



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

NOAA Fisheries Tracking No.:
1999/01856

June 16, 2004

Larry Dawson
Forest Supervisor
Clearwater National Forest
12730 Highway 12
Orofino, Idaho 83544-9333

RE: Amended Incidental Take Statement for the North Lochsa Face Project

Dear Mr. Dawson:

The document accompanying this letter amends portions of the November 23, 1999, Biological Opinion for the North Lochsa Face Project. This amendment primarily clarifies the amount or extent of incidental take that is authorized by the Incidental Take Statement (ITS) and describes required monitoring of the specified take. The details of the monitoring will be further developed in coordination with NOAA's National Marine Fisheries Service (NOAA Fisheries) [previously known as National Marine Fisheries Service (NMFS)].

Please add this amended ITS to your records and inform the appropriate staff about the additional term and condition for monitoring. The amended ITS calls for the Clearwater National Forest to develop the additional monitoring, and to submit the plan to NOAA Fisheries for review. When completed, the draft monitoring plan should be mailed to: Dale Brege, NOAA Fisheries, 102 North College, Grangeville, Idaho, 83530.

Mr. Dale Brege at (208) 983-3859 and Mr. Bob Ries at (208) 882-6148 are the NOAA Fisheries contacts for questions concerning this letter or the amended ITS.

Sincerely,

D. Robert Lohn
Regional Administrator

Attachments: Amended Incidental Take Statement
Copy of November 23, 1999, Biological Opinion

cc: J. Foss - USFWS
R. Eichstaedt - NPT



AMENDED NORTH LOCHSA FACE EFFECTS, REINITIATION, AND INCIDENTAL TAKE STATEMENT

June 16, 2004

V. Analysis of Effects

A.1. Clarified Effects of the Proposed Action

Rates of embryo and fry survival are likely to be reduced where project-related sediment causes fine sediment (particles less than 2.5 mm in diameter) deposition in spawning gravels to approach or exceed 30% cobble embeddedness (e.g. Chapman and McLeod 1987; Philips et al. 1975; Tappel and Bjornn 1983). In rearing areas, rates of growth and survival of post-emergent juveniles are likely to be reduced where project-related sediment particles less than 6.35 mm in diameter render unusable interstitial spaces needed for cover, as a result of increased exposure to predation or temperature extremes, or displacement into sub-optimal habitats (e.g. Waters 1995).

In the action area, the 30% sediment threshold is presently exceeded under the environmental baseline in Bowl Creek, Doubt Creek, Hungery Creek above Obia Creek, Alder Creek, and Frenchman Creek. Existing sediment levels in Gass, Obia, and Fish Creek above Hungery Creek are near the 30% threshold, and might reach or exceed the threshold from project-related sediment pulses in certain locations. Anticipated sediment inputs are primarily from sediment trap removals and culvert removals associated with road obliteration.

Sediment delivery caused by the proposed action is likely to reach concentrations that adversely affect listed fish in circumstances that are limited to: (1) instream work activities in the vicinity of juvenile steelhead, including sediment trap removals and road obliteration related removals of some stream crossings; and (2) infrequent occurrences of extreme precipitation following moderate/severe prescribed fire in riparian areas or on steep slopes away from riparian areas that causes surface or mass soil movement into streams occupied by steelhead. Steelhead spawning and rearing areas are scattered throughout the action area, while fall chinook spawning and rearing areas are more than 40 miles downstream from the management units. Sediment effects are expected to be greatest in fish-bearing stream reaches in close proximity to ground-disturbing activities, and decline in their frequency and severity as sediment concentrations dissipate downstream. Few individuals would be killed or harmed from culvert removal since the majority of culverts are located in ephemeral channels or small channels that do not support fish. Where culverts are located in flowing, fish-bearing streams, past experience by the Clearwater National Forest (CNF) indicates that direct mortality or injury to fish from instream work appears to be rare, and has not been observed (but may have occurred undetected). Where sediment traps and culverts in flowing water are removed, the area where sediment deposition would reach levels causing adverse effects would not exceed 200 feet of stream at each site, based on monitoring cited in the Biological Assessment (BA).

The degree of adverse effects associated with prescribed fire will depend on the fire intensity and amount of precipitation following the fire, the number of acres of land where bare soils exist from high-intensity fire, slope steepness, soil type, and use of the affected stream reach or reaches by steelhead. A large number of individual steelhead could be harmed or killed in one extreme precipitation event that triggers large amounts of erosion in treated areas. However, the number of acres susceptible to such events would be limited to a few hundred acres treated with the mixed severity burn prescription in a given year, which is small percentage of the action area.

