

Monitoring Conducted

Timber Activities and Commercial Wood Harvest

At the end of each fiscal year (FY) data bases on the Superior National Forest (SNF) are reviewed to determine acres treated, acres harvested, and timber volume harvested. Database sources include Combined Data System (CDS), Forest Activities Tracking System (FACTS), and Timber Information Managers (TSA). Vegetative *treatments* include even-aged and uneven-aged timber management methods, site preparation, reforestation, and mechanical fuel reduction. *Harvest acres* are acres that are actually cut or harvested. *Volume* is the amount of timber removed through harvest. Resource objectives across an entire planned treatment area may be achieved when an area less than the entire stand is actually harvested, planted, or has some sort of operational activity occur on it. For example 80 acres of a 100 acre stand may be harvested and 20 acres may have no activities occur on it at all. However, while 20 acres had no activities occur on them, the entire stand would be considered to have been treated in order to address various Forest Plan directions relating to wetlands, legacy patches, reserve islands, inoperability, etc.

To determine if implementation activities are achieving or trending towards Decade 1 objectives or projections, the M&E Report attempts to document actual management accomplishments and planned accomplishment approved in project NEPA decisions.

Actual and planned *volume* is evaluated and displayed in this report because they are discussed in both the NEPA decisions and updated databases.

Accomplished and planned *treatment* acres and how they contribute towards Forest Plan decade 1 projections will be documented in future M&E Reports.

During FY 2007 timber accomplishments were monitored within twenty timber sales across the Forest. Harvest and volume accomplishments are shown in Figure 1 and table 1.

Timber Summary Points

- * FY 2007 had the 2nd highest volume sold and highest volume under contract since approval of the Revised Forest Plan. However, volume harvest was less in 2007 due to a continued downturn in the timber market. Five sales received no bids which amounted to 6,766 MBF.
- * The SNF *awarded* 56,372 MBF within twenty timber sales on 5,533 acres but *actually* harvested 27,930 MBF on 1,649 acres.
- * To date, 162,200 MBF or 16% of the decade 1 volume projection has been achieved. To date 9,928 acres have been harvested.
- * Actual treatments when combined with planned approved treatments would result in about 261 MBF harvested which represents approximately 25% of the Decade 1 harvest volume projection.
- * During 2007, 4,629 acres were certified to have established forest regeneration and 3,672 acres harvested but not certified.
- * During 2007, approximately 58% of harvest acres were clear cut compared to 60% clear cut during 2006 and 88% clear cut during 2005.
- * The differences between planned and actual harvest observed in 2006 and 2007 appear to be greater than expected. During future monitoring we will analyze this difference in greater detail.

Table 1. FY 07 Timber Program. Sold and Harvested Volume & Acres (Includes sales planned & sold under 1986 Forest Plan and Revised Forest Plan)					
Revised FP Expected Annual Outcome		Sold		Harvested	
MBF	Acres	MBF	Acres	MBF	Acres
102,000	13,200	56,372	5,533	27,930	1,649

Table 2. FY 07 Timber Program. Volume And Treatment Acres Approved In 2007 NEPA Decisions		
Estimated Volume MBF	Estimated Treatment Acres	# of NEPA Documents
115,300	24,650	5

Stewardship Contracting

There were two stewardship contracts awarded during FY 2007. The SNF will again be offering stewardship contracts again during FY 2008.

Restocking

During FY 2007, 4,629 acres were certified as restocked and 3,672 acres harvested but not certified as of 09/30/06. The balance of harvested acres needing certification is 1,013 acres (Table 3). The Forest is meeting the NFMA obligation to adequately restock within 5 years following final harvest. Fifth year stocking surveys under the Revised Forest Plan (2004) are to begin in FY 2009.

Table 3. Certification Acres			
<i>A Acres that needed to be certified for stocking by 09/30/2005</i>	<i>Additional acres that needed to be certified for stocking by 10/01/2005 thru 09/30/2006</i>	<i>C Acres certified as being adequately stocked 10/01/2005 thru 09/30/2006</i>	<i>D Balance of acres needing certification as being adequately stocked as of 09/30/2006</i>
3,672	1,970	4,629	1,013
Column A (+) column B (-) column C = D			

Proportion of Clear cutting

The proportion of timber harvesting that was clear cut was monitored on 11 sales that occurred during FY 2007. These proportions were compared with clear cut proportions from 2005 and 2006 harvests. Moreover, actual harvests in conjunction with planned but not yet implemented 2007 decisions were analyzed for clear cut proportions. These percentages are best estimates and can change if planned activities vary from planned harvest activities because of unexpected site conditions.

