

Northwest Forest Plan Aquatic Conservation Strategy Consistency Review

PROJECT: Rogue River Fuel Hazard Reduction Project

Medford District BLM, Grants Pass Resource Area

PREPARERS: D. Maurer (Soil Scientist), J. Raybourn (Aquatic / Fisheries Biologist)

HUC-5: Rogue-Recreation Section

PROJECT AREA: Hellgate Recreational Section of the Rogue National Wild & Scenic River. (include the Dunn and Applegate reaches). Other streams and watersheds intersect the project area only at their confluences with the Rogue (e.g., Grave, Galice, Pickett, Taylor, Hog, Stratton, Jumpoff Joe, Limpy, Shan, and Dutcher Creeks, and the Applegate River).

Rogue-Recreation Section Watershed Analysis, Medford BLM, January 1999

Rogue River Fuel Hazard Reduction Project Environmental Assessment, Medford BLM 2003

I. ROD Standard and Guidelines analyzed at the project level

I.A. Road Management:

RF-2 (Page C-32). Meet or attain ACS objectives for existing and planned roads.

Proposed Action: No new spur road construction is proposed in the riparian reserve. As necessary to provide access to fuel treatment areas, existing operator spurs would be brushed and new, semi-permanent spurs would be constructed outside of riparian reserves. Approximately 4.1 miles of BLM roads within the riparian reserve and approximately 8 miles of roads outside the riparian reserve will continue to be maintained. Approximately 7.2 miles of existing non-capitalized roads or unrecovered skid trails on BLM lands could be opened and used for biomass removal. Helicopter landings would be constructed outside of the riparian reserves. Road maintenance, renovation, and decommissioning will be done in accordance with Best Management Practices (Medford District RMP, Appendix D-VII).

Consistency Assessment: These activities follow the standards and guides for road maintenance and renovation in the riparian reserve. By following District BMPs and project design features, all proposed activities would maintain baseline conditions and be consistent with ACS objectives.

I.B. Stream Crossing

RF-4 (Page C-32). New culverts, bridges, and other stream crossings shall be constructed...to accommodate at least the 100-year flood including associated bedload and debris. Crossings will be constructed and maintained to prevent diversion of stream flow out of the channel and down the road in the event of crossing failure.

Proposed Action: There are no stream crossings proposed.

Consistency Assessment: This activity follows the standards and guides for road construction in the riparian reserve.

I.C. Sediment

RF-5 (Page C-33). Minimize sediment delivery to the streams from roads.

Proposed Action: Maintain and renovate roads to minimize delivery of sediment to streams (see RF-2 above). Road maintenance and renovation will be done in accordance with Best Management Practices (Medford District RMP, Appendix D-VII).

Consistency Assessment: These activities follow the standards and guides for road maintenance and renovation in the riparian reserve. Sediment delivery from existing roads will be decreased by road maintenance and road renovation. A minimal amount of sediment delivery to streams could result from this work, but would cause highly localized, negligible, short term impacts at the site level. There will be a long term reduction of sediment and long term beneficial impacts from less sediment entering streams.

I.D. Fire/Fuels Management

D.1. FM-1 (Page C-35). “Design fuel treatment(s)...to meet ACS objectives and to minimize disturbance of riparian ground cover and vegetation...recognize role of fire in ecosystem function....”

Proposed Action: Fuel hazard reduction treatments would be implemented within the riparian reserves. In all cases a no treatment area adjacent to the stream would be maintained. No treatment area widths will be 50 feet on all streams to minimize reduction of vegetation shading the stream and to prevent the delivery of sediment to any stream. Slash treatment and fuel reduction objectives within the riparian reserves could incorporate the slashbuster, with followup underburning. If a slashbuster is used, it would not treat areas within 50 feet of perennial and intermittent streams, with the treads stopping at 75 feet. All trees >8" DBH within 75 feet of perennial streams would be retained, therefore causing no reduction of shade on perennial streams. All trees >12" DBH within 150 feet of any stream would be retained. Larger trees could be removed from the riparian reserve outside of 150 feet from a stream as prescribed to meet fuel hazard reduction objectives, but all trees >21" DBH within the riparian reserve would be retained.

