against and limited by the NOI stated objective of “*conservation and recruitment of mature and old growth forests conditions*” as well as providing for a reasonable assurance of the persistence of species associated with mature and old growth forests.

In addition, any proposed allowance for increases in road system miles, changes to stand age entry, and other management, particularly in LSRs, must be explained and analyzed in the DEIS

in terms of how the increases would meet and comply with the amended plan's clear objective of *"Improving conservation and recruitment of mature and old-growth forest conditions."* Similar discussion must also apply to Matrix and AMA.

Providing a 'sustainable supply of timber' is not consistent with conserving mature and old forests in LSRs if it results in reducing these protections and damaging forest areas now providing late successional habitat. It should mean ensuring that an amended PSQ is consistent with current Agency policy, administrative and statutory withdrawals, and realistic access, and reflects the limitations on the ground of each affected national forest administrative unit.

The science presented in the Bioregional Assessment and related Supplemental Reports does not support the contention that Moist forests are no longer ecologically sustainable, other than due to density metrics precluding large trees in their current state.

Over time, even those dense plantations will have wind throw or fire creating gaps and openings which will 'release' certain trees to grow larger and begin to fill the niche of older trees. The alternative, of cutting, i.e. harvest, of plantation trees, has not been presented in a format that encourages gaps and openings, and release of target trees. The fallacy of cutting so as to encourage new older trees is that frequently the USFS, in our experience in the MBS, allows cutting of trees up to 26" DBH, but those trees would have grown larger to older trees much sooner, even decades sooner, than the 'released' younger trees. The larger trees are needed for the ESA species, as well as for carbon retention.

There is no analysis included in the discussions about restoration by timber cutting or by fire, of how to protect existing current and future likely habitat for listed species. The discussion about climate resilience and community jobs which might be generated by restoration fire and timber cutting does not have the necessary detail or rules to protect ESA habitats.

Without those habitat discussions being the initial and primary focus of the Amendment, the FS may not be in compliance with the ESA.

For maintaining Old Growth and Mature Forests, we urge that the DEIS adopt the following approach, copied from the Standards for Management Actions Within Old-Growth Forest Conditions – Para 3, found in the recent NOI for and Old Growth Amendment issued by the USDA on 12/19/23:

"Vegetation management within old-growth forest conditions may not be for the primary purpose of growing, tending, harvesting, or regeneration of trees for economic reasons."

Such a standard should be applied not only for the Old Growth Forests, but also equally as important for the Mature Forests in the NWFP Area.

See page 88047 of [20231220FederalRegisterNotice.pdf](#) and <https://usfs-public.app.box.com/v/PinyonPublic/file/1394174142375>, the NOI for **Land Management Plan Direction for Old-Growth Forest Conditions Across the National Forest**

System, Section “Standards for Management Actions Within Old-Growth Forest Conditions—Para 3”

D. Aquatic Conservation – Tier I and Tier II Watersheds: Road Decommissioning; and Watershed Analysis preparation

The DEIS must strengthen direction to encourage more road decommissioning within Tier I and II watersheds. The LSR language on roads should be amplified and strengthened so as to give greater priority to protecting watersheds.

If the new NWFP direction is intended to allow for additional roads and logging, the DEIS must describe how this activity will be consistent and non-harmful with the amended plan’s objective of “Improving conservation and recruitment of mature and old-growth forest conditions.”

Road systems are a major source of soil erosion in a Climate Change environment that produce a detrimental effect on watershed health. Such erosion negatively impacts salmon and the DEIS needs to address this impact in the amendment process for both wet and dry forests. In addition, national forest administrative units, on too regular a basis, appear to bias decision making which results in the retention of too many roads that may harm fish.

The USFS needs to amend the NWFP to increase the priority given to road decommissioning, particularly in watersheds with high road densities. USFS must prohibit new roads in LSR stands over 80 years old within Tier I Watersheds.

The ACS needs stronger language to recognize the protections that the riparian reserves provide and that more roads need to be eliminated from the landscape within these reserves, and ***such protections must be included in all alternatives considered in the DEIS.***

The DEIS must provide new NWFP direction that ‘watershed analyses’ development and updating be an on ongoing process, and provide more explicit direction on watershed analysis content and the requirement to evaluate at least the most impacted watersheds on a scheduled or periodic basis, and at a minimum when a new project is proposed in Tier I watersheds.