Large Patch Temporary Openings

The number of openings, average opening size, largest, and smallest openings within parts of eleven harvested sales were monitored. In addition, proposed temporary openings proposed in five decisions approved in FY 2007 were also analyzed. The five 2007 projects were Old Root (biomass removal/fuel reduction) CE, Mid-Temperance EA, Echo Trail Forest Management EIS, Whyte Forest Management EA, and Devil Trout EA.

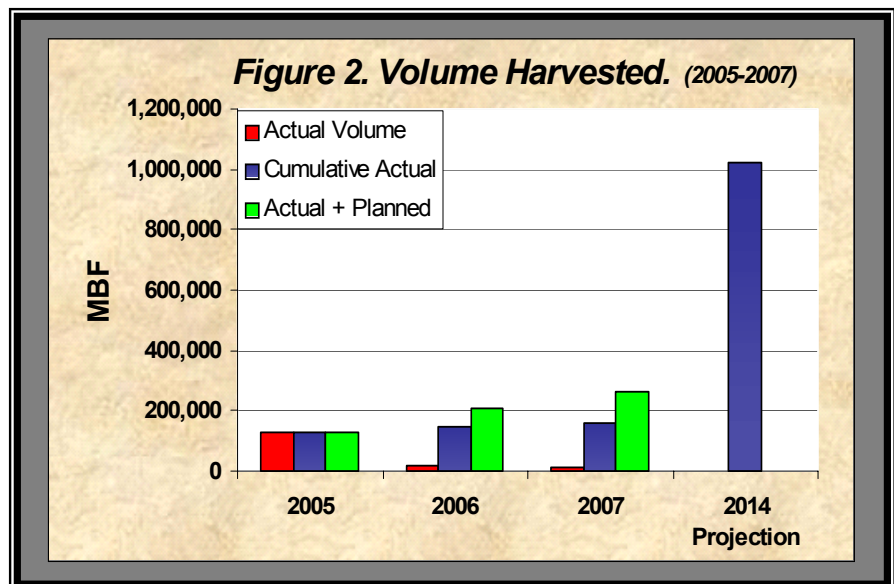
Evaluation and Conclusions.

Timber Activities and Commercial Wood Harvest

During FY 2007, timber accomplishments were monitored within twenty timber sales across the Forest. During this period the SNF:

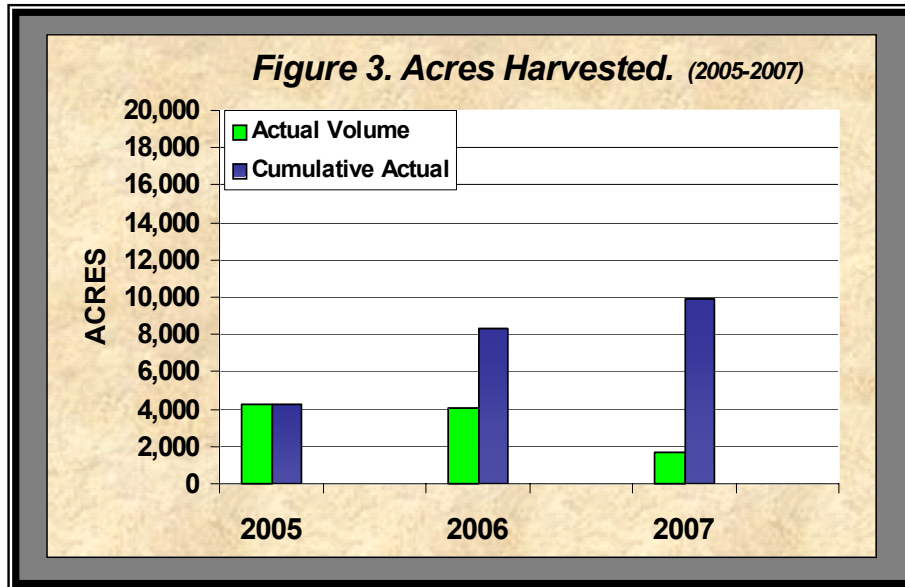
- Awarded (sold) 56,372 thousand board feet (MBF) but actually harvested 27,930 MBF.
- Awarded to harvest 5,533 acres but actually harvested 1,649 acres.

