

## ENVIRONMENTAL ASSESSMENT, FONSI AND DECISION RECORD

**BLM, Bishop Field Office  
351 Pacu Lane, Suite 100  
Bishop, CA 93514**

**EA Number:** CA-170-06-16

**Lease/Serial/Case File No.:** CACA 047725

**Proposed Action Title/Type:** T-REX Weather 110' Lattice Tower

**Location of Proposed Action:** MDM, T. 13 S., R. 34 E., Sec 35, NE1/4SW1/4NE1/4.  
On north side of dirt road which is boundary of Symmes Ck WSA CA-010-064.  
The tower would be outside the WSA.

**Applicant (if any):** Dr. Steven Oncley, National Center for  
Atmospheric Research

**Plan Conformance:** The proposed action is subject to the Bishop Resource Management Plan, approved March 25 1993. The proposed action has been reviewed and is in conformance with the plan.

**Need for Proposed Action:** This project is part of a 3 year project known as the Terrain-induced Rotor Experiment (T-REX) under National Science Foundation funding which would measure wind events and corresponding weather information concerning the development of sierra waves and rotors. T-REX participants include investigators from a large number of US Universities and agencies, the National Center for Atmospheric Research, and several European Universities and research institutes. The general area just south of Independence is considered an ideal location for this project due the steep Sierra Nevada range and the winds generated on the east slope. These various projects are located along, at, or adjacent to an existing authorization for 17 weather tower stations arrayed along 3 transect lines running generally east and west and separated by about 2 miles with each station separated by 2 miles. Seven stations are located on public land with one on the USFS and the remaining on LADWP lands.

This tower is part of a 3-tower array (other 2 towers on LADWP) which would be used during the March-May T-REX project. The towers are inter-related and need to be within certain distances in order to perform according to design. The towers would gather weather data and transmit data between each other during the project.

**Description of Proposed Action:** The proposed action would be the issuance of a 4 month temporary use permit (TUP) for the installation of a weather research station with a 110' high guyed-lattice tower, a sawhorse instrument support stand, buried soil moisture and temperature sensors, hydrogen fuel cells for electrical power, and a 3-strand circular electric fence with a 125 foot radius.

The 3-sided lattice tower would be a straight line braced type having 12" wide panels and a 24" square steel base. The base would be mounted on wooden timbers secured by metal rebar stakes. Two 8' copper rods would be driven into the ground for grounding uses. The 3 wire guy-sets are anchored with 6'-10' expanding rod legs jack-hammered into the ground at three locations. The tower would have a dulled-off galvanized surface and would not be painted.

The tower would have various electronic sensors attached at various heights from the 0.5 foot level to the 100 foot level. Some of the instruments are white and painting would adversely affect the quality of data collected from the instruments. There would be a beacon light at the top for aviation safety. Communication to the site would be standard "WiFi" Ethernet between the 3 towers and the Independence Unified School.

The sawhorse supports a radiometer and is anchored by two 18" rebar stakes at each leg base. Soil sensors would be buried in a shoe-box size trough dug in the ground.

The hydrogen fuel cells would consist of standard cylinders of pressurized hydrogen laid horizontally on the ground.

Tower and sawhorse would be enclosed with a 3-strand circular electric fence with a 125 foot radius. The fence would use fiberglass poles driven into the ground.

Access would be on existing dirt roads. No off-road travel would be needed. The area being used is partially disturbed but it is expected that some shrubs would be crushed during installation. All equipment would be removed by May 31 and the area restored.

### **Environmental Impacts:**

The proposed action is not within a Wilderness, Wilderness Study Area, Area of Critical Environmental Concern, nor Wild and Scenic River corridor, and there will be no effects on any lands so designated.

Air quality will not be affected. The proposed action is within the Owens Valley federal nonattainment area. The action will not result in the emission of PM<sub>10</sub>.

There will be no impact to listed or sensitive species. There are no known listed or sensitive species or habitats within the proposed action area.

There will be no impacts to prime farm lands, flood plains, nor water quality (including ground or surface waters).

There will be no disproportionate impacts to low income or minority groups, per Executive Order 12898 (2/11/94).

### ***Cultural resources***

A cultural inventory was conducted for the site. No cultural resources were identified.

### ***Visual resources***

The area has a Class III VRM rating. A Class III is defined as contrasts to the basic elements caused by a management activity may be evident and begin to attract attention in the characteristic landscape, however, the change should remain subordinate to the existing landscape.

