

## Categorical Exclusion Documentation Format for Actions Other Than Hazardous Fuels and Fire Rehabilitation Actions

Climate Change and Precipitation Patterns data collection Project – Sonoran Desert National Monument.

### NEPA #DOI-BLM-AZ-PO40-2012-004-CX

The Sonoran Desert National Monument (SDNM) contains more than 487,000 acres of Sonoran Desert landscape. The Sonoran Desert is the most biologically diverse of the North American deserts, and the monument exemplifies this desert setting. The most striking aspect of the plant community within the monument is the extensive saguaro cactus forest. The monument contains three distinct mountain ranges, the Maricopa, Sand Tank and Table Top Mountains, as well as the Booth and White Hills, all separated by wide valleys. The monument is also home to three congressionally designated wilderness areas, many significant archaeological and historic sites, and remnants of several important historic trails. The purpose for installation of the weather station is for the inventory of weather and rain patterns within the SDNM, This information will be directly related to the monument conservation efforts, water and climate change management/mitigation.

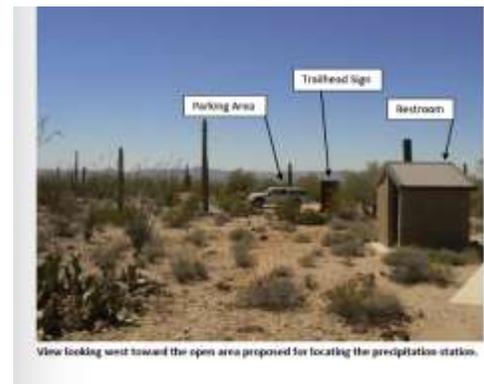
BLM Office: *Sonoran Desert National Monument (SDNM)*

Lease/Serial/Case File No.: N/A

Proposed Action Title/Type: Climate Change and Water Management Project

Location of Proposed Action: SDNM- Table Top Trail Head 32.716371 112.159003

Description of Proposed Action: The installation of permanent weather stations is needed to obtain data critical to better understand rain patterns and water resources within the SDNM. This project involves the installation of one weather station within the Table Top Trail Head on the SDNM. The station will be located 32.716371 112.159003. This proposed station will be installed within the Sonoran Desert National Monument at the Table Mountain Wilderness Trailhead parking area on BLM land. The specific location for the precipitation station will next to the trailhead restroom.



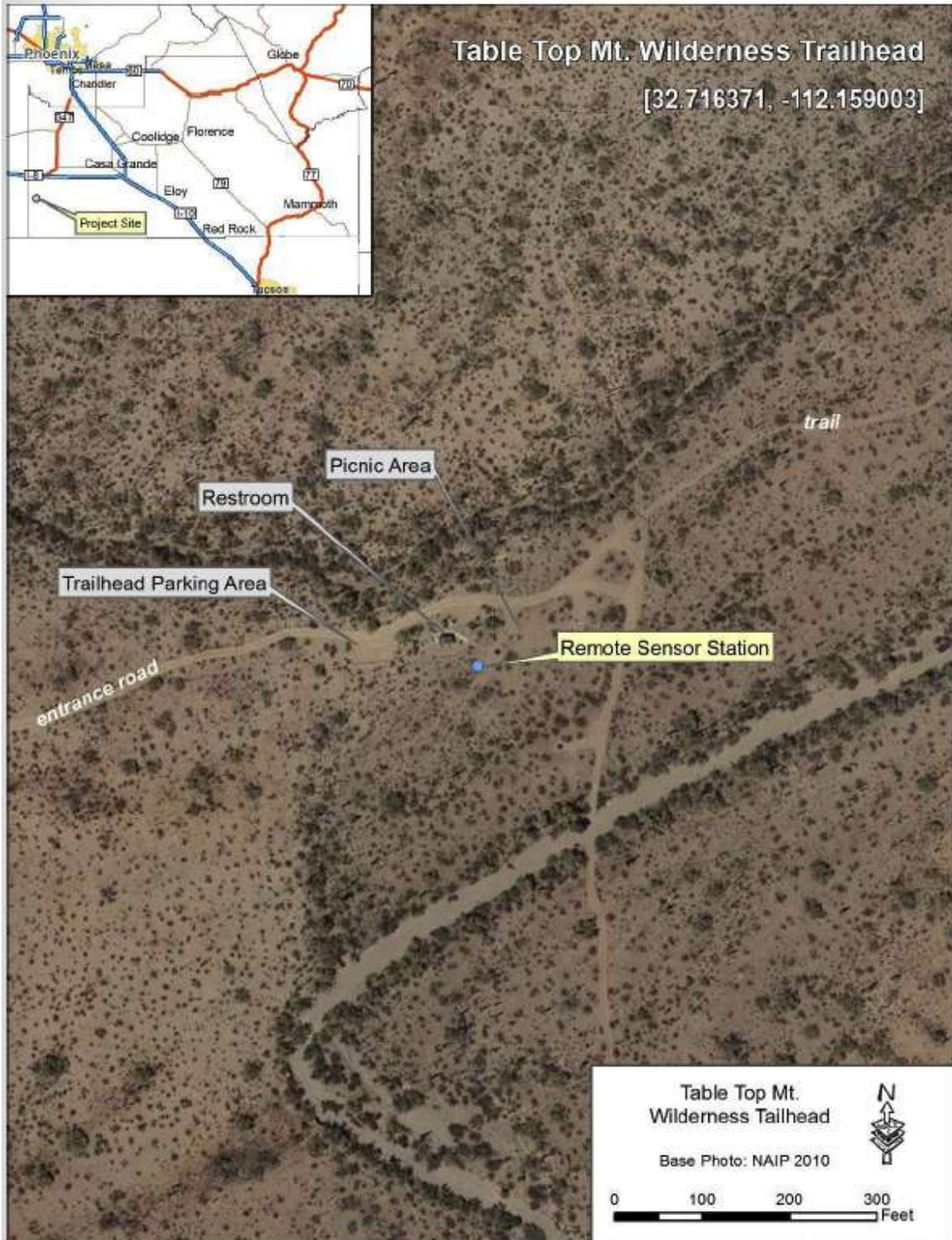
View looking west toward the open area proposed for locating the precipitation station.