E. Roadless Areas (both Inventoried and Un-inventoried) and the 2001 Roadless Conservation Rule

i) ***The DEIS must*** expressly incorporate the requirements of the 2001 Roadless Conservation Rule into the NWFP amendment, as it is a settled policy that greatly affects the direction associated with the NWFP amendment. The entire NWFP Region and all its Land Use Allocations (LUA), particularly the LSRs, are overlaid by substantial areas of roadless areas (including both Inventoried and non-inventoried) lands.

ii) Any “clarified management direction”, “active management,” and/or “nuanced direction” in the DEIS must not result in any cutting of trees or any road construction into any of the roadless areas on any national forest administrative unit.

The Sierra Club specifically objects to the assertion on page 236 Chapter 4 of the Supplemental Report: Northwest Forest Plan Land Use Allocations and Management Direction, which appears to lay the groundwork for both building roads and cutting timber in Inventoried Roadless Areas and other LUAs where timber cutting is not scheduled, and the Sierra Club requests that no such provision be included in any amendment to the plan. See below:

*“While management activities are not precluded in administratively withdrawn areas or inventoried roadless areas, many management activities may not be analyzed or implemented without regional or national review processes, and **the inability to build roads or harvest timber in inventoried roadless areas substantially limits management options in these areas.**”*

It is exactly in these areas that management should be most substantially limited.

The Sierra Club agrees with the following statement found on page 229 of Chapter 4 of the Supplemental Report:

“Inventoried roadless areas are a substantial portion of the late-successional old-forest habitats that benefit many fish and wildlife species. Wide-ranging species, such as meso-carnivores, benefit substantially from inventoried roadless areas, as do many aquatic species.”

The Sierra Club requests that this acknowledgement be included in the DEIS and appropriate protections for the IRAs be retained in the Amendment and the DEIS.

F. Increased Fire in the NWFP area

The NOI states:

“In recent years, large, uncharacteristic wildfires have resulted in losses of mature and old growth forests eliminating gains achieved in the first 25 years of implementation of the NWFP, and research indicates that large wildfires, with impacts to mature and old growth forests and associated NSO habitat, will increase in frequency and extent in both the wetter (e.g., western Cascades) and drier (e.g., eastern Cascades, Klamath province) portions of forests within the NWFP area.”

That gains have been eliminated is an overly broad statement. Sierra Club is concerned by the lack of distinction between all areas that are burned with those that have burned at high intensity, as well as the lack of distinction between areas that burn at low intensity or in mosaic and areas where stand replacement occurs.

The Sierra Club requests that the DEIS must include specific data that fully describes the areas that have burned for each ecological province. These area descriptions should be disaggregated for at least the period 1990-2022, by National Forest administrative unit and include the following information:

- geographic province,
- burn intensity and severity, ,
- the state of development (roadless areas, and areas that were roaded),
- the cause of each fire,
- the year the fire occurred, and
- land use allocation of the area burned.

The Forest Service has tended to describe any area burned as a single intensity that is “high.” That said, the Background Documents do provide extensive coverage of the several different levels of fire ranging from frequent fire dependent to moderate fire to infrequent fire, and each of those types of fire has varying intensities. Based on the Background Documents, there has been limited occurrence of fire in Moist Forests, except in the National Forests in the NWFP area in Southern Oregon and California. There must be delineation of where fire has occurred on the Moist Forests, and detailed description of intensity, and impact.

The DEIS must acknowledge that there is minimal data and reports on the long-term impacts of fire in the Moist Forests, rather than short-term impacts, and that in part the differences depend on the type of forest conditions existing pre-fire.

Until all of such documentation is provided, ***The Sierra Club disagrees*** with and objects to the assertion in the NOI regarding the level of impact of wildfire on Moist Forest’s mature and old growth ecosystems. While climatic shifts are virtually certain, and may affect moist forest conditions, management practices must reflect best available science.

The DEIS must provide more clarity on this question, and incorporate the detail that was utilized in the Background Documents.