The two critical viewpoints (CVP) are Hwy 395 and the Onion Valley road running west out of Independence. The proposed site is located 3.2 miles west of Hwy 395 and 1 mile south of Onion Valley road. Hwy 395 is a well traveled scenic highway along the eastern Sierras. The Onion Valley road, running in an east-west direction is mostly used during the summer months for access to the Sierra back-country.

The tower would be back-dropped by the steep Sierra eastern slopes consisting of rock-outcroppings, incised drainages covered with shrubs at the lower elevation and scattered pinyon and juniper trees above 6800'. The tower would be slightly visible from both Hwy 395 and Onion Valley road due to the instruments located on the tower. The tower would be slightly more visible from Onion Valley road while traveling down the road towards Independence. At both CVPs, the tower's lattice design, the 1- 3 mile setback from either road and the dull gray surface greatly reduces the tower's visibility.

The proposed action meets the Class III standard. The tower would be slightly visible but would not dominate the landscape or attract attention as viewed from the CVPs. The safety beacon would only be visible during the night and would not adversely affect the overall visual quality.

### ***Vegetation***

It is expected that up to 10 shrubs would be damaged and 4 shrubs would be removed during tower base installation.

### ***Invasive, non-native species***

The minimum amount of surface disturbing activity is not likely to result in Invasive, non-native species establishment.

### ***Wildlife habitat***

The proposed action is outside of mule deer critical winter habitat and outside of tule elk calving areas. It is expected that during installation, some scattered mule deer may be temporarily displaced. Very slight impact to mule deer from displacement.

**The following resources would have no impact or are not applicable**

***Economic Impacts***

Viability of the Proposed Development

Impacts to the Community and to the Tribe

Benefits of Being a Non-Gaming Tribe

***Environmental Justice***

***Hazardous Materials***

***Gaming***

***Consistency with County Planning***

***Impacts to County Infrastructure***

***Impacts to Local Community***

***Adherence to Local, State and Federal Environmental Ordinances / Laws***

***Discussion of Trust Status, Federal Trust Responsibilities, Tribal***

***Sovereignty***

***Minerals***

***Land Uses / Realty / Rights-of-way***

This TUP if issued would be considered a minimum impact action.

***Cumulative effects***

This project is not expected to contribute to cumulative effects, because of the minimal surface disturbance and short duration of the proposed action.

**Description of Mitigation Measures and Residual Impacts:**

None required.

**Implementation Monitoring:**

Installation would be monitored by the BLM Realty Specialist.

**Persons/Agencies Consulted:**

Steven Oncley	National Center for Atmospheric Research
Vanda Grubisic	Desert Research Institute, T-REX Coord., UNR
Richard Dirk	National Center for Atmospheric Research

**Preparer(s):**

Larry Primosch	BLM, Realty Specialist
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**Date:** January 25, 2006

**Reviewed By:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
Environmental Coordinator

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**FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD**

I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined that the proposed action with the mitigation measures described below will not have any significant impacts on the human environment and that an EIS is not required.

There will be no effect on threatened or endangered species as a result of the action.

I have determined that the proposed project is in conformance with the Bishop Resource Management Plan, which was approved March 25, 1993. This plan has been reviewed, and the proposed action conforms with the land use plan terms and conditions as required by 43 CFR 1610.5.

It is my decision to implement the project and issue a 4 month temporary use permit (TUP) for the installation of a weather research station to Dr. Steven Oncley at the National Center for Atmospheric Research with the mitigation measures identified below. The project will have minimal environmental impacts due to the limited amount of surface disturbance and the short duration of the project.

It is in the public interest to allow this project in order to gather more information concerning wind and rotor events as generated in the eastern Sierras within the Owens Valley. This information will provide important weather related safety measures and predictions on wind-caused rotors. This information may also provide data on wind events which contribute to lofting of dust, aerosol, and dust transport.

**Mitigation Measures/Remarks:**

None required.

