# **United States Department of the Interior Bureau of Land Management**

Environmental Assessment CA-067-2005-95 Casefile Number: CACA 47518

Finding of No Significant Impact and Decision Record

GreenHunter Wind Energy LLC (formerly Wind Hunter)
Ocotillo Meteorological Tower

U.S. Department of the Interior Bureau of Land Management El Centro Field Office 1661 South 4<sup>th</sup> Street El Centro, CA 93342

November 2008



# Finding of No Significant Impact El Centro Field Office

EA Number: CA-670-2005-95 Case File No. CACA 47518

**Proposed Action Title/Type:** Proposed Right-of-Way Grant for Wind Energy

Site Testing and Monitoring Project Area

**Applicant/Proponent:** GreenHunter Wind Energy LLC (formerly Wind Hunter)

5900 Balcones Dr., Ste 243

Austin, TX 78731

# **Location of Proposed Action:**

# Project Area:

T16S R09E S17 SW 1/4

T16S R09E S18 (All except NE1/4)

T16S R10E S19 (All)

T16S R09E S20 (All)

T16S R09E S21 (All)

T16S R09E S22 (All)

T16S R09E S23 (All except private lands in W 1/2 of SW 1/4)

T16S R09E S24 (All)

T16S R09E S27 SW 1/4

T16S R09E S28 N 1/2

T16S R09E S29 (All)

T16S R09E S30 SE 1/4

The location of the MET tower will be in the  $S\frac{1}{2}$  of section 20, T. 16 S., R. 09 E. (32°45'36"N, 116°03'43"W).

### INTRODUCTION

GreenHunter filed an application with the Bureau of Land Management (BLM) in September 2005 for purposes of obtaining a right-of-way grant for wind monitoring and testing within a larger Project Area.

GreenHunter is seeking to erect one meteorological (MET) tower within a 6,300± acre *Project Area* consisting of public lands administered by BLM in western Imperial County, California, near the community of Ocotillo. Existing National Renewable Energy Laboratory (NREL) wind power data indicates "good" to "outstanding" wind strength in the area of the Proposed Action. Wind resources may be variable with respect to location and height above ground. MET towers

are used to measure wind conditions, including wind speed, direction and temperature, and would confirm and precisely record the wind regime and potential for wind farm development at this site.

The BLM has conducted an environmental analysis (EA CA-670-2005-95) for the proposed action. The EA analyzed impacts on the quality of the environment and served as a vehicle for interdisciplinary review of the proposal. The Proposed Action and a No Action alternative were analyzed in the EA. The EA, available at the El Centro Field Office, is incorporated by reference for this Finding of No Significant Impact (FONSI).

One MET tower would be installed and operated in the first year. The location of the first tower would be in the south 1/2 of Section 20 of Township 16S, Range 09 East (32° 45' 36"N, 116° 03' 43"W). However, during the 3-year period of the right-of-way grant, additional MET towers could likely be installed and/or the existing tower could be relocated within the Project Area. The tower would be in continuous operation for approximately 1 year in a single location. The tower(s) would be approximately 197 feet (60 meters) in height. The location of the first tower would be on the north side of the existing Imperial Highway on a high spot in the area. An existing "open" road would be used for access to a point within approximately 150' of the tower site, from which construction vehicles would utilize overland access via a pre-flagged access route.

The towers consist of a tubular steel structure supported by four sets of guy wires that extend up to 200 feet from the base of each tower supported on a 4-foot-by-4-foot base. Each set of guy wires consists of 7 guys attached along the entire vertical shaft of the pole.

The dangers presented by guy wires would be minimized by installing high visibility cable balls on the guys. The marker balls will be installed on each guy approximately 10 feet below the guy ring on the top set of guy wires. An additional set of balls will be installed as close to the ground as possible above the tallest expected vegetation, which in this case is Ocotillo (shrub), which grows to a height of about 15-feet in the Project Area.

The MET tower would not have a concrete or other type of permanent base and therefore will not have any permanent ground disturbance associated with installation. Depending on the condition of the immediate area of the installation, one or more anchor pins (ground rod) might be necessary to keep the base from slipping during erection. The MET tower would be assembled on site, using pick-up trucks for material delivery. GreenHunter will use removable anchors for the guy wires.

The main ground disturbing activities would be temporary, and involve the securing of the steel tube tower to the ground with a base plate and guy wires. The guy lines are anchored to the soil using screw-in, arrowhead, rock, or concrete anchors depending on the soil conditions encountered at the installation site. With the site conditions as currently known, arrowhead anchors will likely be used. Expected temporary disturbance in the area of anchor installation and removal will be very small, totaling several square feet.

The entire area of potential effect for the tower installation (not including the existing access roads) occupies approximately 2.9 acres. The actual temporary disturbance area, assuming one flagged 10-foot wide, 150-foot long overland travel route and a 50-foot diameter working area at the tower site would temporally disturb less than 5,000 square feet.

The 4.5-inch to 8-inch diameter tubular steel tower sections would arrive on site in 5-foot to 8-foot lengths. The tower would be assembled on the ground with all of the anchors installed and electronic equipment secured. The tower would then be hoisted with a winch, and final adjustments are made. No clearing of vegetation is expected due to the nature of the erection activities and height of dominant existing low growing vegetation such as burrobush or creosote bush. Existing vegetation will not need to be removed.

The erection of future relocated or new towers will depend on the results of the data collected, and they could potentially be located anywhere within the Project Area where they do not interfere with infrastructure (roads, transmission lines, etc.) or environmentally sensitive areas. Any relocation or new towers will be subject to a supplemental site-specific environmental assessment.

#### PLAN CONFORMANCE AND CONSISTENCY

The Project Area is located on BLM administered land within the California Desert Conservation Area (CDCA), which is managed under the CDCA Plan, as amended (BLM 1980). Public lands within the CDCA have been classified into four "multiple-use classes": Controlled (C), Limited (L), Moderate (M) and Intensive (I). The class designations govern the type and degree of development or management activities allowed within the boundaries of the classes, and must meet the guidelines given for that class. A fifth category of land is "Unclassified" for parcels that are meant to be managed on a case-by-case basis. The plan includes an Energy Production and Utility Corridors element, which includes the goal:

*Identify potential sites for geothermal development, wind energy parks, and powerplants.* 

The entire Project Area is Multiple Use Class L. Class L "protects sensitive, natural, scenic, ecological, and cultural resource values", and are "managed to provide for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished." Most land use activities, including energy generation facilities, are allowed in Class L after National Environmental Policy Act (NEPA) requirements are met.

Due to higher levels of resource sensitivity in Class L, vehicle access is limited to approved or "open" routes of travel. The Western Colorado OHV Routes of Travel Designation Plan (WECO) amended the CDCA Plan for Imperial County and assigned a designation where none existed in the CDCA Plan. The roads (109 & 110) near the proposed tower site are designated as open. Access on route by motorized vehicle is allowed. Off-road vehicle travel is not allowed without specific authorization. Parking and camping is allowed within 300 feet of the centerline of open routes in this area.

The proposed action and alternatives have been reviewed and found to be in conformance with California Desert Conservation Area Plan, as amended, and the associated decision(s):

#### FINDING OF NO SIGNIFICANT IMPACT

The El Centro Field Office interdisciplinary review and analysis determined that the proposed action would not trigger significant impacts on the environment based on criteria established by regulations, policy and analysis.

Based on the analysis in EA CA-670-2005-95, and the findings discussed herein, I conclude that the proposed action is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR §1508.27 and do not exceed those effects described in the CDCA Plan, as amended. Therefore, preparation of an environmental impact statement to further analyze possible impacts is not required pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969. This determination is based on the rationale that the significance criteria, as defined by the Council on Environmental Quality (CEQ) (40 CFR 1508.27) have not been met.

