



State of Washington  
**DEPARTMENT OF FISH AND WILDLIFE**  
Lands Division, Okanogan County Wildlife Areas

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To: George Wooten  
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RE: DNS 16-061: Methow forest Habitat Restoration

First let me thank you for taking the time to comment and, where indicated, your support for the project. Below is my response to the comments submitted to WDFW regarding DNS 16-061 from Conservation Northwest. In quotations is each of the original comments for reference, followed by a response.

*“Conservation Northwest supports projects that help connect and protect habitats from the coast to the Rockies. We support the concept that this project is in line with our mission and is a high-priority need for ecosystem management related to wildfire potential and overstocking, which will involve commercial and non-commercial thinning.”*

Thank you for your support.

*“Although controlled fire is shown covering a large area on the maps, it is only briefly described in the DNS. We feel that more information should be provided about the type of controlled fire that is being planned, particularly on what type of target mortality you will be seeking, when it would occur, and whether it will be manual or aerial ignition?”*

*The DNS was not clear on whether the non-commercial thinning includes controlled fire or whether that is a separate action. Does the post-thinning mortality allowance include controlled*

*fire mortality or not? From past experience we have found that if controlled fire is a separate action, it sometimes does not get accomplished once project funds are spent. Our support for this project as ecosystem management is contingent on providing a guarantee that the planned controlled fire will indeed occur, regardless of when the commercial thinning occurs.”*

The prescriptions for leave tree density in the commercial and non-commercial treatments accounts for post-burn mortality. In commercial thinning, WDFW is expecting an approx. 10-15 square feet/ acre basal area mortality resulting from a combination of post-treatment stress (5-10 years), and future returns with prescribed burning (10+ years). In non-commercial thinning areas, we are restricted from thinning to the same density due to an existing fuel load. Non-commercial thinning shall focus on the reduction of trees less than 8” Diameter at Breast Height (DBH), releasing larger size dominant Ponderosa pine and other fire-resilient conifer species. Burn plans in these units will allow for greater mortality in the immature, 8”-14” DBH size class to more quickly reach a healthy stand density with older, large diameter, fire-resilient, dominant trees with an overall open canopy to allow for understory regeneration. WDFW does recognize the fact that mortality attributed to prescribed fire will likely result in a range of mortality depending upon fire behavior across the landscape, which will contribute to stand structure heterogeneity and/or require additional management in the long term.

Prescribed fire may be applied in the Spring or the Autumn. With prescribed fire, it is important to understand that we are bound by small operational windows and funding limitations. WDFW will focus on opportunities to meet our ecological and restoration priorities but may not be able to focus on a particular season over another. Manual ignition will be used in the majority of the prescribed burn activities, but steeper slopes may require aerial ignition for effective results.

It is intended to apply underburning across the project area where it is appropriate. While this project recognizes the ecosystem need to restore fire and fuel density to the historic and future range of variability, the ability to apply prescription burning may vary based on existing fuel breaks, property boundary lines, adjacent landowner concerns, infrastructure protection, wildlife concerns, recreational usage, etc. that may exclude small subunits. We currently do have funding to cover the cost of prescribed burning in the commercial thinning areas, and intend to conduct it after operations are complete, fuels have cured, smoke management issues have been addressed, and weather conditions allow. WDFW has several grant applications and funding requests to be able to expand underburning and fuels treatments to more of the Methow Wildlife Area. The long term goal is to re-introduce broadcast burning as a regular management tool in Okanogan County where social and economic constraints will allow us to treat our ownership.

*“We note that the risk of erosion described in the Checklist was not very specific. In addition to the mitigation measures proposed in 1.h. there should be more specific descriptions of where risks will require logging on frozen ground and more specific descriptions of the mitigation measures. The Checklist omitted inclusion of what are the logging standards to avoid ground-based impacts, including (1) harvest system; (2) monitoring of frozen ground depth prior to*

*logging over frozen ground; (3) using appropriate setbacks from streams and; (4) restricting ground-based logging on steep slopes; (5) descriptions of temporary stream crossings and; (6) location of temporary roads.*

