

# Fallen Bear Old Growth Report

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## Introduction

This report addresses the current allocated old growth related to the Fallen Bear Project Area. This analysis involves one Old Growth Management Unit (OGMU) on the St. Joe Ranger District. This old growth management unit (OGMU 27) was used as the analysis area for old growth related to this project.

## Regulatory Framework

Direction for the management of forest vegetation, including old growth, is provided through the *National Forest Management Act* and the *Forest Plan for the Idaho Panhandle National Forests* (USDA Forest Service, 1987).

NFMA provides for balanced consideration of all resources. It requires the Forest Service to plan for diversity of plant and animal communities. The Forest Plan, in compliance with NFMA, establishes Forest-wide management direction, goals, objectives, standards and guidelines for the management of forest vegetation and plant communities.

Direction concerning implementation of NFMA and the Forest Plan can be found in Forest Service Manuals (FSM) and Handbooks (FSH), as well as various written communications from the Forest Service's Washington Office, Regional Office and the Supervisor's Office for the Idaho Panhandle National Forests.

More specifically, direction in the Forest Plan (page II-5) states that "Approximately 10 percent of the Forest will be maintained in old growth as needed to provide for viable populations of old growth dependent and management indicator species. To obtain the desired distribution, the IPNF will be managed to maintain approximately 5 percent of each old-growth unit as old growth where it exists." As part of a Forest-wide process the District(s) identified stands meeting old growth criteria. Stands were then allocated to old growth management to comply with Forest Plan standards.

The Forest Plan standards related to old growth are found in the Forest Plan (page II-29). Forest Plan standard *10a* incorporates the definitions of old growth developed by the Regional Old Growth Task Force, documented in *Old-Growth Forest Types of the Northern Region* (Green and others 2005). In compliance with Forest Plan old growth standard *10a*, the validation process for the Fallen Bear Project used the definitions as outlined in this Regional old growth guide (project file, OG-1). Compliance with standards *10b-i* is discussed later in this report.

## Analysis Area and Methods

Analysis of old growth is done on the total area in Old Growth Management Unit(s) (OGMU) that are totally or partially within a project area. The old growth analysis area for the Fallen Bear project is OGMU #27 (Avery, 02). This is appropriate for this project because the project area is entirely within this OGMU.

An old growth validation process was completed for this project, and the results are discussed in this report. The validation process used new aerial photography, the most current stand data and the Region 1 Old Growth Report (project file OG-2). New stand exams were accomplished in 2003, 2004, 2006 and 2008. The data from these new exams was used in this old growth validation.

The validation process applied the criteria listed in *Old-Growth Forest Types of the Northern Region* (Green and others 2005) to all stands proposed for treatment, all allocated stands in this OGMU, and all stands in this OGMU that had been given an old growth code but not allocated. This process was used to determine the current old growth allocation for OGMU #27 (Avery, 02). The validation documentation for individual stands, using the most recent data available, is located in the project file (OG-3). A list of stands in the current allocation can be found in the project file (OG-4).

All acres used in this report, and associated project file documents, should be considered **approximate** due to such factors as rounding, scale of analysis, delineation and procedural variance between resources evaluating old growth. Variations in estimated acres are insignificant related to evaluating the current status of old growth in this project.

The assessment of proposed treatment stands involved a review and comparison of the most current stand data (project file FV-10) with the criteria listed in *Old-Growth Forest Types of the Northern Region* (Green and others 2005).

Various special use codes are used to identify allocated and additional old growth. The old growth special use codes identified within this project area related to the old growth validation process were codes 9, 11, 12 and 13. Code 9 are stands that are retained in the old growth allocation that have been field examined and meet the minimum criteria or were previously identified by an interdisciplinary team as old growth. Code 11 stands are recruitment or stepdown stands that are retained in the allocation to create large blocks, corridors, or logical old growth landscape management units. Code 12 stands are additional existing old growth that has been field examined and meets old growth minimum criteria, but **not allocated** to old growth management under the 1987 Forest Plan strategy. Code 13 stands are additional stands photo identified as most likely meeting old growth minimum criteria, but **not** field examined, and **not allocated** to old growth management under the 1987 Forest Plan Strategy.