The following rationale was used to determine that significant impacts were not present for each criteria mentioned in Title 40 CFR 1508.27:

<u>Context:</u> This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effect in the locale rather than in the world as a whole. Both short and long term effects are relevant.

The context of the EA analysis was determined to be at a local and regional scale in Imperial County, California. The effects of the action are not applicable on a national scale since no nationally significant values were involved.

**Intensity:** This refers to the severity of impact. The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27 and incorporated into BLM's Critical Elements of the Human Environment list (H-1790-1), and supplemental Instruction Memorandum, Acts, regulations and Executive orders. In making this Finding of No Significant Impact (FONSI), the following criteria have been considered, in accordance with the Council on Environmental Quality (CEQ), 40 CFR §1508.27:

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

<u>Beneficial Effects</u>: The proposed MET tower will have beneficial impacts by providing data on wind energy potential in Imperial County.

Adverse Effects: Construction of the proposed MET tower will involve temporary ground disturbance for installation. The actual temporary ground disturbance would be less than 5,000 square feet, assuming a 10' x 150' access route and a 50 foot diameter working area at the tower site. Vegetation may be temporarily disturbed by vehicles or equipment while installing or maintaining the structures. These vegetation impacts would be concentrated to the immediate vicinity of the MET tower and would not result in denuding of the area. Mitigating measures to reduce impacts were incorporated in the design of the proposed action. None of the environmental effects discussed in detail in the EA are considered significant.

2. The degree to which the proposed action affects public health, safety and sanitation.

The proposed action is designed to minimize effects to public health and safety. The dangers presented by guy wires would be minimized by installing high visibility cable balls on the guys. The marker balls will be installed on each guy approximately 10 feet below the guy ring on the top set of guy wires. An additional set of balls will be installed as close to the ground as possible above the tallest expected vegetation, which in this case is Ocotillo (shrub), which grows to a height of about 15-feet in the Project Area.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The proposed MET tower will not be situated in proximity to park lands, prime farmlands, wild and scenic rivers, or ecologically critical areas. The proposed project has been sited so as to avoid cultural or historic resources.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

It is not likely that construction of the proposed MET tower would result in impacts to the quality of the human environment that would be highly controversial. The areas in which the construction would take place are remote and are currently used for wildlife viewing, off-highway vehicle recreation and camping. These uses will continue by similar numbers of people. There is no scientific controversy over the nature of the impacts.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risk.

The project is not unique or unusual. The BLM has experience implementing similar actions in similar areas. The environmental effects to the human environment are fully analyzed in the EA. There are no predicted effects on the human environment that are considered to be highly uncertain or involve unique or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The proposed action would not establish precedents for future actions or represent a decision in principle about a future action.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

The actions related to the proposed action were considered by the interdisciplinary team within the context of past, present, and reasonably foreseeable future actions. The installation of additional MET towers or moving the tower will cause similar impacts to those described for the proposed action. Two pending applications for installation of up to five MET towers in the general area will result in similar impacts at each site if approved. Significant cumulative effects are not predicted.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

A BLM Class I record search and literature review was prepared for the purposes of analyzing the undertaking at the landscape level to aid in the identification of any potentially significant resources or issues that may be relevant to the issuance of the temporary ROW for the larger project area. A BLM Class III archaeological inventory of the area of potential effect for the proposed MET tower location was also completed. The project will not adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the national Register of Historic Places, nor will it cause loss or destruction of significant scientific, cultural, or historical resources. The location of the proposed MET tower has been sited to avoid all cultural resources.

The Native American Heritage Commission performed a sacred lands records search of the larger project area which failed to identify the presence of sacred sites or known traditional cultural properties that could be affected by the proposed undertaking. Native Americans tribes were invited to consult on the project and no traditional cultural properties or sacred sites were identified within the project boundaries although Coyote Mountain to the north (outside of the project area) was identified as a place of significance mentioned in certain tribal legends. Consultation with the State Historic Preservation Office has been completed in accordance with Section 106 of the NHPA.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Two Federally listed species, Peninsular bighorn sheep and Least Bell's vireo, have the potential to occur in the project area. The proposed tower location is within ½ mile of

designated critical habitat for the Peninsular bighorn sheep. Mitigating measures to reduce impacts to wildlife have been incorporated into the design of the proposed action. BLM determined the project would have no effect on Least Bell's Vireo, and not likely to adversely affect Peninsular Bighorn Sheep or adversely modify PBS critical habitat. U.S. Fish & Wildlife Service concurred with the determination.

No other threatened or endangered plants or animals are known to occur in the area.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The project does not violate any known federal, state, local or tribal law or requirement imposed for the protection of the environment. State, local, and tribal and private interests were given the opportunity to participate in the environmental analysis process. Letters were sent to each band or tribe which could have cultural ties to the project area or had expressed an interest in the past. The project is consistent with applicable land management plans, policies, and programs.

Reviewed by:	/s/ Daniel Steward	for	Date: 11/7/2008
_	NEPA and Planning Co	ordinator	
Authorized O	fficer: /s/ Thomas F. 2	Zale Acting	Date: 11/10/2008
	Vicki L. Wood, Fi	eld Manager	
	El Centro Field Of	fice	

# Decision Record El Centro Field Office

EA Number: CA-670-2005-95 Case File No. CACA 47518

**Proposed Action Title/Type:** Proposed Right-of-Way Grant for Wind Energy

Site Testing and Monitoring Project Area

**Applicant/Proponent:** GreenHunter Wind Energy LLC (formerly Wind Hunter)

5900 Balcones Dr., Ste 243

Austin, TX 78731

# **Location of Proposed Action:**

# Project Area:

T16S R09E S17 SW 1/4

T16S R09E S18 (All except NE1/4)

T16S R10E S19 (All)

T16S R09E S20 (All)

T16S R09E S21 (All)

T16S R09E S22 (All)

T16S R09E S23 (All except private lands in W 1/2 of SW 1/4)

T16S R09E S24 (All)

T16S R09E S27 SW 1/4

T16S R09E S28 N 1/2

T16S R09E S29 (All)

T16S R09E S30 SE 1/4

The location of the MET tower will be in the  $S\frac{1}{2}$  of section 20, T. 16 S., R. 09 E. (32°45'36"N, 116°03'43"W).

# 1.0 Introduction and Background

GreenHunter (formerly Wind Hunter) filed an application with the Bureau of Land Management (BLM) in September 2005 for purposes of obtaining a right-of-way grant for wind monitoring and testing within a larger Project Area.

GreenHunter is seeking to erect one meteorological (MET) tower within a 6,300± acre *Project Area* consisting of public lands administered by BLM in western Imperial County, California, near the community of Ocotillo. Existing National Renewable Energy Laboratory (NREL) wind power data indicates "good" to "outstanding" wind strength in the area of the Proposed Action. Wind resources may be variable with respect to location and height above ground. MET towers are used to measure wind conditions, including wind speed, direction and temperature, and

would confirm and precisely record the wind regime and potential for wind farm development at this site.

An Environmental Assessment (EA) was prepared to disclose and analyze the environmental consequences of the installation of one MET tower. Only the installation of a MET tower and associated guy wire supports and access needs are addressed in the EA. The EA did not address wind energy development facilities, as the installation of wind turbines is not proposed at this time.

#### 2.0 Decision

# 2.1 Alternatives Considered

The only alternative considered was the "no action" alternative. There were no issues driving the need to consider other alternatives. Alternative locations were not considered because many areas with the potential of sufficient wind resources are excluded from development due to sensitive resources, i.e., wilderness, ACEC, critical habitat, etc., or encumbered by other applications.

Under the No Action Alternative, GreenHunter's application would not be approved. The installation of the MET tower would not take place, and the potential impacts described in the EA would not occur.

