



June 16, 1989

Office of the Dean

Mr. Veto "Sonny" LaSalle, Forest Supervisor
Payette National Forest
P.O. Box 1026
McCall, ID 83638

Dear Sonny:

Thank you for visiting the proposed site for the atmospheric monitoring and meteorological station at Taylor Ranch. It was good to review things on the ground together--you, me, Dr. Dale Bruns of INEL, and Jim and Holly. It's easier to find solutions when we can all see what's involved.

We completed our site analysis and have determined that we will not need to place the station on National Forest land, and therefore will not be seeking a special use permit at this time. We have developed a compromise plan that will locate the monitoring station on University of Idaho property at the edge of the sagebrush bench, rather than in the center of the bench as originally proposed. Air quality experts from Idaho National Engineering Laboratory believe that this is a compromise location, but will be a suitable site for preliminary data collection with the temporary equipment.

The MET station consists of a tripod base with a 12-15 foot pole supporting the sensory equipment. A microcomputer unit which temporarily stores the climatological data will be attached to the structure. The atmospheric monitoring instrument consists of a 24 x 18 x 8 inch metal suitcase containing an air filter and pump which is attached to two portable 18 x 16 inch solar panels. The pump is inaudible when standing more than 4 feet from the instrument. Additional information is attached.

Thanks for making the effort to join the Man and Biosphere team at Taylor Ranch. It was an important event, having the Soviet, Forest Service, Park Service, INEL and UI scientists together talking about the environmental baseline monitoring and assessment potential of the area. We appreciate your support for wilderness research at our Taylor Ranch Wilderness Field Station.

Sincerely,

John C. Hendee
Dean

JCH:ead

cc: Dr. Leon Neuenschwander, FWR Associate Dean for Research
Jim and Holly Akenson, Resident Managers--Taylor Ranch
Dr. Dale Bruns, Idaho National Engineering Laboratory
Dr. Jim Fazio, Executive Coordinator--UI Wilderness Research Center
Dr. Oz Garton, Professor of Wildlife

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TEACHING
RESEARCH
SERVICE

TAYLOR RANCH PORTABLE ATMOSPHERIC MONITORING
AND METEOROLOGICAL (MET) STATION
Site Location Decision--6/9/89

Background:

The University of Idaho, Wilderness Research Center and the Idaho National Engineering Laboratory (INEL) are establishing a long term atmospheric monitoring program at the Taylor Ranch Field Station. Essential to this program is a MET station having multiple factor sensing capability. This station will provide a complete climatological record. Air samples will be filtered and analyzed for heavy metal contamination.

The Taylor Ranch site has been selected because of its location in the middle of the Frank Church, River of No Return Wilderness, a relatively pristine airshed. INEL scientists consider that this area may contain the most pristine inland airshed in the continental United States due to its remoteness and lack of human development and activities in the vicinity. The atmospheric information acquired by this station will be used for comparison with other similar stations around the world, thus contributing to the global atmospheric data base. Information obtained from this station will also be utilized for a wide range of ecological research, conducted through the Wilderness Research Center at Taylor Ranch.

Site Selection:

After a reconnaissance of potential site locations, INEL and UI scientists identified a site on UI property at the edge of an elevated bench in lower Rush Creek near its entry to Big Creek as being best suited for the MET station. This sagebrush covered flat adjoins the UI Taylor Ranch property above Rush Creek. The optimal positioning of the MET station would be in the middle of the flat, approximately 150 feet from the property boundary, on

Payette National Forest land, but to avoid the need for a special permit, for the immediate pilot study at least, a compromise location on the edge of the sagebrush flat on UI property was selected. The site was visited 5/30/89 by Forest Supervisor Sonny LaSalle, Dean John Hendee of UI College of FWR, Dr. Dale Bruns of Idaho National Engineering Laboratory and Jim and Holly Akenson, resident managers of Taylor Ranch Wilderness Field Station.

Placing the facility at the selected site will create limited visual impact to wilderness visitors. The site is completely screened from view of the Big Creek Trail by both vegetation and topography. It may be possible to see the site from a short section of the Rush Point Trail, depending on the strategic use of trees and brush to screen the equipment. Visual effects would be insignificant as this trail receives minimal use and the station is over one-half a mile away from the Rush Point Trail at the nearest segment.

Portable MET Station Description:

The MET station consists of a tripod base with a 12-15 foot pole supporting the sensory equipment. A microcomputer unit which temporarily stores the climatological data will be attached to the structure. The atmospheric monitoring instrument consists of a 24 x 18 x 8 inch metal suitcase containing an air filter and pump which is attached to two portable 18 x 18 inch solar panels. The pump is inaudible when standing more than 4 feet from the instrument. An unobtrusive fence will be placed around the station to protect the sensitive apparatus from disturbance by wild animals. About a 15 x 15 foot area needs to be protected.