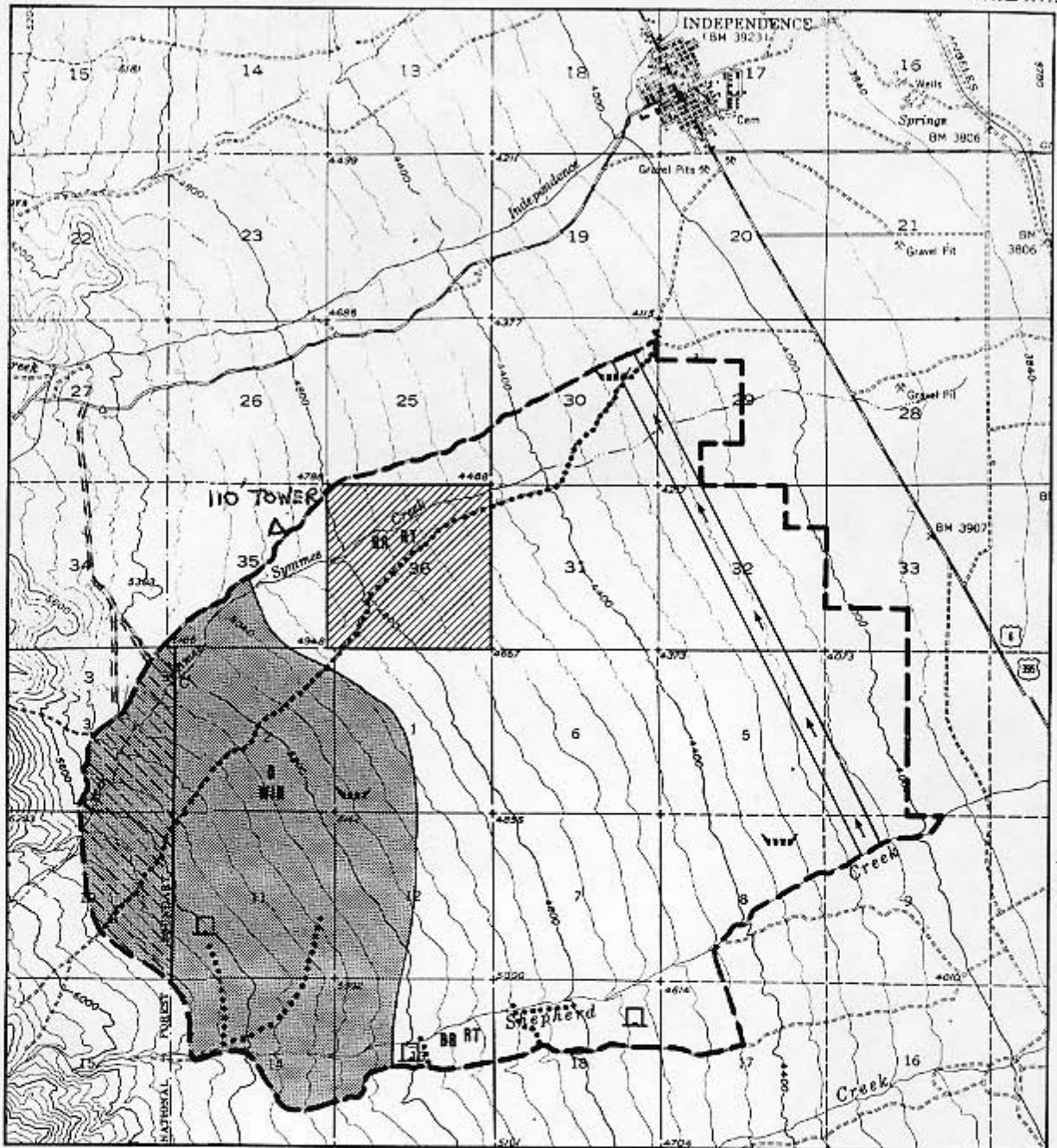
**Authorized Official:** \_\_\_\_\_  
Field Manager, Bishop Field Office

