RESOLUTION OF THE WHITE MOUNTAIN APACHE TRIBE OF THE FORT APACHE INDIAN RESERVATION

- WHEREAS, Tribal Forester Dennis Bierer has come before the Tribal Council regarding the interior west resource inventory monitoring and evaluation program; and
- WHEREAS, said program includes a comprehensive inventory of the status and trends of the country's diverse forest ecosystems, their use and their health; and
- WHEREAS, the forest survey responsibility for the interior west states of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming, has been assigned to the Interior West Resource Inventory, Monitoring, and Evaluation program [IWRIME] at the Inter-Mountain Research Station headquartered in Ogden, Utah; and
- WHEREAS, the IWRIME seeks permission from the Tribal Council to conduct a forest survey within the Fort Apache Indian Reservation in accordance with the procedures outlined in the Mission Statement of the IWRIME, which is attached to this Resolution and incorporated by reference herein; and
- WHEREAS, the White Mountain Apache Tribe may benefit from the Forest Survey as the Tribal Council is extremely interested and concerned about ecosystem management within the Fort Apache Indian Reservation; and
- WHEREAS, the Tribal Council concludes that the Tribal Chairman should be authorized to negotiate a Memorandum of Understanding with the Forest Service to conduct the inventory study and survey within the Reservation and that said MOU should recognize the sovereignty of the White Mountain Apache Tribe over its land, forests and waters and that provisions within the MOU must ensure that the Tribe's management and administration of its water resources will not be in any way be compromised by the forest survey study.
- **BE IT RESOLVED** by the Tribal Council of the White Mountain Apache Tribe that it hereby authorizes and directs the Tribal Chairman to negotiate the terms of a Memorandum of Understanding with the Secretary of Agriculture and IWRIME to conduct a forest survey within the exterior boundaries of the Fort Apache Indian Reservation.

The foregoing resolution was on November 9, 1995 duly adopted by a vote of nine for and zero against by the Tribal Council of the White Mountain Apache Tribe, pursuant to authority vested in it by Article IV, Section 1 (a), (b), (f), (h), (i), (s), (t) and (u) of the Constitution of the Tribe, ratified by the Tribe September 30, 1993, and approved by the Secretary of the Interior on November 12, 1993, pursuant to Section 16 of the Act of June 18, 1934 (48 Stat. 984).

Chairman of the Tribal Council

JAN 0 : 1993

Secretary of the Tribal Council

INTERIOR WEST RESOURCE INVENTORY, MONITORING, AND EVALUATION PROGRAM

MISSION

To improve the understanding and management of our Nation's forests by maintaining a comprehensive inventory of the status and trends of the country's diverse forest ecosystems, their use, and their health.

WHAT

The McSweeney-McNary Act of 1928 directed the Secretary of Agriculture to make and keep current information on the status of the Nation's forest resources. This responsibility was delegated to the Forest Service; and because it involves a type of investigation, it was handed to the Experiment Stations in different geographic regions of the country. Thus began the Forest Survey, which is now, more than 65 years later, one of the oldest continuing programs in the Forest Service. The name, Forest Survey, which has gone through many iterations, has been changed to Forest Inventory and Analysis. Objectives have been broadened, and technological change has led to new procedures, but overall few Forest Service programs have changed so little in their major thrust as has Forest Survey. The activities are, basically, the collection, compilation, analysis, and reporting of information on the status of forest vegetation resources on all forested lands. Forest Survey work is organized on the basis of States and counties; however, political entities whose boundaries are rarely congruent with those counties are accommodated.

WHO and WHERE

The Forest Survey responsibility for the Interior West States of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming is assigned to the Interior West Resource Inventory, Monitoring, and Evaluation Program (IWRIME) at the Intermountain Research Station headquartered in Ogden, Utah. The Program is responsible for conducting forest resource inventories on all lands outside National Forests, including lands administered by the Bureaus of Land Management and Indian Affairs, National Park Service, State, county and municipal governments, and lands owned by private individuals and businesses. Extensive inventories on National Forests are carried out usually in cooperation with Regional Office Resource Staffs. In Region 1, for example, inventories of the National Forests are being conducted by the Regional Inventory Service Center located in Kalispell, Montana, with training, quality control, and data compilation provided by IWRIME personnel. In Regions 2-4, the inventories are cooperative ventures. For example, in Region 3 the Forestry/NFS/SPF staff has contracted with IWRIME to conduct, compile, and report for the eleven National Forests in the Region.