The validation process and assessment of allocated old growth stands within this OGMU resulted in the following adjustments in the old growth allocation. Eleven stands previously included in the allocation did not meet current minimum criteria as listed in

*Old-Growth Forest Types of the Northern Region* (Green and others 2005) and were removed (approximately 420 acres) from the old growth allocation (project file OG-5). The old growth classification of twenty-nine allocated old growth stands was changed, but the stands were retained in the allocation. Twenty-one stands changed from code 9 to code 11, and eight changed from code 11 to code 9. Twelve stands that previously had no old growth special use code assigned and now meet minimum criteria were added to the allocation (approximately 356 acres). Additionally, two stands identified as non-allocated other old growth are now allocated (approximately 51 acres). As a result of this validation process OGMU 27 had a **net decrease** in allocated old growth of approximately 13 acres (0.1%) (project file OG-5). The FSVEG and TSMRS data bases have been updated to reflect these changes.

## **Affected Environment**

The Fallen Bear Project involves one Old Growth Management Unit (OGMU) on the Avery portion of the St. Joe Ranger District, OGMU 27 (Avery, 02). OGMU 27 has approximately 10,524 acres in National Forest System lands, with approximately 2,845 acres (27%) of those acres allocated to old growth management. All of these allocated old growth stands are located within the project area boundary, and all allocated old growth stands in OGMU 27 (Avery, 02) are located within the project area. A map showing the allocated old growth stands and the project area boundary is located in the project file (project file OG-6).

Forest Plan standards for old growth retention are currently met in OGMU 27. Compliance with Forest Plan old growth standards *10b-i* is discussed later in this report.

Validation and monitoring of old growth is an ongoing process. This review and validation process identified additional acres that meet the criteria as described in *Old-Growth Forest Types of the Northern Region* (Green and others 2005) and other acres that were previously allocated but no longer meet the minimum criteria. Changes that were made in the FSVEG and TSMRS databases are documented in the project file (project file OG-3).

## **Environmental Consequences**

### **Alternative A - (No Action)**

#### **Direct, Indirect and Cumulative Effects**

There would be no direct/indirect or cumulative effects resulting from Alternative A, No Action, on either existing allocated old growth or other stands known to meet old growth criteria. Forest Plan standards for old growth retention would continue to be met.

There would be no direct or indirect effects from current and reasonably foreseeable activities including weed control, road and trail maintenance, pocket gopher control, fire suppression, and public recreation (i.e. berry picking, hiking, hunting, wood gathering and similar activities). No cumulative effects on allocated old growth are expected as a result of these other activities.

## **Alternatives B (Proposed Action)**

### **Direct and Indirect Effects**

There would be no direct/indirect or cumulative effects resulting from Alternative B, Proposed Action, on existing allocated old growth. Alternative B proposes treatment activities in three stands (Veg ID 96, 151 & 211), approximately 68 acres, that are mature or over mature and meet old growth criteria based on *Old-Growth Forest Types of the Northern Region* (Green and others 2005) (project file OG-7). These three stands are not currently allocated old growth. After treatment, these stands would not meet old growth criteria based on *Old-Growth Forest Types of the Northern Region* (Green and others 2005). In addition to treatment, approximately 0.3 miles or 1.1 acres of new system road construction is proposed through one of the three stands (project file, OG-8). Forest Plan standards for old growth retention would continue to be met.

### **Cumulative Effects**

There would be no direct or indirect effects from current and reasonably foreseeable activities including weed control, road and trail maintenance, pocket gopher control, fire suppression, and public recreation (i.e. berry picking, hiking, hunting, wood gathering and similar activities). No cumulative effects on allocated old growth are expected as a result of these other activities.

## **Alternatives C**

### **Direct and Indirect Effects**

Alternative C does not propose treatment in stands that meet minimum criteria for old growth, but approximately 169 feet or 0.03 miles new system road would be constructed through an allocated old growth stand that does meet minimum criteria for old growth. No other activity or timber harvest is proposed within allocated old growth or within stands that meet minimum criteria for old growth according to Green and others (2005).

