F3 HIGH RIDGE EVALUATION AREA

GOAL

TO PROVIDE AN ADMINISTRATIVE STUDY AREA TO EVALUATE THE EFFECTS OF TIMBER HARVESTING ACTIVITIES ON WATER QUALITY AND STREAMFLOW REGIMES.

DESCRIPTION

The F3 Management Area applies to the High Ridge Evaluation Area which is approximately 560 acres in size. It is the part of the Umatilla National Forest Barometer Watershed that has been the study site for timber operations and watershed response testing.

Hydrologic data collection was initiated in 1965. Data currently being collected are measures of streamflow, water and air temperature, precipitation, and suspended sediment. Three smaller watersheds, located at the headwaters of Buck Creek, were silviculturally treated in 1976. The fourth watershed was untreated and serves as the control watershed. Additional timber harvest is planned. The hydrologic response to the treated watersheds is compared against that of the control in order to assess changes in flow regimes as a result of timber harvest. Of primary interest are changes in peakflow timing, peakflow volumes, peakflow durations, annual hydrograph distribution, streambank stability, and water quality.

DESIRED FUTURE CONDITION

The barometer watershed study will continue through the next IO-year period. The watershed will be characterized by a variety of vegetative conditions ranging from natural to highly modified. Modifications in timber canopy will result from a variety of standard timber harvest techniques and strategies, and will be studied for their impacts on water quality and streamflow regimes. Other development activities inconsistent with study objectives will be absent or show minimal impact. Changes in possible allocation will be reviewed at the next Forest Plan development.

MANAGEMENT AREAS STANDARDS AND GUIDELINES

RECREATION

Dispersed recreation uses are permitted. Developed recreation is not permitted.

VISUAL

A Maximum Modification visual quality objective is permitted.

CULTURAL

Meet Forest-wide Standards and Guidelines.

WILDLIFE

Meet Forest-wide Standards and Guidelines.

FISH

Meet Forest-wide Standards and Guidelines. No fish habitat is within the area.

RANGE

Livestock grazing will be permitted after timber operations are completed as long as grazing meets the objectives of the study.

TIMBER

Timber harvest and management entries are permitted based on outcome of present study. The full range of timber management practices and intensities is available.

Maintain the control watershed in a natural or unharvested condition.

WATER

Monitor water quality and quantity to determine effects of timber and other forest management operations on water resources. Periodically report results of the barometer watershed monitoring.

SOIL

Meet Forest-wide Standards and Guidelines.

MINERALS AND ENERGY

Meet Forest-wide Standards and Guidelines.

LANDS

Meet Forest-wide Standards and Guidelines for lands and land uses.

TRANSPORTATION

Maintain the existing road system and keep the existing roads open. Roads may be constructed based on the requirements of the study.

FACILITIES

Maintain and protect existing weather and water measuring stations. Other monitoring facilities may be added, as study needs arise.

FIRE

The area has a high priority for protection from wildfire. The appropriate wildfire suppression should emphasize control strategies. Standard fire suppression techniques should be used.

Based on the objectives and requirements of the study, standard rehabilitation practices may generally be used where intense wildfire or suppression activities create a need for protecting or rehabilitating soil and water resources.

Fuel hazards may be treated to standards found in areas with intensive timber practices, or to levels determined from study requirements. Typical fuel treatment practices should be used.

FUELS

Prescribed burning from planned ignitions will be used to accomplish a variety of timber and forage production objectives. Prescribed fire from unplanned ignitions will not be used due to high resource values and risk of escape fires.

PESTS

Use integrated pest management (IPM) principles and strategies in managing insects and diseases to meet management objectives. Monitoring and detection of pest conditions and populations will be done so that corrective treatments consistent with resource objectives can be prescribed at the earliest opportunity. Protect growing stock consistent with the level of investment by practicing high intensity prevention activities.

Emphasis will be on the prevention of stand and fuels conditions that favor pests increases above epidemic levels. Aggressively suppress insects and diseases using the most cost-effective suppression strategies when outbreaks threaten resource management objectives. Use a variety of methods in meeting protection and suppression requirements.