Item #36: Harvest in Lodgepole Pine

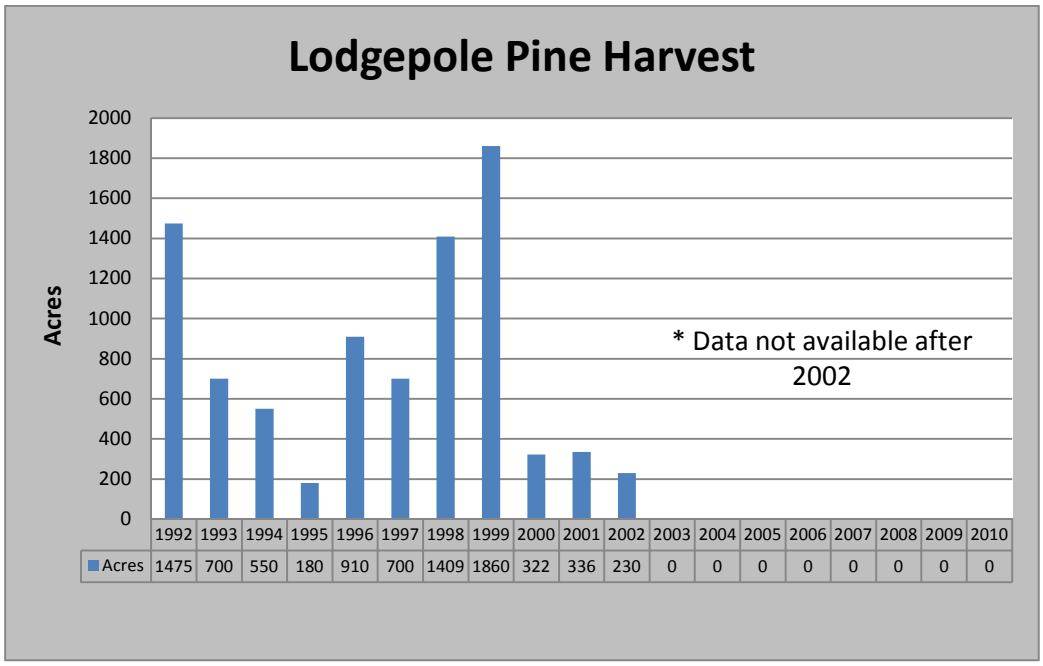
Evaluation Question: Is lodgepole pine harvest addressing Mountain Pine Beetle (MPB) problems as was projected in the plan?

Resources to be measured: Acres of harvest in lodgepole pine cover type by year

Data Sources:

- Historical timber stand management record system (TSMRS) Data
- R1 Forest Health Protection Annual Reports

This monitoring item was established to monitor mortality in lodgepole pine stands due to mountain pine beetle. In 1986 plan, an accelerated treatment of lodgepole pine was anticipated in the first decade to address on-going mountain pine beetle mortality. This was projected as an average of 3,000 acres/year. As amended in 1999, the Forest Plan projected treatment of approximately 2,500 acres of lodgepole pine per year. Due to the overall harvest reduction in the following years, this did not occur. Available data on lodgepole pine harvest is displayed below.



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Acres	1475	700	550	180	910	700	1409	1860	322	336	230	0	0	0	0	0	0	0	0

Figure 1: Lodgepole Harvest on the Flathead National Forest from 1992 to 2010

Tabular data on harvest by species is not available for 2003 to the present. This is due to a change in the database which stores historical vegetation management activities. A review of sales since 2003 indicates that most sales had a lodgepole pine harvest component, but few were exclusively designed targeting only lodgepole harvest. Since 2003, on average, an estimated one-third to one-half of the harvested acres were likely lodgepole pine dominated stands, well below Forest Plan projections.

Harvest in the late 1980s was often for the principal purpose of harvesting mountain pine beetle infested or killed stands. During the 1990s, mountain pine beetle infestation levels declined, and dead lodgepole were more scattered across the forest. As a result, lodgepole pine salvage became less of a priority. Since then, timber sale purpose and need has often shifted to other reasons: fire salvage, addressing Douglas-fir and spruce beetle infestations, landscape composition and health, and more recently fuel loadings and wildland urban interface concerns.

For future monitoring, trends in mountain pine beetle activity are a better indicator for the underlying forest health concern. At the time of this update, mountain pine beetle infestation levels are on the rise again, highlighting the concern raised by this monitoring item. Refer to monitoring item 59 for further information on mountain pine beetle trends.

Mature, larger diameter pine remains on approximately 4-6% of the forest (forest inventory and analysis data), much of it in the wilderness. These areas continue to be at risk for MPB. Currently the pattern of mountain pine beetle mortality is for the most part scattered and not concentrated enough to warrant large vegetation management projects. Annual aerial forest health monitoring provides a means to assess the extent of mountain pine beetle mortality and the need for projects which target lodgepole pine for harvest.

Recommended Actions: Drop as a future monitoring item. Trends in mountain pine beetle activity are tracked in Item #59.