If Alternative C were selected three additional stands totaling 68 acres would be allocated for old growth management (project file OG-18). With the allocation of these acres the total allocated old growth in OGMU 27 would be increased from 2,845 acres (27%) to 2,913 acres (28%) (project file OG-19). A map showing allocated stands in Alternative C is attached to this report and can be found in the project file (OG-20). Compliance with standards *10b-i* are discussed later in this report.

This alternative includes the construction of approximately 169 feet or 0.03 miles of system road construction that would affect an estimated 0.1 of an acre or 0.2% of an allocated old growth (project file OG-9). The road would be located on the southeast corner of the allocated old growth stand to have minimal affect on it. Location of the proposed road construction is shown on Fallen Bear Alternative C Road Construction Thru Existing Allocated Old Growth Map. Based on the location and length of the road construction, the effect on old growth patch 6 (276 acres) would be approximately 0.04 %, and the effect on the allocated old growth within OGMU 27 (2,913 acres) would be approximately 0.003% (project file OG-9). After the construction and use of this road, it

would be placed into Road Management Prescription C (long-term storage), which would recontour the portion of the road through the allocated old growth stand.

No other activity or timber harvest is proposed within allocated old growth.

### **Cumulative Effects**

There would be no direct or indirect effects from current and reasonably foreseeable activities including weed control, road and trail maintenance, pocket gopher control, fire suppression, and public recreation (i.e. berry picking, hiking, hunting, wood gathering and similar activities). No cumulative effects on allocated old growth are expected as a result of these other activities.

## **Consistency with Forest Plan and Laws**

Old growth standard *10a* in the Forest Plan states: “A definition for old growth is being developed by the Regional Task Force and will be used by the Forest when completed.” In compliance with Forest Plan old growth standard *10a*, the definitions of old growth developed by the Regional Old Growth Task Force, documented in *Old-Growth Forest Types of the Northern Region* (Green and others 2005) have been incorporated into Forest Plan standard *10a* and were used in the validation and analysis process of old growth in this project (OG-3).

Old Growth standard *10b* in the Forest Plan directs that we “Maintain at least 10 percent of the forested portion of the IPNF as old growth.” The 2005 and 2006 IPNF Forest Plan Monitoring Report (project file OG-11) shows approximately 11.8% of the forested lands on the IPNF met old growth criteria using the Forest Inventory and Analysis (FIA) data. This estimate was derived after applying adjustments for years to grow to breast height (4.5 feet) to FIA data (project file OG-12). Additionally, the monitoring report showed that the mapped allocated old growth stands were 12.3% of the forested acres on the IPNF. In May of 2007, an updated report of estimates of Old Growth in the Northern Region and the component National Forests (project file OG-13) disclosed that the IPNF had approximately 11.8% old growth. Although these studies were developed at different landscape scales, they demonstrate consistency in estimates of old growth on the IPNF and compliance with Forest Plan Old Growth standard *10b*.

Old growth standard *10c* in the Forest Plan states: “Select and maintain at least five percent of the forested portion of those old-growth units that have five percent or more existing old growth.” The Fallen Bear Project involves one Old Growth Management Unit (OGMU): OGMU 27 (Avery, 02). An old growth validation was completed for this project, discussed earlier. This old growth management unit has approximately 10,524 acres in National Forest System lands. The current condition and the condition proposed in Alternative B, 2,845 acres (approximately 27%) is allocated to Old Growth Management. Alternative C would have an increase in the allocated stands to 2,913 acres (approximately 28%) allocated to Old Growth Management. With any alternative the old growth allocation within this OGMU meets Forest Plan Old Growth standard *10c*.

Old growth standard *10d* states: “Existing old-growth stands may be harvested when there is more than 5 percent in an old-growth unit, and the Forest total is more than 10 percent.” Timber harvest **is not proposed** in any allocated old growth. Three of the stands proposed for timber harvest in Alternative B meet minimum criteria for old growth. The three stands proposed for treatment in Alternative B, would be allocated under Alternative C and would not be harvested. All alternatives comply with the Forest Plan Old Growth standard *10d*.