### 2.2 Decision and Rationale

Based on information in the EA, the project record, and consultation with my staff, it is my decision to approve the proposed action and issue a temporary right-of-way for the construction, operation, maintenance, and termination of one MET tower as described in EA CA-670-2005-95 subject to the stipulations identified below.

The authority for this decision is Title V of the Federal Land Policy and Management Act of 1976 (P.L. 94-579), which authorizes the BLM to grant, issue, or renew rights-of-way over, upon, under, or through public lands (43 U.S.C. 1761). General regulations for processing ROWs are found at 43 CFR §2800.

The proposed action is consistent with the President's National Energy Policy and with BLM's National Energy Policy Implementation Plan. It is BLM's general policy to encourage research into the development of wind energy in acceptable areas.

In 2005 BLM implemented a comprehensive Wind Energy Development Program to administer the development of wind energy resources on BLM-administered public lands. This document established policies and best management practices to ensure that potential adverse impacts associated with all stages of wind energy development on BLM-administered land are minimized to the greatest extent possible. The Wind Energy Development Program supports the directives of E.O. 13212, "Actions to Expedite Energy-Related Projects", the recommendations of the

National Energy Policy, and congressional direction provided in the Energy Policy Act of 2005 regarding renewable energy development on public lands.

The proposed action was selected over the no action alternative for the following reasons:

- The Proposed Action most closely conforms to the President's Energy Policy of 2005 and BLM's National Energy Policy Implementation Plan. It is BLM's general policy to encourage research into the development of wind energy in acceptable areas.
- With the mitigation measures/stipulations listed above, the adverse environmental impacts of the Proposed Action are not significant and will be only nominally greater than those attributable to No Action Alternative.

The granting of this R/W is consistent with the goals set forth in the President's Energy Policy of 2005. The project is not expected to adversely impact any resources.

# 2.3 Description of Mitigation Measures

As part of the decision the BLM will impose the following stipulations:

- a. The tower installation and operation will conform to the recommendations outlined in the U.S. Fish and Wildlife Service <u>Guidance on the Siting</u>, <u>Operation</u>, and <u>Decommissioning of Communication Towers</u> (USWFS 2000).
- b. Bird deflectors (guy balls) shall be placed on each guy wire at a spacing of no less than one guy ball every 50-75 feet and no less than one bird deflector should be placed on each guy wire. Bird deflectors shall be maintained and replaced on the guy wires as needed on a maintenance schedule that incorporates checking for presence. Of all bird deflectors every 2-3 months for the life of the MET tower and more frequently if large wind storms occur.
- c. Anti-perching devices should be installed on the main support pole at potential nest or perch sites to deter raven or other raptor use. Suggested reference can be found at <a href="http://www/hawkwatch.org/publications/Technical%20Reports/Perch%20Guard%20Final%20Report.pdf">http://www/hawkwatch.org/publications/Technical%20Reports/Perch%20Guard%20Final%20Report.pdf</a>
- d. To reduce minor potential impacts caused by construction vehicles (pick-up trucks), the exterior limits of the off-road overland access areas (approximately 150-feet long and 10-feet wide) shall be flagged prior to commencement of construction activities. Any tracks that occur shall be carefully raked out without disturbing existing ground cover after erection of the tower is complete.
- e. The proposed action shall comply with the Flat-tailed Horned Lizard Rangewide Management Strategy, including having a biological monitor present and providing payment of a mitigation fee.
- f. Construction shall take place outside of Peninsular Bighorn Sheep lambing season to avoid impacts to sheep populations in the vicinity of the project area.

g. A BLM approved Archaeologist shall monitor construction at the MET tower site to ensure that all cultural resources are avoided during construction. The archaeologist will be responsible for ensuring that the access road corridor is flagged and that all construction activity takes place within the surveyed areas. In addition, in response to concerns expressed by Native Americans, a tribal monitor shall be present during installation activities. GreenHunter is responsible for coordinating with applicable Native American tribes to ensure that tribal monitors are present during installation.

# 3.0 Public Participation/Consultation/Coordination:

Initially the project was determined to be a minor action not requiring Tribal consultation. The EA was made available for a 30 day review and comment period. Copies were sent to known interested parties, including Tribal interests. Only two comments were received. One comment was received generally in favor of the project for the potential benefit to the community. One comment was received on behalf of the Kwaaymii Laguna Band of Indians expressing concern that consultation with tribal entities had not occurred as part of the project.

Subsequently, BLM participated in a series of discussions with the State Historic Preservation Office regarding the numerous applications for both wind and solar renewable energy projects under consideration by BLM throughout California. The outcome of those discussions was the intent to produce supplemental procedures for Section 106 compliance for solar and wind power applications. The interim policy requires 1) Class 1 archaeological inventory (literature and record search) of the entire project area for the purposes of analyzing the undertaking at the landscape level to aid in the identification of any potentially significant resources or issues that may be relevant to the issuance of the temporary right-of-way for the larger project area; and 2) consultation with Native Americans and the SHPO.

A Class I archaeological inventory of the entire project area has been completed. The results revealed that very few cultural resource investigations have occurred within the larger project area. Fifteen prehistoric or historic archaeological sites, features or isolates were previously documented.

A Class III inventory of the area of potential effect for the proposed MET tower location was also completed. No cultural resources within the MET tower APE were identified.

To aid in the identification of any issues or concerns that may rise above and beyond specific archeological or historic properties, which may involve sacred sites, traditional cultural landscapes or other issues that would not normally be identified through a literature search, BLM invited Native American tribes to formally consult on this project in November 2007. A letter was sent to the chairman of each band or tribe that could have cultural ties to the project area or had expressed an interest in the past.

Discussion and comments received during follow-up meetings between BLM and tribes concerning this project as well as those received in writing, including the initial comments on the EA, concern cumulative impacts to visual resources both within and outside the overall project

boundaries, the need for full-scale Class III inventories, and tribal monitors during any ground disturbing activities. No traditional cultural properties or sacred sites have been identified through consultation at this time within the project area although Coyote Mountain to the north (outside of the project area) was identified as a place of significance mentioned in certain tribal legends.

Consultation with the State Historic Preservation Office has been completed in accordance with Section 106 of the NHPA.

BLM has taken all comments, requests and the information provided into consideration. The subsequent consultation actions described above respond to the original comments made on behalf of the Kwaaymii Laguna Band of Indians regarding lack of consultation. The scope of the environmental analysis required for a project area site and monitoring related facilities includes direct, indirect, and cumulative effects of the proposed site testing and monitoring related facilities. Comments regarding cumulative impacts to visual resources within and outside of the project boundaries and the need for full-scale class III inventories for the entire project area involve issues outside the scope of the currently proposed action and environmental assessment. BLM will continue to have on-going discussions with Native Americans as this project develops.

Two Federally listed species, Peninsular bighorn sheep and Least Bell's vireo, have the potential to occur in the project area. The proposed tower location is within ½ mile of designated critical habitat for the Peninsular bighorn sheep. BLM determined the project would have no effect on Least Bell's Vireo, and not likely to adversely affect Peninsular Bighorn Sheep or adversely modify PBS critical habitat. U.S. Fish & Wildlife Service concurred with the determination.

The Imperial County Airport Land Use Commission (ALUC) representative was contacted (Cabanilla 2006) regarding potential airspace conflicts that may result, requirements for lighting, and other air traffic related issues. The ALUC provided guidance for coordination with three military facilities: Naval Air Facility-El Centro, March Air Reserve Base, and Yuma Marine Air Station. Each of these facilities were contacted by email and subsequently contacted by phone and/or letter.