G. Efforts to reduce WildFire Risks in Dry Forests

For dry forests, The Sierra Club supports the reduction of wildfire risks **with the caveats discussed below. All alternatives involving wildfire risk reduction in dry forests must:**

- retain old trees and large mature trees,
- exclude access to Roadless Areas (inventoried and not),
- limit new & reconstructed roads,
- protect soils,
- *retain derivative snags and logs that are core structural elements and social icons of natural Dry Forest ecosystems, and*
- generally “retain[] mature and old trees to reduce threats to old trees, reduce overall stand density, increase average tree diameter, and favor early seral species such as ponderosa pine, western larch, Douglas-fir, and white and black

*oak, where each was historically a dominant tree.” J. Franklin’s book *The Making of the Northwest Forest Plan*, page 366.*

Notwithstanding the foregoing, **the Sierra Club does not support mechanical efforts** to reduce wildfire risks and severity in either Dry or Moist Forests.

The Sierra Club does not support reduction of wildfire risks in Moist Forests.

H. General Comments re Post wildfire Silvicultural Direction:

For each alternative the DEIS must provide a full description of all post-wildfire silvicultural direction as it would affect each NWFP LUA.

If “post-wildfire silvicultural direction” is another description for ‘post fire salvage logging’ it must be noted that practice in the past has included removals of live and dead trees and the construction and reconstruction of roads; **the Sierra Club states that** such action should be strictly avoided since it is not consistent with the objectives of “protecting and enhancing biodiversity of mature and old growth ecosystems.”

I. Fire and Timber Cutting in Riparian Reserves

In several documents the Forest Service has indicated its desire, and plans, to use fire in Riparian Reserves.

First, the NOI states:

*“In addition, while the NWFP recognizes the differences in management needs along the gradient of wet to dry forests, more clarity is needed **to ensure that managers can implement the beneficial use of fire** and other strategies appropriately across the varying ecosystems, **including within riparian areas in the NWFP area.** [emphasis added by The Sierra Club]”*

Second, see also Page 27 of Chapter 2 of the Bioregional Assessment:

*“Riparian areas are generally managed passively using natural process and minimal intervention. However, by clearly defining the desired conditions, we can identify where active management, such as **harvesting**, planting vegetation, **using fire**, and other activities,³² is needed” [emphasis added by The Sierra Club]”*

Third, see also page 232 of Chapter 4 of the Supplemental Report regarding fire in Riparian Reserves.

The Sierra Club does not agree with any of the above three citations. Contrary to the Forest Service’s assertion above in the NOI and in Chapter 2 of the Bioregional Assessment, and in

Chapter 4 of the Supplemental Report, prescribed fire and other active management strategies should not be used or introduced into **riparian areas** in the NWFP area, in either moist forests or the dry forests.

The Sierra Club supports natural processes and passive management in the riparian areas that provide durable protections.

To the contrary, one of the consequences of fire or other timber cutting in Riparian Reserves, see page 376 of *The Making of the Northwest Forest Plan* by K. Norman Johnson, Jerry F. Franklin and Gordon H. Reeves, for merely one example of the impact on the private and state forests salmon landscape, which is equally applicable to the NWFP lands:

“...removing large trees alongside streams eliminated their potential to fall into waterways and contribute to spawning and rearing habitats.”

The Sierra Club requests that there be no change to management of Riparian Reserves, as they are refugia not only for listed fish but also for resident wildlife and older trees, and have performed well since the implementation in 1994 of the NWFP.

Chapter 3 of the Bio Assess, at page 177, Call-Out Box 23, states the following:

“One area of apparent relief from increasing stream temperatures will be in complex terrain where there is prolonged stream shading combined with subsurface streamflow and cooler groundwater inputs. Maintaining stream buffers for shade and complex channel and floodplain dynamics appear to be important for minimizing the impacts of a changing climate on stream temperatures and fish habitat (Spies et al. 2018). These are examples of climate refugia.”

This statement certainly supports continuing the Riparian Reserve Buffers at a maximum width in view of climate change, rather than the many suggested statements to include Riparian Reserves in areas recommended for fire modification and/or mechanical treatments. The DEIS must prohibit such treatments in Riparian Reserves and must continue to require compliance with existing NWFP direction on buffer widths and other protections and restrictions for Riparian Reserves.

While the ACS remains an important habitat protection and management tool as multiple runs of steelhead and salmon have been listed since the NWFP was adopted in 1994, **the Sierra Club is concerned** that this ACS tool is being weakened when National Forest administrative units and the Region 6 REO ignore clear NWFP direction and fail to provide the required ‘no cut’ stream buffer widths when implementing vegetative management plans.

