

PROPOSED ACTION

SNOTEL Site Development Chalender Site Williams Ranger Districts Kaibab National Forest Coconino County, Arizona November 2008

Introduction

In February 2008, the Natural Resource Conservation Service submitted an application for a new SNOTEL site adjacent to an existing Chalender Snow Course on the Kaibab National Forest. This site is located on Section 27, T22N, R3E, just off of Interstate 40 about seven miles east of Williams, Arizona (see Attachments 1 and 2).

This SNOTEL site would provide automated long term meteorological data for the Natural Resource Conservation Service Snow Survey program that forecasts water runoff using snow data. Management of SNOTEL sites are the responsibility of the National Resource Conservation Service. However, SNOTEL sites located on Forest Service system lands are governed by Forest Service policy and regulation. A nationwide Memorandum of Understanding exists between the Forest Service and the National Resource Conservation Service that guides cooperative and coordinated management of SNOTEL and snow survey sites on Forest Service lands (FS #08-MU-11132426-005).

Proposed Action

The proposed action includes construction of the following items at the SNOTEL site:

- 1) ten-foot diameter hypalon rubber snow pillow;
- 2) 12-foot tall precipitation gauge with a 12 inch orifice;
- 3) antenna tower;
- 4) instrument shelter containing a snow depth sensor, air temperature thermometer, soil moisture-soil temperature sensors, and three solar charged 12-volt batteries.

SNOTEL installation will require that the shelter house, antenna tower, and precipitation gage be permanently mounted in concrete footing, 24 to 30 inches deep (see Attachment 3). Construction will require some ground disturbance of less than 1/10 of an acre and will be completed within two weeks. Access for construction and annual maintenance will be by government owned vehicle. The snow pillow will be fenced for protection from trampling. Snow pillow sample points for ground truth measurements will be marked by steel posts and visible above the deepest snow depth in winter.

Preventive maintenance will be performed on an annual basis, normally in May or June. At that time, the precipitation gage will be recharged with propylene glycol, a biodegradable antifreeze. Additionally, painted surfaces will be maintained, the snow pillow and pad will be kept clean and free of weeds; and the accuracy of all sensors and equipment will be checked and verified. Emergency equipment repairs will be carried out by NRCS as necessary to assure consistent and accurate data collection.

Other Considerations

Kaibab Forest Plan Consistency: This project is consistent with the direction listed in the Forest-wide standards and guidelines, and in the standards and guidelines for the following Management Area (MA): MA 2 Coniferous Forest and some Coniferous Forest Woodland.

This project is also consistent with the congressional intent this type of Forest land use which includes with the Multiple-Use Sustained-Yield Act of 1960, Forest and Rangeland Renewable Resources Planning Act of 1974, Federal Land Policy and Management Act of 1976, and National Forest Management Act of 1976.

Level of Environmental Analysis

Based on our preliminary environmental analysis, this project can be categorically excluded under Category 31.2.3 with no extraordinary circumstances. This category is allowed for projects like this for “approval, modification, or continuation of minor special uses of National Forest System lands that require less than five contiguous acres of land”.

The extraordinary circumstances related to this project which have been analyzed to date are:

- Threatened and endangered species or their critical habitat: There is a determination of No Impact for each animal species listed under the Endangered Species Act as identified by the U.S. Fish and Wildlife Service for Coconino County, including Mexican spotted owl and Mexican spotted owl Critical Habitat.
- Flood plains, wetlands, or municipal watersheds: There are no flood plains, wetlands, or municipal watersheds in the project area.
- Congressionally designated areas, such as wilderness, wilderness study areas, or National Recreation Areas: There are no congressionally designated areas such as wilderness, wilderness study areas, or National Recreation Areas in the project area.
- Inventoried roadless areas: There are no inventoried roadless areas in the project area.
- Research Natural Areas: There are no Research Natural Areas in the project area.
- Native American areas of traditional cultural importance, archaeological sites, or historic properties or areas: Native American tribes will be consulted on this project. An archeological survey and clearance report is being completed for this project. No effects to archeological resources or sites are anticipated.

Scoping comments (Forest Service specialists and public comments) along with a completed environmental resource analysis will further determine whether this project can be categorically excluded.

Decision to be Made and Timing of Decision

The Williams District Ranger is the Responsible Official for this project and will decide whether or not to allow this project, as described in the Proposed Action, or select an alternative to the proposed action.

Contact Person

For more information about this proposal, contact Mike Hannemann, Range and Watershed Staff Officer for the Kaibab National Forest at (928) 635-8221, fax (928) 635-8208 or via e-mail at mhannemann@fs.fed.us.