The project is located in a United States Air Force military air space corridor under Visual Route (VR)-288 as administered by March Air Reserve Base located in Riverside County, California (Backs 2006, Durham 2006). VR-288 is a low level route with a minimum required altitude of 300-feet above ground level (AGL). The tower height would be below the 300-minimum flight level assigned VR-288, and would be below the 200' threshold for FAA lighting requirements, so would not impact military or commercial aviation activities. No lighting or other requirements have been identified by the military (Durham 2006).

# 4.0 Plan Consistency and Other Applicable Regulatory Requirements

The Project Area is entirely located on BLM administered lands in Imperial County, and is managed under the California Desert Conservation Area Plan (CDCA Plan), as amended (BLM 1980). The entire Project Area is Multiple Use Class L. Class L "protects sensitive, natural, scenic, ecological, and cultural resource values", and are "managed to provide for generally

lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished." Most land use activities, including energy generation facilities and communication sites, are allowed in Class L after National Environmental Policy Act (NEPA) requirements are met.

Due to higher levels of resource sensitivity in Class L, vehicle access is limited to approved or "open" routes of travel. The Western Colorado OHV Routes of Travel Designation Plan (WECO) amended the CDCA Plan for Imperial County and assigned a designation where none existed in the CDCA Plan. The roads (109 & 110) near the proposed tower site are designated as open. Access on route by motorized vehicle is allowed. Off-road vehicle travel is not allowed without specific authorization. Parking and camping is allowed within 300 feet of the centerline of open routes in this area.

Based on information in the EA, the project record, and recommendations from BLM specialists, I conclude that this decision is consistent with the CDCA Plan (as amended), the Endangered Species Act; the Native American Religious Freedom Act; other cultural resource management laws and regulations; Executive Order 12898 regarding Environmental Justice; and Executive Order 13212 regarding potential adverse impacts to energy development, production, supply and/or distribution.

#### **5.0 Administrative Remedies**

Administrative remedies may be available to those who believe they will be adversely affected by this decision. When BLM issues a decision on a right-of-way application, it may be appealed by any party adversely affected by the decision (43 CFR 4.410(a)).

This decision may be appealed to the Interior Board of Land Appeals (IBLA), Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4, and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed within 30 days from this decision. The appellant has the burden of showing that the decision appealed from is in error. If a notice of appeal does not include a statement of reasons, such statement must be filed with this office and the Board within 30 days after the notice of appeal is filed. The notice of appeal and any statement of reasons, written arguments, or briefs must also be served upon the Regional Solicitor, Pacific Southwest Region, U.S. Department of Interior, 2800 Cottage Way, E-1712, Sacramento, CA 95825.

All BLM decisions under 43 CFR Parts 2800 (Rights-of-Way) remain in effect pending an appeal. The person filing the appeal (appellant) may also file a petition for a stay (43 CFR 2801.10 or 2881.10) which is a request to stop the actions allowed by the BLM decision. The IBLA will review the petition for a stay and may grant or deny the stay. If the IBLA takes no action on the stay within 45 days of the date the appeal was filed, the BLM decision would remain in full force and effect until IBLA makes a final ruling on the case.

If you wish to file a petition pursuant to regulations at 43 CFR 2801.10 or 43 CFR 2881.10 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is

required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed in this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

# Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success on the merits,
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

The effective date of this decision (and the date initiating the appeal period) will be the date this notice of decision is signed by the Authorized Officer.

Authorized Officer: /s/ Thomas F. Zale Acting 11/10/2008
Vicki L. Wood, Field Manager Date
El Centro Field Office

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

# DO NOTAPPEAL UNLESS

- 1. This decision is adverse to you, AND
- 2. You believe it is incorrect

## IF YOUAPPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF APPEAL	Within 30 days after the date of publication of a decision in the FEDERAL REGISTER, a person not served with a decision must transmit a Notice of Appeal to the office where it is required to be filed. You may state your reasons why you are appealing, if you desire.
2. WHERE TO FILE NOTICE OF APPEAL	Bureau of Land Management, El Centro Field Office, 1661 South 4th Street, El Centro, CA 92243
WITH COPY TO SOLICITOR	Office of Regional Solicitor, 2800 Cottage Way, Rm. E-1712, Sacramento, CA 95825-1890
3. STATEMENT OF REASONS WITH COPY TO SOLICITOR	Within 30 days after filing the <i>Notice of Appeal</i> , File a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203 (see 43 CFR Sec 4412 and 4413) If you fully stated your reasons for appealing when filing the <i>Notice of Appeal</i> , no additional statement is necessary Office of Regional Solicitor, 2800 Cottage Way, Rm E·1712, Sacrament 65825-1890
4. ADVERSE PARTIES	Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the <i>Notice of Appeal</i> , (b) the Statement of Reasons, and (c) any other documents filed (see 43 CFR Sec. 4.413). If the decision concerns the use and disposition of public lands, including land selections under the Alaska Native Claims Settlement Act, as amended, service will be made upon the Associated Solicitor, Division of Land and Water Resources, Office of the Solicitor, U.S. Department of the Interior, Washington, D.C. 20240. If the decision concerns the use and disposition of mineral resources, service will made upon the Associated Solicitor, Division of Mineral Resources, Office of the Solicitor, U.S. Department of the Interior, Washington, D.C. 20240.
5. PROOF OF SERVICE	Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (see CFR Sec. 4.401(c)(2)).
6. REQUEST FOR STAY	Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed (see 43 CFR 4.21). If you wish to file a petition pursuant to 43 CFR 4.21 or 43 CFR 2804.1 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the Notice of Appeal and Petition for a Stay <b>must</b> also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR Sec. 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted
	Standards for Obtaining a Stay Except as other provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the likelihood of the appellant's success on the merits, (2) the likelihood of immediate and irreparable harm if the stay is not granted, (3) the relative harm to the parties if the stay is granted or denied, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed your appeal will be subject to dismissal (see 43 CFR Sec. 4.402). Be certain that **all** communications are identified by serial number of the case being appealed.

**NOTE:** A document is not filed until it is actually received in the proper office (see 43 CFR 4.401(a)). See 43 CFR Part 4, subpart b for general rules relating to procedures and practice involving appeals.

#### 43 CFR SUBPART 1821--GENERAL INFORMATION

Sec. 1821.10 Where are BLM offices located? (a) In addition to the Headquarters Office in Washington, D.C. and seven national level support and service centers, BLM operates 12 State Offices each having several subsidiary offices called Field Offices. The addresses of the State Offices can be found in the most recent edition of 43 CFR 1821.10. The State Office geographical areas of jurisdiction are as follows:

#### STATE OFFICES AND AREAS OF JURISDICTION

Alaska State--Alaska
Arizona State Office--Arizona
California State Office--California
Colorado State Office--Colorado
Eastern States Office--Arkansas, Iowa, Louisiana, Minnesota, Missouri, and all States east of the Mississippi River
Idaho State Office--Idaho
Montana State Office--Montana, North Dakota and South Dakota
Nevada State Office--Nevada
New Mexico State Office--Nevada
New Mexico State Office--Coregon and Washington
Utah State Office--Utah
Wyoming State Office--Wyoming and Nebraska

(b) A list of the names, addresses, and geographical areas of jurisdiction of all Field Offices of the Bureau of Land Management can be obtained at the above addresses or any office of the Bureau of Land Management, including the Washington Office, Bureau of Land Management, 1849 C Street, NW, Washington, DC 20240

Sec. 1821.11 During what hours may I file an application? You may file applications or other documents or inspect official records during BLM office hours. Each BLM office will prominently display a notice of the hours during which that particular office will be open. Except for offices which are open periodically, for example, every Wednesday or the 3rd Wednesday of the month, all offices will be open Monday through Friday, excluding Federal holidays, at least from 9 a.m. to 3 p.m., local time.

Sec. 1821.12 Are these the only regulations that will apply to my application or other required document? No. These general regulations are supplemented by specific program regulations. You should consult the regulations applying to the specific program.