HOW

The Forest Survey uses a double sample for stratification. The first phase or primary sample is a 1,000 meter based on the Universal Transverse Mercator (UTM) geographic coordinate system. Land at each grid point (intersections of 1,000 meter grid lines) is examined on aerial photos and classified as to its nature: forest land, nonforest land, or water; additional information about the point is taken from maps and includes ownership, congressional district, county, and various physiographic features. This constitutes the Phase I sample and is used primarily to estimate area in various land classes. Intersections of every fifth grid line, using a random start, provide a 5,000 meter grid which is the basis for the Phase II sample. These grid points are visited on the ground to provide a check on the Phase I photo calls and a correction, if necessary, to the area estimates determined by the Phase I process. They also provide a sample from which various vegetation and physical characteristics are estimated on a per acre basis. These estimates are then expanded according to the corrected acreages from Phase I. The Phase II sample requires a large data collection effort in the field.

Data items collected on a normal Forest Survey field location include:

Map number

Crew number

Past land cover

Present owner

Seed source

Crown cover

Aspect azimuth

Curvature class

Location history

Browsing intensity

UTM northing

Recreation use

Water proximity

Land use impact distance

Distance to improved road

Litter depth

Burn history

Point number

Past diameter

Past tree height

Number of stems

Crown class

Tree class

Line posts

Cover class

Azimuth

Site tree

Tree age

Soil group

Field location number

State County Current date Sample kind Past owner Canopy structure

Stand-size Aspect Slope Habitat type UTM easting

Vegetative concealment Grazing intensity Availability Soil texture

Soil erosion Land use impact Size of forested area Type of cutting

Downed-stem count Tree number Tree history Species Radial growth

Current tree height Compacted crown ratio Cause of death

Relative crown position

Dead volume

Christmas tree grade

Understory vegetation percent cover and layer by species with at least 5 percent cover

forb, graminoid) with at least 1 percent cover

Together these measured or observed variables represent nearly 120 data items of which 63 are constant, that is, collected only once per location, and 40 to 56 are repetitive in that they are collected on each tree and or subplot within the location.

Once the field data are collected and edited for correctness and consistency they are compiled by a series of programs that have evolved over time and are constantly updated to reflect changing needs and policies. The information summaries generated by the process are then analyzed and presented in various reports on the status of a region or State's forest resources. In addition to published reports, the inventory results in a data base containing more than 350 attributes that describe each field location.

ANCILLARY INFORMATION

To facilitate analysis and provide a complete assessment of the dynamics of the forest, additional information is required that cannot be readily obtained from the field location. This information pertains to annual consumption of wood fiber by primary wood using industries as well as domestic users. This information is

Consecutive point number

Past date Sampling factor Current land cover Origin of vegetation

Forest type Elevation

Remote sensing cover type

Physiographic class

UTM zone Wildlife cover Animal type Trails and roads Humus depth Percent bare ground

Water type Size of condition Cutting history Snag count Point history Slope distance

Mortality

Current diameter Location stand age

Uncompacted crown ratio

Damage Mistletoe class

Rotten and missing wood

Corner posts

Understory vegetation percent cover and layer by life form (tree, shrub,

obtained by canvassing the primary wood using industry within the State and mills in neighboring States that might consume material generated in the State of interest. Domestic consumption of fuelwood is obtained through the use of telephone survey sampling.

To obtain an accurate estimate of timber harvests impact on inventory, studies are conducted to generate utilization factors, that are then used to convert actual harvest volume estimates to inventory drain.

REPORTING

The State analytical report is the primary product resulting from a forest survey. Additional documents usually include analyses at the substate, unit, or ecoregion level; and, analyses of timber production and mill residue, logging utilization, and domestic fuelwood consumption. In addition, publications resulting from individual and team research are also generated.

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