**Date:** \_\_\_\_\_

R 34 E

R 35 E

T 13 S



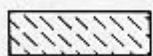
T 13 S

T 14 S

**LEGEND**



WSA Boundary



Uninventoried National Forest Lands with BLM Wilderness Study Lead



Private Lands within WSA



Primitive Vehicle Route

BR

Brown Trout Population

BT

Rainbow Trout Population



Deer Wintering Habitat



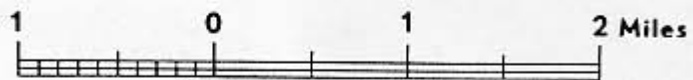
Proposed Water Development



Apiary Site



Livestock Driveway



SCALE 1:62,500

**SYMMES CREEK WSA**

CA-010-064

**Existing Resources**

**MAP 35**



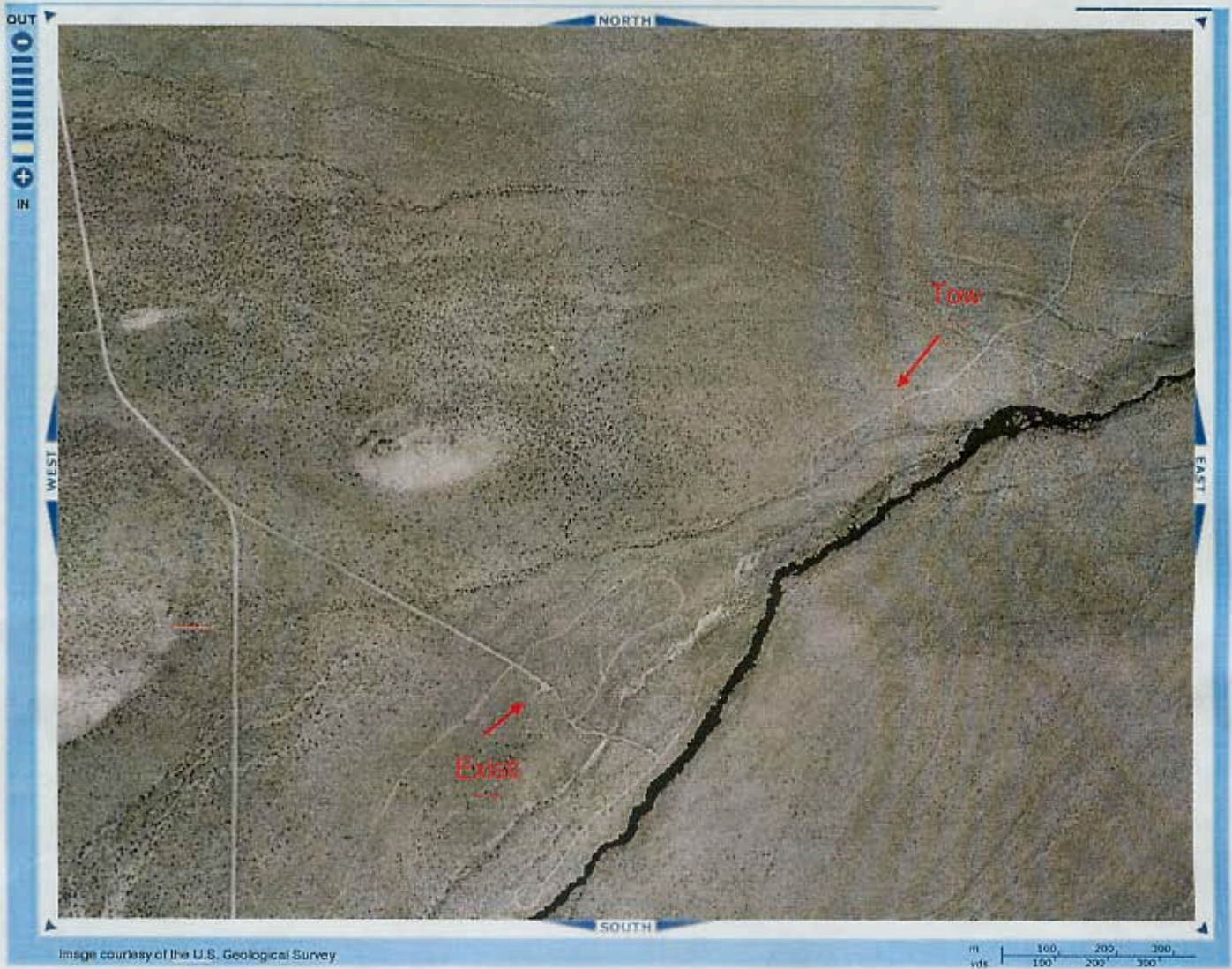
West ISFF Site: 3C.18

Lat: 36d 45.603' Lon: 118d 14.837' (WGS84 datum) = -118 14 50.22

Legal description: T.13S, R.34E, Sect. 35

388671

4068980



Photos (taken approx 200 West of desired location)

North

Eas

South

West





Rain Gauge, Soil Sensor Logger, and "Sawhorse" (Radiometer Stand)