Hand pile burning will be combined with fall, winter or spring cool, low intensity underburning. Low intensity underburns in the riparian reserve may extend into the no treatment zones where this can mimic a naturally occurring low intensity ground fire, but no ignition will occur within the no treatment zones.

Consistency Assessment: These activities follow the standards and guides for fire/fuels management in the riparian reserve.

D.2. FM-2 (C-35). Fuel treatment staging areas meet or attain ACS objectives.

Proposed Action: Fuel treatment staging areas will be restricted to existing roads and spurs.

Consistency Assessment: These activities follow the standards and guides for fire/fuels management in the riparian reserve.

D.3. FM-4 (Page C-36): Design prescribed burn projects and prescriptions to contribute to attainment of ACS objectives.

Proposed Action: See FM-1.

Consistency Assessment: These activities follow the standards and guides for fire/fuels management in the riparian reserve.

II. Evaluation of Pathways and Indicators In Relation To ACS Objectives

In the following discussion, factors and indicators from the National Marine Fisheries Service (NMFS) Matrix of Pathways and Indicators are evaluated individually. Each factor and indicator relates to various ACS objectives. By including ACS objectives in the discussion of factors and indicators, a common link and logic track is developed between ACS consistency and the effects determination of the proposed project on federally listed fish species.

When discussing effects in the individual analyses of ACS objectives, "long term" is used in the context of ACS, meaning a period of time defined as "...decades, possibly more than a century" (USDA, USDI 1994 p. B-9), unless otherwise described. The "baseline" is the current condition of the watershed, rated in the environmental baseline as Properly Functioning, At Risk, or Not Properly Functioning (see Table 1 with footnotes). The effects of an action are evaluated as to whether they will move the relevant indicator to a different baseline condition on a watershed (fifth field) scale. The proposed action would neither degrade or restore any of the indicators, but all baseline conditions would be maintained at the sixth field scale or smaller.

II.A. Water Quality

Temperature (ACS 2,4,8,9)

The Rogue River Recreation Section is 303(d) listed as water quality limited due to high summer temperatures. It is anticipated activities will not increase stream temperature. The removal of brush and small trees outside of 50 foot buffers will not cause a reduction of effective shade. Trees which are >8"DBH will be retained within 75 feet of perennial streams, and trees >12" DBH will be retained within 150 feet of perennial streams, therefore causing no reduction of effective shade.

Baseline:

Maintain: This indicator is not expected to change in a way measurable at the project or watershed scales.

Sediment/Turbidity and Substrate (ACS 3, 4,5,6,8,

Project design features would minimize the potential for sediment delivery mechanisms. The amount, timing and duration of sediment delivery would be minimal and of short duration. The sediment would be delivered during winter run-off when flows are higher, thereby reducing adverse affects. Road maintenance and renovation activities will reduce the amount of sediment entering streams in the project area. In addition, temporary operator spurs would be ripped and seeded or planted with trees after yarding is completed and any preexisting skid trails used in the riparian reserve will be decommissioned following use. The ripping and decommissioning of spur roads and landings would not cause sediment delivery to streams because of the project design features and the location outside of riparian reserves.

Baseline:

Maintain: No short or long term adverse effects to fish survival or production are expected to occur. The sediment regime or turbidity levels are not expected to change on the sixth field scale.

Chemical Contamination/Nutrients (ACS 2,4,8,9).

The use of chemicals such as petroleum products is restricted and controlled by BLM Best Management Practices. Long term nutrient input to the riparian reserve from the addition of coarse wood will provide a benefit to the nutrient cycle related to aquatic production. Precautions to prevent the possibility of chemical spills from fuel treatments or road activity are stipulated in contracts. Spill plans are required from contractors and equipment is immediately available to contain oil or fuel spills from leaking machinery.

Baseline:

No long term effects are expected to occur which would measurably change the current condition at the sixth field scale.

II.B. Habitat Access

Physical Barriers (ACS 2,6,9).

No activities will create a barrier to fish.

Baseline:

The project would not affect this indicator.

II.C. Habitat Elements

Substrate (ACS 3,5,8,9). Refer to Water Quality above.

Large Woody Debris (ACS 3,6,8,9).

By reducing the risk of a stand destroying fire in the riparian reserves of the project area, the recovery of mature forests would be advanced and the opportunity for future recruitment of large woody debris into these streams would be increased.