VIII. Reinitiation of Consultation

Consultation must be reinitiated if: the amount or extent of taking specified in the Incidental Take Statement is exceeded, or is expected to be exceeded; new information reveals that the action may affect listed species in a manner or to an extent not previously considered; the action is modified in a way that causes an effect on listed species that was not previously considered; or, a new species is listed or critical habitat is designated that may be affected by the action (50 CFR 402.16).

Because sediment deposition is correlated to the survival and production of steelhead and the proposed action is likely to deliver sediment to several streams in the action area, sediment monitoring is required in the BA and this Biological Opinion (refer to Incidental Take Statement, Term and Condition 2, below). If sediment monitoring shows a measurable, action-caused increase in sediment deposition outside of the areas that are 200 feet below the instream work sites (e.g., for culvert and sediment trap removal), then consultation must be reinitiated.

X. Incidental Take Statement

The ESA at section 9 [16 USC 1538] prohibits take of endangered species. The prohibition of take is extended to threatened anadromous salmonids by section 4(d) rule [50 CFR 223.203]. Take is defined by the statute as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." [16 USC 1532(19)] Harm is defined by regulation as "an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavior patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering." [50 CFR 222.102] Incidental take is defined as "takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant." [50 CFR 402.02] The ESA at section 7(o)(2) removes the prohibition from any incidental taking that is in compliance with the terms and conditions specified in a section 7(b)(4) Incidental Take Statement [16 USC 1536].

An Incidental Take Statement specifies the impact of any incidental taking of endangered or threatened species. It also provides reasonable and prudent measures that are necessary to minimize impacts and sets forth terms and conditions with which the action agency must comply in order to implement the reasonable and prudent measures.

A. Amount or Extent of Take

This Incidental Take Statement amends the November 23, 1999, Biological Opinion to more accurately describe incidental take that is expected to occur from the North Lochsa Face Project. NOAA's National Marine Fisheries Service (NOAA Fisheries) [previously known as National Marine Fisheries Service (NMFS)] is reasonably certain the proposed action will cause incidental take of Snake River steelhead because: (1) Snake River steelhead occur in the action area; and (2) the proposed action is likely to cause sediment impacts to their habitat significant enough to impair feeding, breeding, migrating, or sheltering. Sediment created by the proposed activities is likely to harm or kill Snake River steelhead by altering habitats required for growth and reproduction.

No incidental take of Snake River fall chinook salmon is anticipated from this action. Snake River fall chinook salmon occur in the action area 45 miles downstream from watersheds where activities would occur. Sediment from the proposed action will reach the mainstem Clearwater River where fall chinook salmon are found; however, sediment concentrations in spawning and rearing habitat are unlikely to change to the extent that fall chinook salmon would be harmed or killed.

The amount of take of listed steelhead cannot be quantified in this instance, because of the combined variabilities in: fish distribution and density, amount of sediment delivery from the activities, and degree of effects (lethal and sublethal) that sediments have on salmonids and their habitats depending where and when the sedimentation occurs. In lieu of an amount of take, NOAA Fisheries describes the extent of take, which is the subset of the action area where project effects are likely to harm or kill steelhead. Incidental take is likely to occur within 200 feet downstream of the road stream crossing removal and sediment trap removal sites. Removal of sediment traps would occur at four sites in Pete King Creek and its tributaries; and road stream crossing removals would occur at approximately 40 perennial streams sites (a subset of which are fish-bearing), in the Pete King, Canyon, Glade, Deadman, and Fish Creek watersheds. In those several 200-foot stream reaches, incidental take is most likely to involve the late-timed incubating eggs, alevins, and overwintering juvenile life stages that are in and along the substrate. Many of the spring, summer, and fall rearing juvenile steelhead are expected to simply move out of these stream reaches into adjacent habitats in response to turbidity, or longer-lasting sediment effects including reduced prey species availability. Therefore, it is likely that a very small number of juvenile steelhead in these tributaries would actually be killed or harmed as a result of project-caused sedimentation.

Outside of those locations associated with instream activities, take is not authorized, with one exception. While NOAA Fisheries believes there is not likely to be a combination of severe prescribed fire effects, extreme precipitation, and location that causes sedimentation of steelhead habitat, one instance of take is authorized where erosion created by prescribed fire is found to have caused significant rilling, mass failures or sheet erosion, in amounts likely to harm or kill steelhead. The incidental take described above (below stream instream work sites and for the single instance associated with prescribed fire) is exempted for the 10-year span of the project.

Other potential sources of sediment delivery, such as timber harvest activities, are not expected to result in incidental take (and take is not authorized) if the CNF implements the riparian buffers and other activity requirements proposed. Monitoring per Term and Condition 2 (below) will be designed to detect if there are project-caused measurable increases in sedimentation outside of the 200-foot area below instream work sites. This monitoring will verify that the extent of take is not exceeded, or will cause reinitiation of consultation, as noted above.

