

## Riparian Management Zones (RMZs) and Timber Suitability

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This paper describes suitability of riparian management zones (RMZs) and their effect on lands suitable for timber production. For Alternative A, riparian habitat conservation areas (RHCAs) are used based on INFISH rather than the RMZs.

### Riparian Areas and Timber Suitability

As indicated by plan component FW-SUIT-RMZ 01, RMZs are not suitable for timber production. Timber harvest is allowed for other multiple-use purposes. This is similar for Alternative A, where RHCAs are not suitable for timber production. See the FEIS glossary for definitions of RHCAs and RMZs.

Table 1 displays acres suitable for timber production and acres where timber harvest is allowed by alternative.

**Table 1. Acres timber suitability and acres where timber harvest is allowed**

<b>Timber Suitability</b>	<b>Alt A</b>	<b>Alt B Modified</b>	<b>Alt C</b>	<b>Alt D</b>
Acres Suitable for Timber Production	534,629	465,183	308,246	482,649
Acres where timber harvest is allowed	437,663	447,191	403,692	522,649

Table 2 displays the total acres of RMZs (RHCAs for Alt A) and how they affect timber suitability. The majority of RMZs are not suitable for timber production because they are legally withdrawn or have technical reasons why they are not suitable (row A in the table). There are also a number of acres of RMZs that would not be suitable for timber production because of the MA (row B in the table). In both of these cases, the RMZs do not affect timber suitability, as they are not suitable for other reasons in addition to RMZ. The remaining RMZ acres (row C in the table) are not suitable for timber production only because they are RMZs. These are the acres that affect lands suitable for timber production.

**Table 2. Acres RMZ by Timber Suitability Determination**

<b>RMZ Suitability</b>	<b>Alt A</b>	<b>Alt B Modified</b>	<b>Alt C</b>	<b>Alt D</b>
Total Acres RMZ (RHCA for Alt A)	313,913	410,863	410,863	410,863
A. Acres RMZ (RHCA) that are not suitable for timber production for other legal or technical reasons	213,784	276,765	276,765	276,765
B. Acres RMZ (RHCA) that are not suitable for timber production for MA allocation	43,985	30,587	67,224	28,178
C. Acres RMZ (RHCA) that could have been suitable for timber production	56,145	103,511	66,874	105,920

The acres in row A are not suitable for timber production and timber harvest is not allowed. The acres in rows B and C are not suitable for timber production but allow timber harvest for other multiple-use purposes. These acres (rows B and C) are included in the acres where timber harvest is allowed shown in table 1.

As shown in row C of table 2, the RMZs do result in a reduction in lands suitable for timber production. Alternatives B modified and D have similar effects on timber suitability, with approximately 100,000 acres not suitable for timber production because they are within an RMZ. The acres in row C are split approximately 50/50 between what would have been moderate and what would have been higher intensity of management for alternatives B modified and D. Alternative A has the least effect, with approximately 56,000 acres not suitable for timber production because they are within an RHCA.

For the action alternatives, the percent effect of RMZs on timber suitability is similar, with an 18 percent reduction in lands suitable for timber production because of riparian management. These acres allow timber harvest, but they are not suitable for timber production.

### Change in RMZs and Spectrum modeling

The analysis areas for the Spectrum model were built using the original RHCAs. The RHCAs were then changed to RMZs for the action alternatives. The RHCAs were also edited and revised for Alternative A. Table 3 displays the changes to timber suitability and the change of RHCAs to RMZs.

**Table 3. Changes to Lands Suitable for Timber Production for RMZs**

Category	Alt A	Alt B Modified	Alt C	Alt D
A. Old Acres Suitable for Timber Production	526,984	483,521	317,301	500,443
B. New Acres Suitable for Timber Production	534,629	465,183	308,246	482,649
C. Change in acres suitable for timber production	+7,645	-18,338	-9,055	-17,794
D. Total Old RHCA acres	327,778	327,787	327,787	327,787
E. Total New RMZ acres (updated RHCA for Alt A)	313,913	410,863	410,863	410,863
F. Net change in acres RMZ within previously suitable for timber production	-7,645	18,302	11,696	18,902

Row F doesn't match row C of Table 3 for the action alternatives because, in addition to the change from RHCA to RMZ, there were minor edits to some management areas (e.g., addition of a recommended wild and scenic river and other changes in management areas in Alt C and D).

The magnitude of changes in timber suitability in row C does not warrant re-running the Spectrum model for the alternatives for the following reasons:

- For all action alternatives, this is a reduction of less than four percent of acres suitable for timber production. Some of these acres are most likely within other constrained resource areas, such as

grizzly bear core areas or winter range. In addition, there are other constraints on management, such as watershed and budget limitations.

- The acres in row C would then allow timber harvest for other multiple-use purposes. Therefore, some timber management would be allowed on these lands.
- Table 4 displays the acres where timber harvest may occur (lands suitable for timber production plus lands where timber harvest is allowed) and those acres allocated to timber management in the Spectrum model. As shown in Table 4, a large portion of the acres where timber harvest may occur is not allocated to timber management. Thus, there are many acres where the model does not schedule timber harvest. A reduction of four percent in lands suitable for timber production would have little impact on the amount of acres where timber harvest could occur.

**Table 4. Acres allocated to timber management in the Spectrum model**

<b>Category</b>	<b>Alt A</b>	<b>Alt B Modified</b>	<b>Alt C</b>	<b>Alt D</b>
Total of acres suitable for timber production and acres harvest allowed	972,292	912,374	712,118	1,005,298
Acres allocated to timber management under Constrained Budget	463,773	398,758	312,426	334,990
Acres allocated to timber management under Unconstrained Budget	471,661	421,823	361,040	436,182

For these reasons, the overall effect of a reduction (or slight increase in alternative A) in suitable acres for the updated RMZs is not expected to result in any change to estimated timber sale production quantities.