Baseline:

Maintain: Within 1 site potential tree of streams, future recruitment of down wood and large woody debris would be maintained.

Pool Frequency (ACS 3,8,9). This project is not expected to affect pool-forming processes at the watershed scale.

Baseline:

Maintain: No long-term effects are expected to occur that would measurably change this indicator at the sixth field scale.

Pool Quality (ACS 3,5,6,9). This project is not expected to affect pool-forming processes at the sixth field scale but the recruitment of large woody debris would improve the quality of pools at the site level.

Baseline:

Maintain: No long-term effects are expected to occur that would measurably change this indicator at the sixth field scale.

Off-Channel Habitat (ACS 1,2,3,6,8,9). This project is not expected to affect pool-forming processes at the watershed scale.

Baseline:

Maintain: No long-term effects are expected to occur that would measurably change this indicator at the sixth field scale.

Refugia (ACS 1,2,9).

The project will not retard the attainment of this objective. It will not affect existing refugia because there is a no treatment area adjacent to all streams. Limited treatment will be allowed within the riparian reserves.

Baseline:

Maintain: No long-term effects are expected to occur that would measurably change this indicator at the sixth field scale.

II.D. Channel Condition and Dynamics

Width/Depth Ratio (ACS 3,8,9).

This project is not expected to affect channel processes that influence width/depth ratios.

Baseline:

Maintain: No long-term effects are expected to occur that would measurably change this indicator at the sixth field scale.

Streambank Condition (ACS 3,8,9).

Fuel reduction treatments will not take place within the no treatment zone of the riparian reserve. Ignition will not take place within the no treatment zones, but a backing fire could cross into the no treatment zones imitating a naturally occurring low intensity ground fire. These actions will not cause a reduction in streambank conditions. Trees greater than 12"DBH, outside of the 150 foot buffer, would be directionally felled and lined out by a skidder working from an existing unrecovered skid trail or road. No new stream crossings will occur. Alterations to streambanks are not anticipated because of absence of equipment entry into the no treatment zones.

Baseline:

Maintain: No long-term effects are expected to occur that would measurably change this indicator at the sixth field scale.

Floodplain Connectivity (ACS 1,2,3,6,7,8,9).

Fuel treatments will not affect the floodplain connectivity because riparian reserves will be maintained and stream channels will not be altered.

Baseline:

Maintain: No long-term effects are expected to occur that would measurably change this indicator at the sixth field scale.

II.E. Flow/Hydrology

Change in Peak/Base Flow (ACS 5,6,7).

Peak, summer and annual flows are expected to be within the range of natural variability for these types of streams. It is anticipated that the road maintenance and decommissioning of skid trails would improve the infiltration of exposed groundwater and runoff from roads.

Baseline:

Maintain: Improvements to infiltration will not be detectable in the duration and intensity of peak winter runoff from roads at the sixth field scale.

Increase in Drainage Network (ACS 2,5,6,7).

Maintenance proposed on natural surface roads such as installing waterdips and ditch relief culverts, would minimally decrease the drainage network by allowing exposed groundwater to infiltrate into the soil off the road.

Baseline:

Maintain: This indicator would decrease minimally in response to maintenance on natural surface roads. Water on treated roads would drain onto forest soils rather than into ditchlines. The factor would not measurably change at the sixth field scale.

Road Density and Location (ACS 1,3,5). The decommissioning of unrecovered skid trails within and outside of the riparian reserves would minimally improve this indicator, but there would be no substantial change at the sixth field scale.

Baseline:

Maintain: Skid trail decommissioning and road maintenance work will have no observable effect on the aquatic environment at the sixth field scale.

Disturbance History (ACS 1,5).

Fuel hazard reduction treatments would act to reverse the trend of fire exclusion and move the project area as a whole back toward a natural fire disturbance regime at a local unit scale.

Baseline:

Maintain: The long term benefit of the reduction of fuels and the trend back toward a natural fire disturbance regime would only be noticeable at less than the sixth field scale.

Riparian Reserves (ACS 1,2,3,4,5,7,8,9). The long term effect of reducing fuel hazard would be to decrease the risk of stand destroying events in the riparian reserves. On a project scale, this maintains the Rogue and tributaries as connected corridors for migration and the function of the aquatic ecosystem. Full riparian reserve widths based on site potential tree heights are proposed.