*Based on a consensus across the region, ground-based logging should be limited to slopes > 35% (e.g., refer to Mission Project objectives on USFS lands). On slopes > 35%, or in areas with unstable slopes, ground-based equipment should be restricted further than the sediment delivery zone, or 300 feet from perennial channels. We identified areas where 300-foot buffers may be appropriate (Figure 1), on steep slopes with steep channels on the ridge south of Ramsey Creek. We appreciate that you have tried to protect this area from erosion by restricting most treatments here to controlled fire and non-commercial thinning, but several areas appeared to have been omitted from the Checklist or maps.”*

Due to steep road grades and safety concerns, winter logging and/or hauling will not be an option in the commercial thinning units outlined in this SEPA. Harvesting systems will also be limited to availability. For previous restoration projects on Okanogan wildlife areas, WDFW has preferred to utilize a cut-to-length/forwarder harvest system that leaves slash distributed on the forest floor and that can result in less ground disturbance. However, cut-to-length/forwarder operators are increasingly more difficult to find. The few operators that are still in business have substantially higher operating costs that often exceed the available budget for the project. Where appropriate for resource protection, a cut-to-length/forwarder system will be used. However, other harvesting systems will also be considered and used when a cut-to-length/forwarder system is not feasible. Mitigation measures described in section 1.h will be used as part of our resource protection measures.

Ground based operations will be limited to continuous slopes less than 35%. There will be a portion of hand-felling with chain saws on steeper adjacent slopes and non-commercial thinning units as indicated on the project map. On either side of Ramsey Creek, the only Type “F” stream, the Riparian Management Zone (RMZ) was delineated according to DNR Forest Practices Rules. Timber harvest or mechanical entry will not occur within the RMZ. In addition, the RMZ boundary on Ramsey Creek exceeds Forest Practices requirements for the majority of the unit boundary by being located along the edge of the slope break that leads into Ramsey Creek.

Finally, according to Forest Practices and our additional requirements, equipment and commercial thinning will not be allowed in the 50 foot RMZ buffer on either side of Type “NP” streams. A 30 foot Equipment Limitation Zone (ELZ) will be established on either side of type “NS” streams. The areas you have indicated in the map are either not sources for perennial flow or not included in the commercial unit boundary where ground disturbing activities cause erosion concerns.

*“The proposal to reduce stream bank erosion on temporary stream crossings needs to be quantified. There is no quantitative measurement of how long it will take for temporary erosion*

*increases to return to levels at or below the present. Likely this sort of generalization would not meet the regulatory agency requirements for protecting endangered species that live directly downstream. The description of bankside waterbars sounds counterproductive, and there is no evidence that they will do more harm than good, or if they will work to restrict ATVs.*

*It is not clear whether the restrictions also preclude building roads or locating other ground disturbances on the steep ridge above Ramsey Creek. Although building new roads was not mentioned in the DNS, rebuilding old roads was mentioned, along with the use of skid trails. The standards for assessing and successfully mitigating these impacts should be described. For instance, how much sediment is currently moving through the planned stream crossings, and what will this be post-harvest and post-fire?"*

We recognize that enough information on planned stream crossings, road work, and post-completion removal was not submitted with the DNS. Attached is a map ["Methow\_ForestRehab\_RoadWk\_Ramsey"] with stream crossing points and road building/utilization that corresponds with the following:

The road work and stream crossings have been designed by WDFW engineers, reviewed on site by a WDFW habitat biologist and approved by a Washington Department of Natural Resources (DNR) Forest Practices Forester. An approved Forest Practices Application and any required Hydraulic Project Permits will be obtained before work begins.

Stream Crossings 02, 03:

In 2008, WDFW undertook to remove culverts, improve roads, and clear fill in this project area (and other locations) to improve stream flow and reduce public access to particular road systems. At the 02 and 03 crossings [see attached map], fill was removed to improve the seasonal streambed that crossed an existing road. Eight years later, the bank restoration work that was completed did not adequately reduce sediment delivery and erosion into the channel. In addition, significant use of the roadbeds as trails has led to further sediment delivery into the seasonal channel, particularly at crossing 02. The road work proposed with this project will pull the road approaches back to a 3:1 slope ratio, place rock into the channel to improve and protect flow, and re-install waterbars where appropriate in the roadbed prior to the approach to divert flow from the road onto the forest floor. This will also provide truck and equipment access for logging operations. While this roadway will not provide vehicular access following completion of the commercial sale due to the removal of Crossing 01, these channel restoration improvements and water bars will be left in place to produce long term reduction of erosion issues.

