

Appendix C - Bugtown Gulch Mountain Pine Beetle and Fuels Project Monitoring

The Forest Plan identified specific items to be monitored, and the Monitoring Implementation Guide (USDA Forest Service 2001) describes monitoring protocols that have been established for numerous resources, as directed by the Forest Plan. The Monitoring Implementation Guide identified frequency and methods of data collection, unit of measure, sampling design, expected precision and reliability, reporting frequency, data storage location, and costs for each monitoring item identified by the Forest Plan. For additional information, refer to the Forest Plan (Chapter 4), and the Monitoring Implementation Guide.

The ID Team compiled additional monitoring objectives/items summarized below to provide emphasis and specifics regarding particular resource monitoring needs in the project area. All monitoring objectives/items will be prioritized by the responsible line officer if funding is not available to implement all objectives/items listed or referenced in the Monitoring Plan.

Hydrology and Soils

BMP monitoring will occur during and after management activities. BMP implementation monitoring will occur during management activities primarily through contract administration. BMP effectiveness monitoring will occur 1-5 years after management activities have ceased and units will be picked randomly from available sample pool. Monitoring will focus on the roads associated with the units, as past BMP monitoring of logging activities revealed that there is generally no problems with the units and roads are usually where the concerns are. District personnel will conduct the monitoring.

Sensitive Plants

Monitor the effect of riparian habitat improvement project and noxious weed treatment on sensitive species habitat, monitor effect of noxious weed treatment on known sensitive species occurrence. Five days for 5 years. District personnel will conduct the monitoring.

Noxious Weeds

The potential spread and the effectiveness of noxious weed treatments will be monitored. Timely treatment is crucial in addressing noxious weed infestation.

Mountain Pine Beetle Epidemic

Movement of the infestation will be monitored for priority of sanitation treatments and to ensure that residual structural stage levels do not go below 3A and 4A. Sanitation harvest units will be designated as priority units in the timber sale contract to ensure harvest before beetle flight takes place in the summer of 2006. Monitoring will occur each year for 3 years. This will be accomplished by District personnel.

Beetle activity will also be monitored by the Forest Health Management Rapid City Service Center on a yearly basis.