However, this doesn't reflect all the volume and acres that are under contract to be harvested in the future. The difference between awarded and actual volume and treatment acres can be attributed to a continued downturn in the timber market as previously



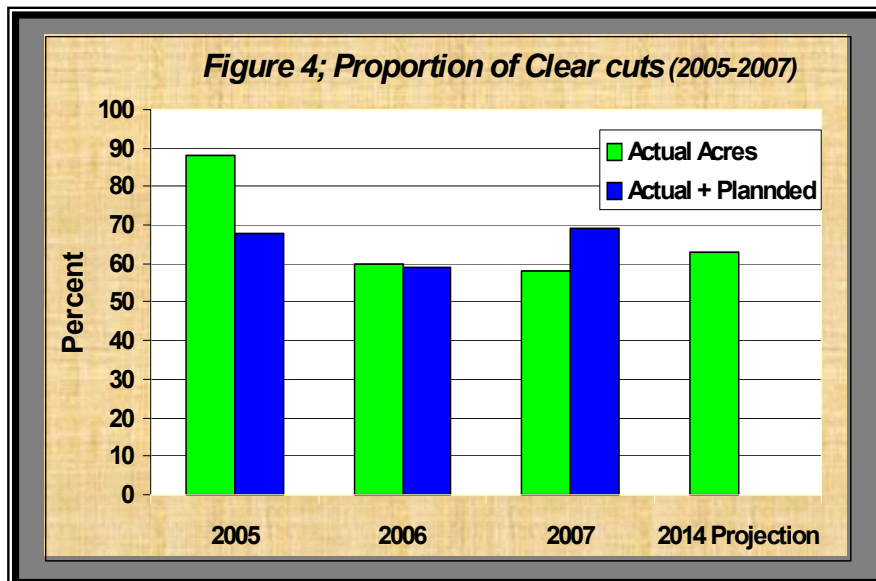
discussed. To date, 162,200 MBF or 16% of the decade 1 volume projection has been achieved. To date 9,928 acres have been harvested (See Figures 2 and 3).

Actual treatments when combined with projected vegetative treatments planned in approved 2006 and 2007 project decisions would result in approximately 261,000 MBF of volume produced. This will represent approximately 25.6% of the Decade 1 harvest volume projection (FEIS Table 2-9. p.2-31).



Proportion of Clear cutting

During 2007, approximately 58% of timber harvests were clear cut compared to 60% clear cut during 2006 and 88% in 2005. When harvests planned within approved 2007 decisions are included with actual harvests, the estimated percent of timber harvests being clear cut will be 69%. These percentages are trending towards the Decade 1 projection of 63% total acres harvested to be clear cut. These percentages are best estimates and can change if planned harvest methods change because of unexpected site conditions. See Figure 4.



Large Patch Temporary Openings

Current year regeneration harvest in combination with adjacent young stands (0-9 year old), constitute a temporary opening or young patch. In 2007, twenty six temporary openings were created, and the average opening size was 25 acres. The largest patch was 84 acres and the smallest was 2.5 acres. When proposed temporary openings approved in 2007 NEPA decisions are fully implemented, there will be eight patches 300 acres or greater totaling 3,485 acres. The Echo Trail project proposes seven openings larger than 300 acres, with the largest being 631 acres. The Devil Trout project will create one 629 acre patch. When approved 2005 to 2007 decisions are fully implemented, 16 patches greater than 300 acres will be created for a total of 7,703 acres. The number and acreage of large patches are increasing which are trends towards the Decade 1 desired condition. Cumulative patches and patch size from 2004 through 2007 are shown in Table 4.

Table 4. Temporary Opening Greater Than 300 Acres			
Year	Avg Temp Opening Size	Actual Accomplishment & Approved NEPA	
		Acres	Acres
2004 ROD	30	NA	NA
2005	42	8	4,218
2006	32	0	0
2007	25	8	3,485
Total 05-07	32	16	7,703
2014 Desired Condition	Increase	Increase	Increase

Management Considerations

- Although differences between planned treatment acres and harvest acres are not unexpected, the differences between planned and actual treatments observed in 2006 and 2007 appear to be greater than expected. During future monitoring we will analyze this in greater detail.
- Improve the incorporation and implementation of design features and mitigation in NEPA analysis and implementation to reduce overestimation of treatment acres.