Baseline:

Maintain: The proposed activities will promote the attainment of the Aquatic Conservation Strategy

Objectives, as interim widths for riparian reserves will be used on all streams. The long term benefit of the reduction of fuels and the trend back toward a natural fire disturbance regime would only be noticeable at less than the sixth field scale.

III. Evaluation of Consistency With Aquatic Conservation Strategy Objectives.

This project is consistent with ACS Objectives because baseline indicators at a local scale would move toward properly functioning condition while not adversely affecting environmental conditions. The distribution, diversity and complexity of watershed and landscape-scale features (e.g. late successional habitat) would be maintained (ACS objective 1). Connectivity within and between watersheds (ACS objective 2) would be maintained by restricting the size of trees removed from within Riparian Reserves. Physical integrity of the aquatic system would be maintained (ACS objective 3) by not disturbing streambanks and by minimizing localized, short-term increases in turbidity and fine sediment. Road maintenance would help improve water quality (ACS objective 4) and move the sediment regime (ACS objective 5) toward properly functioning by reducing existing and potential sediment contribution from roads. The project would not affect instream flows (ACS objective 6), the timing, variability and duration of floodplain inundation or water table (ACS objective 7) or alter species composition and structural diversity of riparian plant communities (ACS objective 8). Reducing the risk of catastrophic fire in the riparian reserves would contribute toward restoring well-distributed populations of native plants, invertebrates and vertebrate riparian-dependent species (ACS objective 9).

IV. Conclusion

Based on this review, I find the proposed project is consistent with Watershed Analysis recommendations and findings, applicable Northwest Forest Plan Standards and Guidelines, NEPA Documentation. Additionally, I find the proposed project does not hinder or prevent attainment of Aquatic Conservation Strategy objectives at the 5th field watershed scale over the long term.

Abbie Josie
Grants Pass Resource Area
Field Manager

Date: _____

Table 1. Checklist for Documenting Environmental Baseline and Effects of Proposed Action(s) on Relevant Indicators

Name and location of action: Rogue River Fuel Hazard Reduction Project

Watersheds: Rogue-Rec. Section HUC-5

FACTORS INDICATORS	ENVIRONMENTAL BASELINE			EFFECTS OF THE ACTION(S)		
	Properly Functioning ¹	At Risk ¹	Not Propr. ¹	Restore ²	Maintain ³	Degrade ⁴
<u>Water Quality:</u> Temperature			WA		EA	
Turbidity		WA			EA	
Chemical Contam/Nutrients	PJ				EA	
Habitat Access: Physical Barriers			WA		EA	
<u>Habitat Elements:</u> Sediment		PJ			EA	
Large Woody Debris		PJ			EA	
Pool Character and Quality		PJ			EA	
Off-channel Habitat		WA			EA	
<u>Channel Cond. & Dyn.</u> Width/Depth Ratio		WA			EA	
Streambank Cond.		PJ			EA	
Floodplain Connectivity		WA			EA	
Flow/Hydrology: Changes in Peak Flow		PJ			EA	
<u>Watershed Condition:</u> Road Dens. & Loc.			PJ		EA	
Disturbance History						
Landslide and Erosion Rates						
Riparian Reserves						

1 Environmental Baseline conditions are derived from Forest Service, BLM and ODFW stream survey data and synthesis of watershed analysis findings. Document your baseline condition findings with the source, e.g. WA (watershed analysis), NEPA, SS (stream surveys- specify whether BLM, FS,ODFW ,other), PJ (professional judgement), Monitoring (MON), etc. Explain with a footnote at bottom of checklist your abbreviation if not listed here.

2 Effects of the Action(s) are derived from scoping for the environmental document (NEPA) or the environmental document supporting the proposed action(s). Document your sources with abbreviations and explanatory footnotes as discussed above.

3 These three categories of function (“properly functioning”, “at risk”, and “not properly functioning”) are defined for each indicator in the “Matrix of Factors and Indicators”

4 For the purposes of this checklist, “restore” means to change the function of an “at risk” indicator to “properly functioning” or to change the function of a “not properly functioning” indicator to “at risk” or “properly functioning”, moving conditions towards recovery.