Old growth standard *10e* states: “Old growth stands should reflect approximately the same habitat type series distribution as found on the IPNF.” Compliance with this Forest Plan standard is disclosed on page 84 in the Old Growth chapter of the 2005 and 2006 IPNF Forest Plan Monitoring Report (project file OG-11). The habitat type series for allocated old growth within this OGMU is generally represented by the habitat type series available within this project area. See Table 1-1 in the Forest Vegetation Report. All alternatives comply with the Forest Plan Old Growth standard *10e*.

Old growth standard *10f* describes desirable patch size stating: “One or more old-growth stands per old-growth unit should be 300 acres or larger. ... The remaining old-growth management stands should be at least 25 acres in size. Preference is 80 plus acres.” Patch size for the OGMU involved with this project is discussed below.

In Alternative B, OGMU 27 (Avery, 02), the allocated old growth occurs in ten patches (project file OG-14). These patches range in size from 12 to 1,267 acres and average approximately 285 acres. Nine of the ten patches are greater than 25 acres. All nine patches are greater than 80 acres. Of the patches greater than 80 acres, seven are greater than 100 acres. Of those seven patches greater than 100 acres, two are greater than or equal to 300 acres. The largest patch in this OGMU is 1,267 acres. All these patches are comprised of multiple stands (project file OG-15).

In Alternative C, OGMU 27 (Avery, 02), the allocated old growth would occur in ten patches (project file OG-16). These patches range in size from 12 to 1,280 acres, and average approximately 291 acres. Nine of the ten patches are greater than 25 acres. All nine of those patches are greater than 80 acres. Of the patches greater than 80 acres, seven are greater than 100 acres. Of those seven patches greater than 100 acres, two are greater than 300 acres. The largest patch in this OGMU is 1,280 acres. All these patches are comprised of multiple stands (project file OG-17).

As discussed above, OGMU 27 (Avery, 02) is in compliance with the Forest Plan Old Growth standard *10f*. Maps identifying allocated old growth patches, comprised of one or more stands, are in the project file (project file OG-15, 17), as well as a list showing component stands of each patch (project file OG-14, OG-16).

Old growth standard *10g* states: “Roads should be planned to avoid old-growth management stands to maintain unit size criteria.” In Alternative B, no road construction is proposed within allocated old growth stands. Alternative C includes road construction in a stand that meets minimum criteria for old growth and would be allocated for old growth management if Alternative C is selected. The road would be located to have minimal effect on the allocated old growth stand, and old growth unit size criteria would be maintained (see discussion of *Standard 10f* above). This road is proposed to meet other resource needs of the project. All alternatives in this project are in compliance with Forest Plan Old Growth standard *10g*.

Old growth standard *10h* states: “Existing grazing allotments will be honored; .....New allotments in old-growth will not be issued.” There are no grazing allotments within the Fallen Bear project area, and no new allotments are proposed. All alternatives comply with Forest Plan Old Growth standard *10h*.

Old growth standard *10i* states: “...goals for lands to be managed as old-growth within those lands suitable for timber production are identified in the management area prescriptions.” Compliance with this Forest Plan Old Growth standard is disclosed on page 83 in the Old Growth chapter of the 2005 and 2006 IPNF Forest Plan Monitoring Report (project file OG-11). As disclosed in the Forest Plan Monitoring Report, the IPNF not only is meeting but is exceeding the Forest Plan old growth standard *10i*.

Specific goals, objectives and standards for old growth management as described in the Forest Plan on pages II-5 and II-29 are met with all alternatives in this project.

### **Bibliography**

Green, P., Joy, J., Sirucek, D. Hann, W., Zack, A., and Naumann B., 2005. Old-growth forest types of the northern region. R-1 SES 4/92; USDA Forest Service, Northern Region. Missoula, Montana.

USDA Forest Service. 1987. Forest Plan: Idaho Panhandle National Forests.



# Fallen Bear

## Alternative C Road Construction Thru Existing Allocated Old Growth

 Proposed Road Construction

### Old Growth Allocation

-  9
-  11

### Alt. C Proposed Units

-  CC/Res
-  CT
-  ST
-  SW

-  40 ft. Contours
-  Streams
-  Existing Roads