J. Fire in Congressionally Reserved Areas and Administratively Withdrawn Areas and Inventoried Roadless Areas

In particular, see page 237 of Chapter 4 of the Supplemental Report:

“Planning Considerations Develop management direction to enable the use of prescribed or wildland fire in congressionally reserved areas where the natural role of fire is appropriate.”

This quote from Chapter 4 follows more detailed discussion about fire generally in various LUAs, which is troubling.

The Sierra Club strongly disagrees with any blanket approval of prescribed fire in either Administratively Withdrawn Areas or Congressionally Reserved Areas, or Inventoried Roadless Areas or any other LUA where logging is not now permitted, and the DEIS must not include any such approval.

The Sierra Club supports restoring the natural role of wildland fire in backcountry areas – where the bulk of congressionally reserved areas in the National Forest are located – and monitoring wildland fires to ensure the safety of communities.

K. Prescribed Burn Fire

The Sierra Club supports the use of prescribed fire in certain circumstances in fire-adapted ecosystems as a practice to promote biodiversity, to restore vegetative communities and natural fire regimes, and to provide an additional wildfire safety buffer for communities. Individual burns should respect Tribal treaty and consultation rights, prioritize the safety of firefighters and residential communities, comply with applicable environmental laws, minimize air quality impacts, and be based on best-available ecological and fire science - including traditional ecological knowledge.

Further, the Sierra Club recognizes the important cultural and ecological role of Native American cultural burning, and supports reducing or removing policy barriers that impede such practices. Indigenous peoples in many ecological zones of North America engaged in cultural burning for millennia. Indigenous people burned – and continue to burn – for a wide variety of reasons, including to produce basket materials and materials for arrows, to stimulate growth of preferred foods, to create deer and elk habitat for hunting, and to protect villages from wildfire. These acknowledgements are important for understanding the context of the following comments.

The Sierra Club is concerned that there are ways that prescribed fire has been and is being misused on public lands. The Sierra Club seeks to avoid: (1) programs or practices that involve commercial logging as a part of prescribed fire activities, or post-fire salvage logging after prescribed fire; (2) the application of prescribed fire in ecosystems that currently have an unnatural excess of fire, or where such application would create an unnatural frequency of fire at an unnatural hyper-frequency; (3) the implementation of prescribed fire during times and circumstances that are damaging to ecosystems, or in circumstances and conditions that create an unnecessary risk to nearby residential communities.

Prescribed burning is a tool in the toolbox of land managers. It is important to note that prescribed burning as described herein, while necessary, is not a substitute for natural fire in ecosystems that evolved to depend upon fire of various intensities as an ecological process. There is broad agreement among scientists that the monitoring of wildland fire (naturally-ignited fire, such as from a lightning strike) is an ecologically appropriate strategy for most fire-adapted ecosystems, particularly in areas distant from communities, to maintain and restore habitat heterogeneity and native biodiversity with a natural mix of fire intensities.

L. Prohibition on Post Fire Salvage Logging

The DEIS must not include post fire, whether natural or prescribed, salvage in the NWFP Area, as the best available science indicates that the forests evolve naturally with such debris on the ground or otherwise left in place, and that undisturbed post fire ecosystems provide important habitat for fire-adapted species.

The DEIS must clarify that the beneficial use of fire and other strategies or activities in NWFP Area Forests:

- a) shall not be deemed in any way to be approval or permission of post fire salvage logging; and
- b) must not be associated with or be a precursor to, nor interpreted as approval of subsequent logging of the area to be burned.

In addition, the DEIS must define what is intended by “other strategies” as used in the NOI subsection on *Fire Resistance and Resilience*.

The DEIS must not permit post fire, whether natural or prescribed, salvage logging as part of a prescribed fire process. Post fire, of any nature, salvage logging should not be implemented or approved in the NWFP Area Forests.

M. Tribal Consultation and Involvement

Sierra Club fully supports the Forest Service commitment to a NW Forest Plan amendment that incorporates traditional ecological knowledge into landscape stewardship techniques and ensures robust consultation of, and collaboration with, the Tribes who have used and stewarded these lands for cultural practices, subsistence, and lifeways since time immemorial.