Sec. 1821.13 What if the specific program regulations conflict with these regulations? If there is a conflict, the specific program regulations will govern and the conflicting portion of these regulations will not apply.

#### 43 CFR SUBPART 1822--FILING A DOCUMENT WITH BLM

Sec. 1822.10 How should my name appear on applications and other required documents that I submit to BLM? Your legal name and current address should appear on your application and other required documents.

Sec. 1822.11 What must I do to make an official filing with BLM? You must file your application and any other required documents during regular office hours at the appropriate BLM office having jurisdiction over the lands or records involved. You must file any document with BLM through

personal delivery or by mailing via the United States Postal Service or other delivery service, except for those applications that may be filed electronically under Sec. 1822.13, unless a more specific regulation or law specifies the mode of delivery. The date of mailing is not the date of filing.

Sec. 1822.12 Where do I file my application or other required documents? You should file your application or other required documents at the BLM office having jurisdiction over the lands or records involved. The specific BLM office where you are to file your application is usually referenced in the BLM regulations which pertain to the filing you are making. If the regulations do not name the specific office, or if you have questions as to where you should file your application or other required documents, contact your local BLM office for information and we will tell you which BLM office to file your application.

Sec. 1822.13 May I file electronically? For certain types of applications, BLM will accept your electronic filing if an original signature is not required. If BLM requires your signature, you must file your application or document by delivery or by mailing. If you have any questions regarding which types of applications can be electronically filed, you should check with the BLM office where you intend to file your application. When you file an application electronically, it will not be considered filed until BLM receives it.

Sec. 1822.14 What if I try to file a required document on the last day of the stated period for filing, but the BLM office where it is to be filed is officially closed all day? BLM considers the document timely filed if we receive it in the office on the next day it is officially open.

Sec. 1822.15 If I miss filing a required document or payment within the specified period, can BLM consider it timely filed anyway? BLM may consider it timely filed if: (a) The law does not prohibit BLM from doing so; (b) No other BLM regulation prohibits doing so; and (c) No intervening third party interests or rights have been created or established during the intervening period.

Sec. 1822.16 Where do I file an application that involves lands under the jurisdiction of more than one BLM State Office? You may file your application with any BLM State Office having jurisdiction over the subject lands. You should consult the regulations of the particular BLM resource program involved for more specific information.

Sec. 1822.17 When are documents considered filed simultaneously?

(a) BLM considers two or more documents simultaneously filed when: (1)
They are received at the appropriate BLM office on the same day and time; or (2) They are filed in conjunction with an order that specifies that documents received by the appropriate office during a specified period of time will be considered as simultaneously filed.

(b) An application or document that arrives at the BLM office where it is to be filed when the office is closed for the entire day will be considered as filed on the day and hour the office next officially opens

(c) Nothing in this provision will deny any preference right granted by applicable law or regulation or validate a document which is invalid under applicable law or regulation.

Sec. 1822.18 How does BLM decide in which order to accept documents that are simultaneously filed? BLM makes this decision by a drawing open to the public.

# OCOTILLO METEOROLOGICAL (MET) TOWER

# **ENVIRONMENTAL ASSESSMENT**

CA-670-2005-95



El Centro Field Office 1661 South 4<sup>th</sup> Street El Centro, California 92243

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# Section 1 – Introduction

# 1.1 Purpose and Need

Wind Hunter filed an Application for Transportation and Utility Systems and Facilities on Federal Lands - Standard Form 299 (Right-of-Way Application) in September 2005 with the Bureau of Land Management (BLM) for purposes of obtaining a temporary right-of-way grant for wind monitoring and testing within a larger Project Area. Wind Hunter, LLC (Wind Hunter) proposes to conduct wind energy site testing and monitoring in various locations within a 6,280 acre Project Area consisting of public lands administered by BLM in Imperial County, California. Wind Hunter is seeking to erect one or more MET tower(s) for purposes of measuring wind speed, duration, and direction. Initially one MET tower will be installed, located approximately 3.5 miles northwest of unincorporated townsite of Ocotillo in the southwest corner of the county (Proposed Action). Wind Hunter has contracted with POWER Engineers, Inc. (POWER) to perform engineering and environmental studies associated with the Proposed Action.

Californians are experiencing a lack of energy generating capacity, a poor energy distribution system, air pollution, and the impacts of global warming. With a growing population, demand for electricity is expected to be strained for the foreseeable future. Wind energy and other renewable energy sources can play a leading role in alleviating these problems.

California currently obtains 1.5% of its electricity from wind. Yet, according to the American Wind Energy Association, California possesses 59 billon kilowatts-hours of wind potential (enough energy to power 6-8 million homes for a year). The California Energy Commission estimates that wind energy could provide up to 10% of California's energy needs.

Existing National Renewable Energy Laboratory (NREL) wind power data indicates "good" to "outstanding" wind strength (speeds of up to 19.7 mph) in the area of the Proposed Action. Wind resources may be variable with respect to location and height above ground. The MET tower(s) will confirm and precisely record the wind regime and potential for wind farm development at this site. This information is required in order to evaluate the local wind resource, and, if applicable, to calculate the exact project layout and land boundaries. There is no substitute for the installation of wind measurement equipment within the Project Area, and there is no possibility of financing a project without the on-site wind measurements.

There are a very limited number of locations in California, where such a project is feasible, due to the available wind resource, topography, land use restrictions, and other issues. Therefore, it is of high importance to investigate the feasibility of using the BLM land for the project.

# 1.2 Scope of Environmental Analysis

This environmental analysis (EA) examines factors that may be impacted by the installation of one MET tower. Only the installation of a MET tower and associated guy wire supports will be addressed in the environmental analysis. Pursuant to BLM Instruction Memo (IM) 2006-216 (August 24, 2006), the environmental review should not address wind energy development facilities as the installation of wind turbines are not proposed during testing and monitoring.

Also, according to the IM the cumulative impact discussion of the EA for testing and monitoring ROW application should not include wind energy development projects, but focus on anticipated installation of additional wind monitoring facilities during the term of the ROW grant. *Typically only a small number of* 

wind energy site testing and monitoring authorizations ever lead to actual wind energy development project. Therefore, this discussion should not focus on uncertain future development scenarios.

The site testing and monitoring authorization is independent of any application that may be made in the future for wind energy development. The holder of a site testing and monitoring ROW grant establishes no right to development and is required to submit a separate application to BLM for analysis, review, and decision. A proposed wind energy development project would be evaluated separately upon the submittal of an actual application for the development project.

Testing and monitoring and development projects are not connected actions under the Council on Environmental Quality (CEQ) NEPA regulations (40 CFR 1508.25), as an authorization to collect wind data does not automatically trigger any wind energy development projects.

# 1.3 Conformance with Land Use Plan

The Project Area is entirely located on BLM administered lands in Imperial County, and is managed under the California Desert Conservation Area Plan (CDCA Plan), as amended (BLM 1980). Most of the lands administered under the CDCA Plan have been designated as one of four "multiple-use classes" Controlled (C), Limited (L), Moderate (M) and Intensive (I). The class designations govern the type and degree of development or management activities allowed within the boundaries of the classes, and must meet the guidelines given for that class.

The entire Project Area is Multiple Use Class L. Class L "protects sensitive, natural, scenic, ecological, and cultural resource values", and are "managed to provide for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished." Most land use activities, including energy generation facilities and communication sites, are allowed in Class L after National Environmental Policy Act (NEPA) requirements are met.

Due to higher levels of resource sensitivity in Class L, vehicle access is limited to approved or "open" routes of travel. The Western Colorado OHV Routes of Travel Designation Plan (WECO) amended the CDCA Plan for Imperial County and assigned a designation where none existed in the CDCA Plan. The roads (109 & 110) near the proposed tower site are designated as open. Access on route by motorized vehicle is allowed. Off-road vehicle travel is not allowed without specific authorization. Parking and camping is allowed within 300 feet of the centerline of open routes in this area.

