

APPENDIX F - Short – Term Timber Program Analysis

This appendix documents the process used to take a realistic look at the current Matrix landbase (lands available for regularly scheduled timber harvest) to identify lands that could provide timber outputs in the next ten years.

A significant reduction of *Forest Plan* identified Matrix lands from 13,630 acres to 4,550 acres is expected to be available in the short term. This reduction occurred primarily because a portion of the Matrix land is identified as "Impaired Watersheds" (see **Chapter 5** *Hillslope Processes* and *Human Uses* sections). The 4,550 acres identified in this analysis are only to be used for timber planning purposes for the next decade. It should be pointed out that the 13,630 acres are still designated in the *Forest Plan* as available for timber harvest until such time as a planning amendment formally changes the lands available.

Timber Analysis Assumptions:

- Green Tree Retention (GTR) is based on an average rotation of 130 years.
- Thinning assumption: 1) Natural stands would be entered no more than every 20-30 years for commercial thinning. Only 3G strata was used for assessing acreage for thinning. It was assumed that approximately a third of the available acres would be thinned per decade. Expected volumes were assumed to be approximately 4 mbf/ac. for thinning in natural stands. 2) Some timber output expectations were assumed from the older plantations. It was assumed that approximately a quarter of the existing older plantations would be available for commercial thinning opportunities during the next decade with volume expectations of approximately 2 mbf/ac.
- Sanitation/Salvage assumption: An assumption was made that approximately 1/3 of the M3P, M4P, and M4G acres would be available for sanitation/salvage opportunities with average volume estimates of 2 mbf/ac.
- Unmapped Riparian Reserve acreage used *Forest Plan* assumption of 42% of land base.
- Green Tree Retention acreage reduction is based on 15% retention.

Current Matrix Strata (based on *Forest Plan* timber type strata and WA discretionary Matrix)

| | |
|--------------|---------------|
| Shrub/Pole - | 841 ac. |
| M3P - | 1,287 ac. |
| M3G - | 927 ac. |
| M4P - | 62 ac. |
| M4G - | <u>98 ac.</u> |

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|-----------------------------------|-----------|
| TOTAL - Commercial Timber Species | 3,215 ac. |
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|------------------------|-----------|
| Riparian Reserve | 1,350 |
| GTR Ac. - | 280 ac. |
| Remaining Matrix Ac. - | 1,585 ac. |

Remaining Strata:

| | |
|--------------|---------------|
| Shrub/Pole - | 412 ac. |
| M3P - | 634 ac. |
| M3G - | 460 ac. |
| M4P - | 32 ac. |
| M4G - | <u>47 ac.</u> |

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|-------|-----------|
| TOTAL | 1,585 ac. |
|-------|-----------|

POTENTIAL HARVEST ACRES PER DECADE

Potential **GTR**/decade = 1,585 ac. ÷ 13 decades = **122 ac./decade**
 Potential **Thinning**/decade = 188 ÷ 4 = 47 ac./decade and 460 ÷ 3 = 153 ac./decade for a total of **200 ac./decade**
 Potential **Sanitation/Salvage**/decade = 591 ac. ÷ 3 = **197 ac./decade**

POTENTIAL VOLUME PER DECADE

GTR = 122 ac./decade x 18.5 mbf/ac. = 2,257 mbf/decade
 Thinning (plantations > 30 yrs.) = 47 ac. x 2 mbf/ac. = 94 mbf/decade
 Thinning (M3G) = 153 ac. x 4 mbf/ac. = 612 mbf/decade
 Sanitation/Salvage (M3P) = 197 ac./decade x 2 mbf/ac. = 394 mbf/decade
Total = 3,357 mbf/decade

POTENTIAL APPROPRIATED PRE-COMMERCIAL THINNING

There are approximately 360 acres of plantations under 30 years of age that should be assessed for possible pre-commercial thinning with appropriated dollars. Plantations should be considered for thinning if they can be accomplished for no more than \$275/ac.

Current strata breakout for matrix is as follows:

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|------------|-----|
| Shrub/Pole | 26% |
| Mid-Seral | 69% |
| Late-Seral | 5% |

Regeneration harvesting should occur in older decadent late-seral stands, stands that are currently under stocked, and mid successional stands that have culminated. Late seral stand are currently lacking in this analysis area. Size class 4 stands should not be regenerated unless they are completely falling apart. Explore M3G stands for potential regeneration harvest, especially the stands over 130 years of age.

If regeneration is not an option due to the good health of the stands, additional commercial thinning should be done in the watershed in order to develop additional late-seral stands.

Treatment of younger plantations should be emphasized in order to reduce the percent of acreage in the shrub/pole size class. The Blue Heron, Collins/Lime, Kohl/Dona, and Quigleys 7th field watersheds should be prioritized for harvesting.

Field verification will be necessary to determine stand conditions and actual seral conditions remaining in available ground.