VI. Have the Original Goals of the NWFP Been Met?

The NOI states: *“In many cases, the land management plans within the NWFP area are delivering effective, landscape-scale management, achieving positive community benefits and moving toward long-term desired ecological conditions by maintaining vegetation conditions*

that support the Spotted Owl and marbled murrelets, protecting mature and old-growth forests, and retaining and improving habitat for aquatic and riparian-associated organisms.”

The Sierra Club agrees with this statement. The reduction of timber cut levels in most LSOG forests, the strong protections of the Late Successional Reserve System, the cessation of new forest road construction are primarily responsible for the improvements identified by this statement in the NOI. As discussed in previous sections of this comment letter, one of the ways in which the plan has failed to meet stated goals is that the Agency has been unable to deliver the predicted timber volume. The fact that the initial Plan estimates of timber cut volumes have not been met is more a function of Forest Service administration and management short falls than a flaw of the 1994 NWFP.

The central motivation for creating the Northwest Forest Plan was to ensure viability of LSOG-dependent species. Thus, the answer to the question ‘have the Original Goals of the NWFP been met’ can only be answered by scientifically credible species viability analyses that clearly demonstrates that the habitat managed by for a range of species associated with late-successional/old growth (LS/OG) forests will maintain viable populations well- distributed across the planning area resulting in a high likelihood of species persistence over an extended period of time (J. Franklin, *The Making of the Northwest Forest Plan*). Any amendments to this original plan must be subject to the same requirements of a species viability analysis in order to determine the amendment’s viability.

VI. CONCLUSION

After 30 years, the Northwest Forest Plan - in its scope and guiding principles - has been successful in preserving late-successional and old-growth forest habitat, and meeting the needs of the region. The Sierra Club supports the general principle of targeted and strategic updating of the NWFP, subject to compliance of the DEIS with all requests and comments by the Sierra Club in this letter so that the Plan, as amended, may continue to work effectively well into the future. We add the express caveat that the underlying principle of protection of habitat of endangered species, including but not limited to the Northern Spotted Owl, the Marbled Murrelet, the Wolverine and several species of protected fish which are listed elsewhere in this Comment, is paramount and of primary importance.

As the largest grassroots-led environmental non-profit organization in the United States, and a leader in the fight against climate change, the Sierra Club shares the Agency’s concerns of a changing climate and commitment to mitigating the impacts that it will have on ecosystems, species, and communities. And, as an entity that was central in the effort to develop the original Northwest Forest Plan, Sierra Club is fully committed to retaining the meaningful protections that the plan provides for late-successional/mature and old-growth forests and their dependent species - especially as science continues to reaffirm the role these forests play as a climate solution for their ability to sequester and store carbon.

However, page 37 of Ch 2 of Bioregional Assessment states,

“We want to keep and enhance management direction that’s working well, but make changes where necessary to meet today’s social, economic, and ecological conditions and challenges on our dynamic landscapes. Large-scale management challenges, such as climate change, affect all the national forests and grasslands across the BioA area. Other challenges, including maintenance of spotted owl habitat and maintaining the role of wildfire in frequent-fire dependent ecosystems, are unique to or more urgent on individual or several national forests and grasslands. To increase efficiency in land management, it’s important for modernization efforts to create consistent direction for universal challenges, but also to develop direction that recognizes and is compatible with diverse ecosystems and communities.”

The Sierra Club concludes that making the changes suggested in the above paragraph from Ch 2 of the Bioregional Assessment *without the Sierra Club’s suggested recommendations in this Comment Letter*, would effect a wholesale change of the NWFP, keeping only the bare framework.

Implementing ‘modernization’, ie. management changes, as described in, and advocated for, in the Background Documents, will change the entire direction of the NWFP. Not only prescribed fire, but also using timber cutting in dry forests as a method of management, is a major change that will impact the entire ecosystem.

The original NWFP objective to maintain viable populations of species associated with late successional/old growth forests that are well distributed across the planning area resulting in a high likelihood of species persistence over an extended period must be retained to the greatest extent possible in this amendment process. The overriding principle of the Plan is to assure species persistence. While much has changed in the region after thirty years, the vision and goals of the 1994 NW Forest Plan remain unchanged and are arguably more significant than ever before.

Sincerely,

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