The Proposed Action is in conformance of the existing land use plans for the Project Area.

# 1.4 Applicable Regulatory Requirements and Required Coordination

Title V of the Federal Land Policy and Management Act of 1976 (P.L.94-579), as amended, authorized the BLM to grant, issue, or renew rights of way over, upon, under, or through public lands (43 U.S.C. 1761). General regulations for processing ROWs are found at 43 CFR 2800.

The proposed action is consistent with the President's National Energy Policy and with BLM's National Energy Policy Implementation Plan. It is BLM's general policy to encourage research into the development of wind energy in acceptable areas.

In 2005 BLM implemented a comprehensive Wind Energy Development Program to administer the development of wind energy resources on BLM-administered public lands. This document established policies and best management practices to ensure that potential adverse impacts associated with all stages

of wind energy development on BLM-administered land are minimized to the greatest extent possible. The Wind Energy Development Program supports the directives of E.O. 13212, "Actions to Expedite Energy-Related Projects", the recommendations of the National Energy Policy, and congressional direction provided in the Energy Policy Act of 2005 regarding renewable energy development on public lands.

# **Section 2 - Proposed Action and Alternatives**

# 2.1 Description of the Proposed Action

One MET tower will be installed and operated in the first year. However, during the 3-year period of the right-of-way grant, additional MET towers could likely be installed and/or the existing tower may be relocated within the 6,280-acre Project Area, described in Table 2-1 and shown on Figure 2-1. An amended right-of-way application will be filed with the addition of each MET tower or the relocation of existing tower. The tower will be in continuous operation for approximately 1 year in a single location. The tower(s) will be approximately 197 feet (60 meters) in height. The location of the first tower will be on the north side of the existing Imperial Highway on a high spot in the area (see Figure 2-1 & 2.-2). An existing "open" road will be used for access to a point within approximately 150' of the tower site, from which construction vehicles will utilize overland access via a pre-flagged access route.

Table 2-1. Legal Descriptions of Proposed Project Area (Township, Range, Section)

T16S R09E S17 SW 1/4
T16S R09E S18 (All except NE1/4)
T16S R10E S19 (All)
T16S R09E S20 (All)
T16S R09E S21 (All)
T16S R09E S22 (All)
T16S R09E S23 (All except private lands in W 1/2 of SW 1/4)
T16S R09E S24 (All)
T16S R09E S27 SW 1/4
T16S R09E S28 N 1/2
T16S R09E S29 (All)
T16S R09E S30 SE 1/4

The location of the first tower will be in the south 1/2 of Section 20 of Township 16S, Range 09 East (32° 45' 36"N, 116° 03' 43"W). The erection of future relocated or new towers will depend on the results of the data collected, and they could potentially be located anywhere within the Project Area where they do not interfere with infrastructure (roads, transmission lines, etc.) or environmentally sensitive areas. Any relocation or new towers will be subject to a supplemental site-specific environmental assessment.

MET towers are used to measure wind conditions, including wind speed, direction and temperature. The towers consist of a tubular steel structure supported by four sets of guy wires that extend up to 200 feet from the base of each tower supported on a 4-foot-by-4-foot base. Each set of guy wires consists of 7 guys attached along the entire vertical shaft of the pole (see Figure 2-3).

The dangers presented by guy wires may be minimized by installing high visibility cable balls on the guys. The marker balls will be installed on each guy approximately 10 feet below the guy ring on the top set of guy wires. An additional set of balls will be installed as close to the ground as possible above the

# WIND HUNTER OCOTILLO MET TOWER ENVIRONMENTAL ASSESSMENT

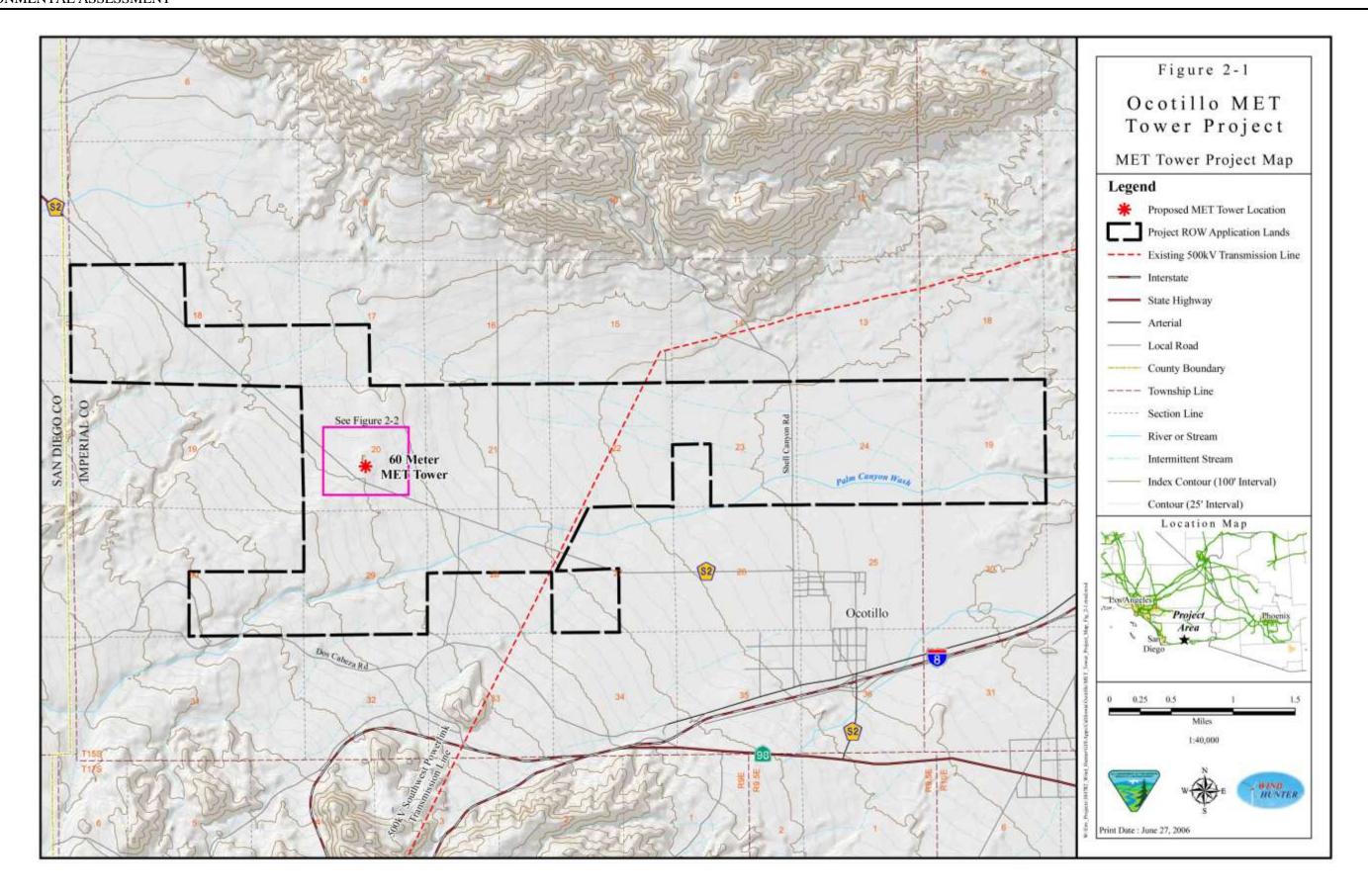
tallest expected vegetation, which in this case is Ocotillo (shrub), which grows to a height of about 15-feet in the Project Area See Section 3.2.1 for existing vegetation occurring in the area.

