

APPENDIX C – TIMBER MANAGEMENT REQUIREMENTS

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Timber Management Requirements

The minimum specific management requirements for projects and activities that must be met in carrying out projects and activities for the National Forest System (NFS) are set forth in FSM 1921.12a. Under 16 U.S.C. 1604 (g)(3)(E), a Responsible Official may authorize site-specific projects and activities to harvest timber on NFS lands only where:

1. Soil, slope, or other watershed conditions will not be irreversibly damaged.

Response: Timber harvesting under the Big Creek Vegetation Treatment Project is designed to comply with Revised Forest Plan Standards and Guidelines to protect soil, slope and watershed conditions, including limiting ground based skidding to slopes under 40%, use of erosion control measures, and use of all other Best Management Practices. No harvest is being planned in Riparian Habitat Conservation Areas. Analysis by the Forest Hydrologist and Forest Soil Scientist discloses that there would be no irreversible damage to soils, slopes or other watershed conditions. (FEIS Sections 3.8 and 3.11)

2. There is assurance that the lands can be adequately restocked within five years after final regeneration harvest (FSM 1921.12g).

Response: All of the harvesting is planned in areas that can be adequately restocked within 5 years. Planting is scheduled for group selection patches in the spruce-fir forest type, natural regeneration for patches with lodgepole pine seed sources, and natural regeneration of aspen/conifers in areas planned for conifer removal or conifer removal followed by prescribed burning. Observation of previous treatments in the lodgepole pine type in this area indicate that natural regeneration is both adequate and timely in this part of the Bear River Range.

3. Streams, stream banks, shorelines, lakes, wetlands, and other bodies of water are protected from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment where harvests are likely to seriously and adversely affect water conditions or fish habitat.

Response: No vegetation treatments will be conducted in Riparian Habitat Conservation Areas (RHCA's). There is very little surface water in streams within this area due to the "Karst Topography" which funnels the water underground so that it primarily surfaces only in springs or ponds. RHCA's have been identified and mapped (see FEIS Appendix A, Map 4). Analysis by the Forest Hydrologist and the Forest Fisheries Biologist discloses that harvests are unlikely to seriously or adversely affect water conditions or fish habitat. (FEIS Sections 3.2 and 3.11).

4. The harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber.

Response: The harvesting systems analyzed were not selected primarily because they would give greatest dollar return or the greatest unit output of timber. While some units utilize clearcut systems, which generally have more robust financial benefits, many other units are partial harvests which have higher unit costs. Considering the high road reconstruction costs, of the 65 units planned for harvest treatment, 30 have negative individual PNV which shows that the primary purpose for selection of that treatment is indeed to further the movement towards PFC in the watershed overall and not to maximize the dollar return.

Under 16 U.S.C. 1604 (g)(3)(E) a Responsible Official may authorize projects and activities on NFS lands using cutting methods, such as clearcutting, seed tree cutting, shelterwood cutting, and other cuts designed to regenerate an even-aged stand of timber, only where:

1. For clearcutting, it is the optimum method; or where seed tree, shelterwood, and other cuts are determined to be appropriate to meeting the objectives and requirements of the relevant plan (16 U.S.C. 1604 (g)(3)(F)(i)).

Response: Several of the proposed units are planned for even aged management. Clear cutting and shelterwood harvest are both used to achieve or move towards this end. In the lodgepole pine and aspen vegetation types even aged stands are naturally occurring and are historically a result of stand replacing disturbance events such as wildfire. Establishment of young even aged stands in these types is consistent with the purpose and need of the project to move the landscape towards a more balanced range of age classes including seedling and sapling stands.

2. The interdisciplinary review has been completed and the potential environmental, biological, aesthetic, engineering, and economic impacts have been assessed on each advertised sale area and the cutting methods are consistent with the multiple use of the general area (16 U.S.C. 1604 (g)(3)(F)(ii)).

Response: See the Big Creek Vegetation Treatment FEIS which is a complete and interdisciplinary analysis of the proposal. This shows that there are no significant adverse biological or environmental effects and that the project is consistent the Revised Forest Plan management direction for this area. Economics are expected to result in positive returns to the government as summarized in the first section of this document. (See Timber Management Specialist Report, Appendix A, located in the project record for a detailed spreadsheet that contains the financial analysis).

3. Cut blocks, patches, or strips are shaped and blended to the extent practicable with the natural terrain (16 U.S.C. 1604 (g)(3)(F)(iii)).

Response: Treatment units are designed to blend with the natural terrain and in fact several are designed to combine and modify the shapes of previous treatments to make them more naturally appearing and consistent with historic disturbance patterns. Section 3.7 in the FEIS discusses scenery management and concludes that though there may be some short-term impact on the landscape as a result of either action alternative, this is not inconsistent with the overall long-term scenery management objectives.

4. Cuts are carried out according to the maximum size limit requirements for areas to be cut during one harvest operation (FSM 1921.12e).

Response: There are no planned harvest units that will exceed the maximum size limit of 40 acres for areas to be cut in one even-aged regeneration harvest operation. Larger harvest units are primarily uneven-aged group selection, shelterwood preparatory cutting, or conifer removal from mixed aspen/conifer stands followed by prescribed burning. Prescribed burning is expected to be 60% to 80% effective in killing overstory aspen, leaving a mosaic pattern of aspen regeneration, and mature aspen patches within these areas (FEIS Section 2.2). Aspen may or may not be harvested and utilized commercially depending on market conditions at the time, however in no case will the addition of aspen units create contiguous even aged regeneration units of larger than 40 acres.

5. Timber cuts are carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, esthetic resources, cultural and historic resources, and the regeneration of timber resources.

Response: See the FEIS, sections 3.2, 3.4, 3.6, 3.7, 3.8, 3.9, 3.11 and 3.12. Each of these areas is considered in detail and show that the proposal is consistent with protection of these resources. The project design, mitigation and the incorporation of Best Management Practices ensure this protection.

6. Stands of trees are harvested according to requirements for culmination of mean annual increment of growth (16 U.S.C. 1604 (m); FSM 1921.12f; FSH 1909.12, ch. 60).

Response: While many of these stands proposed for even aged systems have met this requirement, and in fact are beyond the culmination point, they are exempt from this requirement for two reasons. Under FSM 1921.12(f) this requirement applies only to those lands managed as part of the suitable timber base. These stands are managed under prescriptions other than 5.2 which emphasizes timber growth and yield. Under FSM 1921.12(f)(5) stands managed for multiple use objectives are also exempt. While timber supply is part of the purpose and need for the project, the management emphasis is not production of timber or growth and yield rather it is developing patches of young vegetation across the landscape in sizes and shapes that are similar to what would have occurred historically.