Effect of Take

In the Biological Opinion, NOAA Fisheries determined that the anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat. Because incidental take from the proposed action will occur in occasional circumstances in the action area over a span of 10 years, and affect a very small percentage of the habitat and individuals in the action area, appreciable changes in listed steelhead populations are not expected to occur. Because female steelhead produce roughly 1,000 eggs per pound of body weight (Simpson and Wallace 1982), and on average, only two individuals (per pair of parents) survive to reproduce in a stable population, high rates of juvenile mortality occur naturally in steelhead populations. The amount of incidental take anticipated to occur from the proposed action is expected to be indiscernible from natural mortality, and is not anticipated to affect the number of juveniles that survive to maturity.

B. Reasonable and Prudent Measures

NOAA Fisheries determines that the following reasonable and prudent measures are necessary and appropriate to minimizing take of listed salmon and steelhead:

- 1) The CNF shall report the miles of road decommissioning, long-term storage roads, number of culverts removed each season, and monitor sediment delivery from road obliteration and sediment trap removal to better quantify the effects of these activities;
- 2) The CNF shall develop and implement a monitoring plan designed to detect instances where erosion created by prescribed fire, timber harvest, or road construction/reconstruction is found to have caused significant rilling, mass failures or sheet erosion, or resulted in measurable sediment deposition in fish-bearing channels other than those within 200 feet below instream work sites.

3) The CNF will further describe planned implementation of, and include NOAA Fisheries in reviewing the results of the trial prescribed fires which are designed to identify and correct problems in protecting RHCAs from the mixed intensity prescribed fires.

C. Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the CNF must comply with the terms and conditions listed below, which implement the reasonable and prudent measures. These terms and conditions are non-discretionary.

1) The CNF will report the miles of road decommissioning, long-term storage, number of culverts removed each season, and monitor sediment delivery from road obliteration and sediment trap removal to better quantify the effects of these activities. To add to quantitative sediment delivery information on road obliteration which CNF gathered in 1998, during the first two years of implementation of the proposed action, the CNF will monitor a representative sample of sediment trap removals, and subset of road obliteration activities that have the potential to deliver sediment to streams. This monitoring will be designed to quantify sediment delivery, and to the extent possible, allow inference to the application of this activity in other areas. The results shall be submitted to NOAA Fisheries each March following the field season data were collected. Per the Reinitiation of Consultation (section VIII, above) requirements, the CNF will reinitiate consultation on this action if the monitoring shows effects of a greater extent than predicted in the BA or this Biological Opinion.

2) The CNF shall develop and implement a monitoring plan designed to detect instances where erosion created by prescribed fire, timber harvest, or road construction/reconstruction is found to have caused significant rilling, mass failures or sheet erosion, or resulted in measurable sediment deposition in fish-bearing channels other than those within 200 feet below instream work sites.

Regarding development of this plan, prior to implementing the proposed action, the CNF will submit to NOAA Fisheries its draft monitoring plan that: includes a map of sediment monitoring locations; describes sediment monitoring protocol(s) for stream channels (such as cobble embeddedness and core sampling); describes a protocol to identify precipitation events in the action area that could potentially cause greater erosion than anticipated in the WATBAL modeling; and describes a protocol for sampling the action area following extreme precipitation events to detect mass failures, substantial rilling, and sheet erosion.

3) Prior to implementing the proposed action, CNF will provide NOAA Fisheries with a specific description (where, when, acreage, methods of evaluating effects on RHCAs, etc.) of the trial prescribed fires described briefly in the BA (p. 8, item 5). Prior to initiating subsequent prescribed fires for this action, CNF will submit for NOAA Fisheries concurrence the results of these evaluations, any added mitigation measures CNF proposes based on these results, and other information.

Additional References

Chapman, D. W. and K. P. McLeod. 1987. Development of criteria for fine sediment in the Northern Rockies Ecoregion. Work assignment 2-73. Battelle Columbus Laboratories. EPA Contract No. 68-01-6986.

Philips, R.W., L.L. Lantz, E.W. Claire, and J.R. Moring. 1975. Some effects of gravel mixtures on emergence of coho salmon and steelhead trout fry. Transactions of the American Fisheries Society 105(3): 461-465. *IN: Methods for evaluating stream, riparian, and biotic conditions.* Platts, W.S., W.F. Megahan, and G.W. Minshall. 1983. USDA, Intermountain Forest and Range Experiment Station. General Technical Report INT-138. Ogden, UT.

Simpson, J.C., and R.L. Wallace 1982. Fishes of Idaho. University Press of Idaho. Moscow, Idaho.

Tappel, P. D., and T. C. Bjornn. 1983. A new method for relating size of spawning gravel to salmonid embryo survival. North American Journal of Fisheries Management 3:123-135.

Waters, T.F. 1995. Sediment in streams: sources, biological effects, and control. American Fisheries Society Monograph 7.