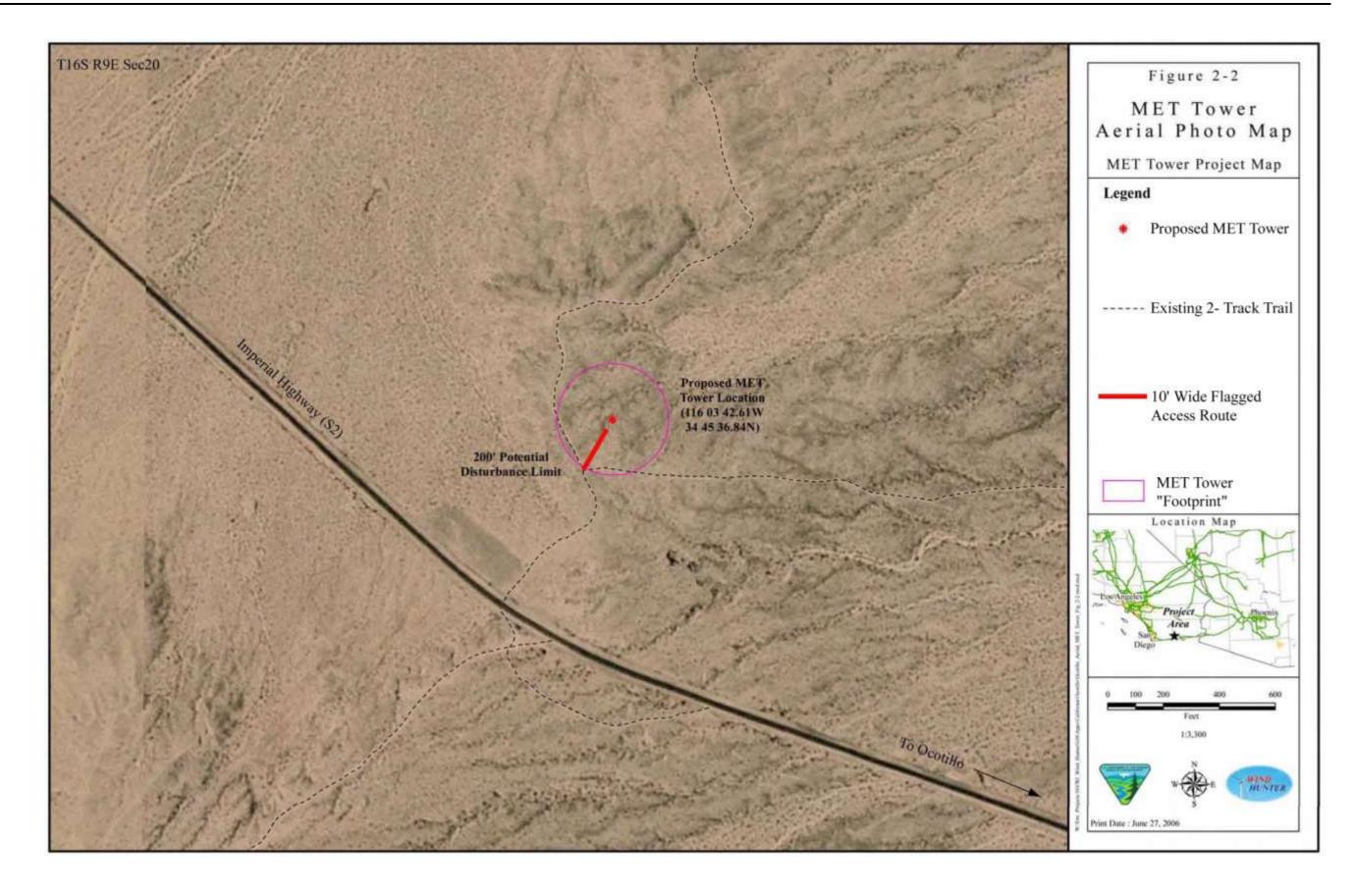
The MET towers do not have a concrete or other type of permanent base and therefore will not have any permanent ground disturbance associated with installation. Depending of the condition of the immediate area of the installation, one or more anchor pins (ground rod) might be necessary to keep the base from slipping during erection. MET towers will be assembled on site, using pick up trucks for material delivery. Wind Hunter will use removable anchors for the guy wires. Approximately one year from installation, the MET tower may be removed or relocated.

The main ground disturbing activities will be temporary, and involve the securing of the steel tube tower to the ground with a base plate and guy wires. The guy lines are anchored to the soil using screw-in, arrowhead, rock, or concrete anchors depending on the soil conditions encountered at the installation site. With the site conditions as currently known, arrowhead anchors will likely be used. Expected temporary disturbance in the area of anchor installation and removal will be very small, totaling several square feet.

The entire area of potential effect for the tower installation (not including the existing access roads) occupies approximately 2.9 acres. The actual temporary disturbance area, assuming one flagged 10-foot wide, 150-foot long overland travel route and a 50-foot diameter working area at the tower site would temporally disturb less than 5,000 square feet.

The 4.5-inch to 8-inch diameter tubular steel tower sections arrive on site in 5-foot to 8-foot lengths. The tower is assembled on the ground with all of the anchors installed and electronic equipment secured. The tower is then hoisted with a winch, and final adjustments are made. No clearing of vegetation is expected due to the nature of the erection activities and height of dominant existing low growing vegetation such as burrobush or creosote bush (see Section 3.2.1). Existing vegetation will not need to be removed.





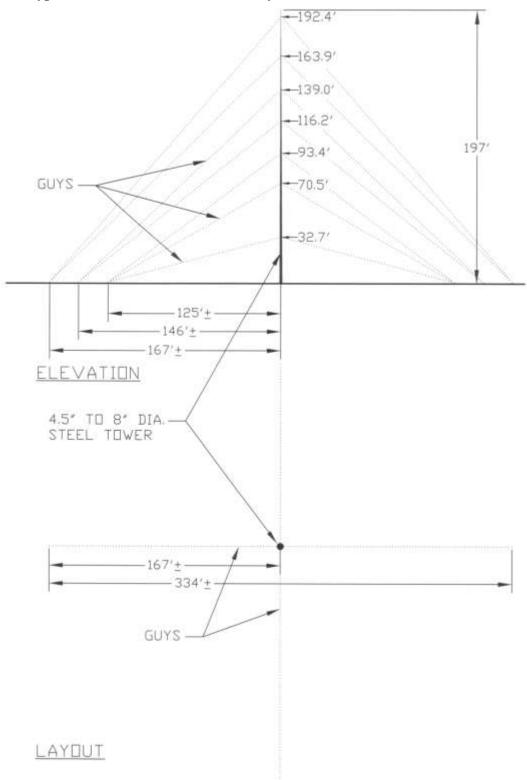


Figure 2-3 – Typical MET Tower Elevation and Layout

Source: NRG 2005

## 2.2 No Action Alternative

Under the no action alternative, the installation of the MET tower will not take place, and the potential impacts described in this assessment would not occur. This alternative is not consistent with the President's National Energy Policy or with BLM's National Energy Policy Implementation Plan.

# Section 3 - Affected Environment and Environmental Consequences

### 3.1 Introduction

The Project Area is located in a sparsely populated area of southern California approximately 28 miles southwest of the Salton Sea and approximately 3.5 miles west of the townsite of Ocotillo. The site is located on a desert plateau in the Colorado Desert and lays between the Coyote Mountains to the north, the Jacumba Wilderness to the south, and the Anza-Borrego Desert to the west. The elevation of the area is approximately 800 feet above mean sea level (AMSL). The climate is characterized by long, hot and dry summers and mild winters.