Temporary Stream Crossing 01:

In the same project in 2008 indicated above, a barrier culvert and roadway was removed at this crossing, and "tank traps" were installed in the roadbed adjacent to the stream to prevent motorized access across the stream to a previous primitive campground (see Fig. 1). This project

removed an undersized culvert from a stream with fish-bearing characteristics, and removed public access to the rest of the road system to the north of the crossing. Ramsey Creek is not currently listed as having fish presence according to the Statewide Washington Integrated Fish Distribution (SWIFD) database.

This project will leave as much of this existing work intact as possible by utilizing a temporary bridge installation for the duration of the commercial sale to allow truck and equipment access (see Attachment “Ramsey Creek Bridge Install (Crossing 01)”). The installed tank traps, currently preventing vehicular access, will be temporarily removed to allow for installation of the temporary bridge and allow truck access. When the bridge is removed, the tank traps will be re-installed and restored stream banks will be planted with mixed shrubs. Motorized access to this route will continue to be restricted by these measures.

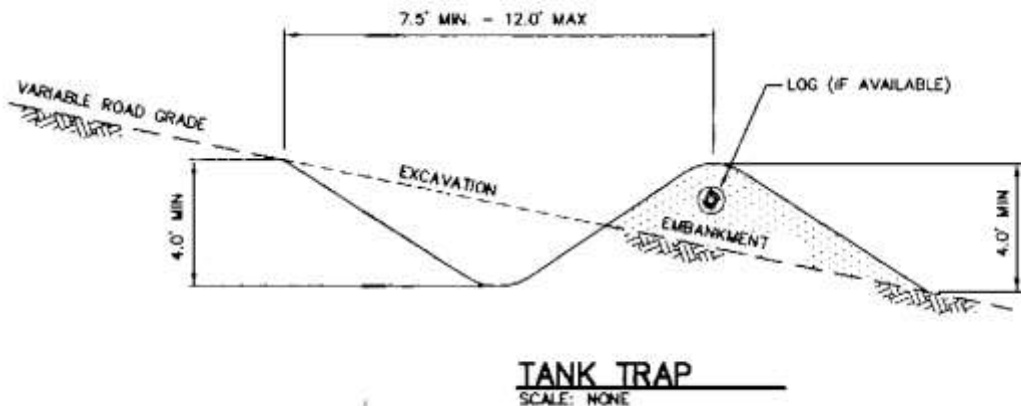


Figure 1 Tank Trap Detail

#### Road Work:

The map initially attached to this DNS did not include a legend item indicating road work and use for the duration of this project. The attached map has been updated to reflect this. As indicated earlier, non-commercial thinning operations will not be conducted with equipment, particularly on the steeper hill slope to the south of Ramsey Creek. As such, no additional roadwork or usage will be included as part of this proposal.

*“Washington Forest Practice standards or better should be adhered to along streams. Minimum setbacks for streams should include retention of most of the intact vegetation cover and healthy trees within 150 feet of perennial fish-bearing streams, and 100 feet from perennial non-fish-bearing streams, and 50 feet from intermittent streams.”*

As indicated, we will be delineating Forest Practice rules no-harvest RMZ buffers to all typed waters. In most instances, RMZ buffers will exceed Forest Practice requirements. The buffers

indicated by CNW do not specify if thinning prescriptions laid out in this SEPA are contradictory to “retention of intact vegetation cover and healthy trees”. However, this project is intended to restore the forest, riparian-adjacent forests, and riparian areas. Long-term quality stream shade cover shall be produced through felling of uncharacteristic and unhealthy conifer tree density in the riparian area and riparian-adjacent forest, leaving and encouraging hardwood trees (i.e. aspen, cottonwood), and treating the riparian and adjacent areas with prescription fire where feasible to increase renewal and response in the understory shrubs. Treatments will be spread out spatially and temporally to reduce overall impacts to streams.