The standpipe housing will be set into concrete (using approximately 4 #80 bags of ready-mix concrete) 2.5 feet deep and will extend approximately 10 feet above ground at the top of the tipping bucket top section. The station is self-contained and will not need guy wire support or an outside power source. All excavation and concrete mixing shall be performed manually. It typically takes a crew of 3 people 4 hours to install this type of station.



Typical ALERT Precipitation Station

# Proposed Location Site Layout



## **B. Land Use Plan Conformance**

Land Use Plan (LUP) Name: **Lower Sonoran and SDNM**

### **Chapter 2.7.9 Water Resources**

Date Approved/Amended: **August 2011**

The proposed action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decision(s):

*Lower Gila South under the Rangeland Management page 10, paragraph 5.*

*Rangeland monitoring program and monitoring studies will include:*

- 1. Actual yearly livestock use,*
- 2. Forage utilization,*
- 3. Trends in rangeland conditions,*
- 4. And precipitation.*

*BLM will also design studies to ensure that wildlife requirements in riparian areas are met.*

*In addition open channels of cooperation with county, state and federal agencies and other partners to evaluate the quantity of groundwater availability and predict the effect of future potential water withdrawals and the ability to provide adequate water availability for natural resources and multiple use goals within the SDNM.*

*Begin a dialogue with the appropriate State of Arizona policy, legal and water resources agencies for the development of cooperative agreements to protect and enhance the water resources of the SDNM.*

The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decision(s) (objectives, terms, and conditions):

## **C: Compliance with NEPA:**

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 Departmental Manual (DM) 11.9:

BLM NEPA Handbook H1790-1. The proposed action meets the 40 CFR 1508.4; Categorical exclusion means a category of action which does not individually or cumulatively have a significant effect in the procedures adopted by the Federal Agency in implementing of this regulation (1507.3) and for which, therefore, neither an environmental assessment nor environmental impact statement is required. This categorical exclusion is appropriate. The proposed action has been reviewed according to DM 516 11.9 J (3); Conducting preliminary hazardous material assessment and site investigations, site characterization. Includes are siting, construction, installation and/ or operation of small monitoring devices such as wells, particular dust counters and automatic air or water samples.

I considered a review of the project described above and field office staff recommendations, I have determined that the project is in conformance with the land use plan and is categorically excluded from further environmental analysis.

**D: Signature**

**Review:** *We have determined that the proposal is in accordance with the categorical exclusion criteria and that it would not involve any significant environmental effects (see Attachment 1). Therefore, it is categorically excluded from further environmental review.*

**Prepared by:** \_\_\_\_\_/s/\_\_\_\_\_

**Mariano Lanza  
Project Lead**

**Reviewed by:** \_\_\_\_\_/s/\_\_\_\_\_

**Leah Baker  
Planning & Environmental Coordinator**

**Approved by:** \_\_\_\_\_/s/\_\_\_\_\_

**Rich Hanson  
Manager**

**Project Rational:** The purpose for installation of the weather station is for the inventory of weather and rain patterns within the SDNM. This information will be directly related to the monument conservation efforts, water and climate change management/mitigation. The installation of permanent weather stations is needed to obtain data critical to better understand rain patterns and quantify water resources within the SDNM. The station will provide the baseline data for the development of *Evapotranspiration* (ET) and water budget assessment.

**Project Description:** This remote ALERT sensor station will consist of a High Sierra Electronics (HSE) Model 3424-00 packaged rain gauge station that includes a standpipe housing, 3306 ALERT data transmitter and 5-watt VHF radio, 3 dB gain J-pole omni antenna, solar panel and lightning protection grounding. The station housing will be set in concrete approximately 2 ½ feet into the ground. This station will operate the same way that those stations are operated on the BLM Agua Fria National Monument, whereby the data will be transmitted in real time to our servers which will in turn host the data on the internet for easy data viewing and downloading by the public and BLM.

**Decision:** Based on a review of the project described above and field office staff recommendations, I have determined that the project is in conformance with the land use plan and is categorically excluded from further environmental analysis. It is my decision to approve the action as proposed, with the following stipulations (if applicable).

Solicitor, U.S. Department of the Interior, 401 West Washington Street, Suite 404, Phoenix Arizona 85003, not later than 15 days after filing the document with the Authorized Officer and/or IBLA.

**Approved By:** \_\_\_\_\_/s/\_\_\_\_\_ **Date:** \_\_\_\_05/15/2012\_\_\_\_

**Rich Hanson**

**Manager**