The area of potential effect for tower installation consists of the land area occupied by the MET tower and the immediately surrounding landscape within approximately 200 feet, as well as the gravel road used to access the site of the MET tower.

# 3.2 Resources

# 3.2.1 Biological Resources

### Affected Environment

The Project Area is located in the lower Colorado River Valley portion of the Sonoran Basin and Range Ecoregion (EPA 2002). The Colorado River Valley is composed of broad, flat valleys interspersed by small, rocky mountain ranges. The predominant vegetative community in these valleys is creosote bush scrub, and the primary plant species includes creosote bush (*Larrea divaricata*) and white bursage (*Ambrosia dumosa*).

Field surveys were conducted by Ultrasystems Environmental on May 8, 2006 (UltraSystems 2006) to evaluate habitat conditions in the area of the tower site location to identify any special status plant or wildlife species, and sensitive habitats that occur on or in the vicinity of the site. Surveyors recorded habitat types in the area as well as all plants and animals that were observed during field investigations. A literature review was also completed, and included databases of the U.S. Fish and Wildlife Service (Imperial County threatened and endangered species), Department of Fish and Game California Natural Diversity Database (CNDDB), and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants. This review facilitated the identification of critical habitats and endangered or threatened species that are likely to occur within the area.

The tower location site has sandy, rocky soils and supports sparse desert scrub vegetation. A total of nine plant species were found within the area of potential effect (Table 3-1). These plant species are consistent with a creosote bush scrub community (Holland 1986). There are no sensitive or unique habitats within or in the vicinity of the tower site. A total of four wildlife species or signs (tracks, scat, burrows, nests, excavations, and vocalizations) were observed within the area (Table 3-1).

Table 3-1. Plant and Wildlife Species Observed during Field Investigations

Common Name	Scientific name			
Plants				
Ironwood	Olneya tesota			
Creosote	Larrea tridentata			
Ocotillo	Fouquieria splendens			
Cholla	Opunta spp.			
Brittlebush	Encelia farinosa			
Barrel cactus	Ferocactus cylindraceus			
Smoketree	Psorothamnus spinosus			
Salt bush	Atriplex spp.			
White bursage	Ambrosia dumosa			
Animals				
Rabbit	Sylvilagus spp.			
Horned lizard (scat)	Phrynosoma spp.			
Meadowlark	Sturnella neglecta			
Common side-blotched lizard	Uta stansburiana			

Several small, unidentified burrows observed on the site were most likely associated with the desert pocket mouse (*Chaetodipus penincillatus*). Vegetative lizard scat was also found, but could not be assigned to a species.

The USFWS species list identified 15 federally listed species that occur in Imperial County. CNDDB data indicated that a total of 12 state listed species have the potential to occur in the area. Two of these species (Peninsular bighorn sheep and Least Bell's vireo) are also federally listed. CNPS data identified a total of 14 special status plant species that have the potential to occur in the area. The list of special status species is presented in Table 3-2. Additionally, the tower site is within ½ mile of federally-designated critical habitat for the Peninsular bighorn sheep.

None of the species listed in Table 3-2 were observed during field investigations. Based upon analysis of existing conditions and species habitat requirements, it was determined that few of these special status species could potentially occur in the vicinity of the site due to the absence of suitable habitat (Table 3-2). Although bighorn sheep may occasionally wander through the area, it does not contain the terrain or vegetation necessary to provide high quality habitat for the species. The prairie falcon and Le Conte's thrasher may forage in the area, but there is no suitable nesting habitat for these species. The site does represent potential habitat for the badger and flat-tailed horned lizard. No badger burrows or sign was observed during field investigations. Lizard scat was found, but it was not possible to assign the scat to a specific species; however, the general characteristics were consistent with the flat-tailed horned lizard. The slender-leaved ipomopsis and desert spike-moss were not observed, although surveys were not conducted during the peak flowering period for either species.

Table 3-2. Special Status Species That Potentially Occur in the Project Area

Common Name	Scientific name	Status <sup>1</sup>	Habitat Requirements	Potential for Occurrence
WILDLIFE				
Peirson's milk-vetch	Astragalus magdalenae var. peirsonii	FT	Restricted to Algodones Dunes area, where critical habitat has been designated.	No suitable habitat- does not occur
desert pupfish	Cyprinodon macularius	FE	Warm desert pools, marshes, streams and springs. Critical habitat designated in San Sebastian marsh (30 miles north of Project Area).	No suitable habitat- does not occur
bonytail chub	Gila elegans	FE	Colorado River system	No suitable habitat- does not occur
Colorado squawfish	Ptychocheilus lucius	FE	Colorado River system	No suitable habitat- does not occur
razorback sucker	Xyrauchen texanus	FE	Colorado River system	No suitable habitat- does not occur
desert tortoise	Gopherus agassizii	FT	Variety of open desert habitats.	Does not occur in Project Area
yellow-billed cuckoo	Coccyzus americanus	FC	Riparian forests	No suitable habitat- does not occur
southwestern willow flycatcher	Empidonax traillii extimus	FE	Riparian forests	No suitable habitat- does not occur
bald eagle	Haliaeetus leucocephalus	FT	Nests in large trees in proximity to water bodies. Forages in large water bodies that support abundant fish populations.	No suitable habitat- does not occur
brown pelican	Pelecanus occidentalis	FE	Lagoons and other waters along the California coast.	No suitable habitat- does not occur
Yuma clapper rail	Rallus longirostris yumanensis	FE	Freshwater marshes with dense herbaceous cover including cattail, bulrush, and reeds.	No suitable habitat- does not occur
California least tern	Sterna antillarum browni	FE	Nest in colonies on sandy beaches associated with river mouths or estuaries.	No suitable habitat- does not occur
least Bell's vireo	Vireo bellii pusillus	FE, SE	Riparian areas with willow, baccharis, or mesquite below 2,000 feet.	No suitable habitat- does not occur
peninsular bighorn sheep	Ovis canadensis	FE, ST	Open desert slopes, canyons, and rocky ridges below 4,000 feet. The Project Area is located adjacent to designated critical habitat.	May occur in Project Area
jaguar	Panthera onca	FE	Tropical/sub-tropical forests and riparian forests.	Extirpated - does not occur
San Diego button celery	Eryngium aristulatum var. parishii	SE	Vernal pools	No suitable habitat- does not occur
Barefoot banded gecko	Coleonyx switaki	ST	Desert foothills of the Peninsular Ranges in San	No suitable habitat- does not

Common Name	Scientific name	Status <sup>1</sup>	Habitat Requirements	Potential for Occurrence
			Diego and Imperial counties. Found only in areas of	occur
			massive rock outcrops at the heads of canyons.	
Prairie falcon	Falco mexicanus	SSC	Nests on cliffs and forages in a variety of open	May forage in Project Area
			habitats.	
Le Conte's thrasher	Toxostoma lecontei	SSC	Low desert plains with scant vegetation, such as	May occur in Project Area
			creosote bush or saltbush flats. Nests in larger	
			saltbush or cholla plants.	
American badger	Taxidea taxus	SSC	Variety of open habitats.	May occur in Project Area
Flat-tailed horned	Phrynosoma mcalli	SSC	Desert scrub habitats, including creosote-white	Likely to occur
lizard			bursage communities.	-
Pallid San Diego	Chaetodipus fallax	SSC	Found in desert border areas in eastern San Diego	No suitable habitat- does not
pocket mouse	pallidus		County in desert wash, desert scrub and similar	occur
			communities. Prefers sandy herbaceous areas,	
			usually in association with rocks or coarse gravel.	
Colorado Valley	Neotoma albigula	SSC	Low desert areas with beaver-tail cactus and	No suitable habitat present- does
woodrat	venusta		mesquite.	not occur
southern grasshopper	Onychomys torridus	SSC	Desert scrub habitats with friable soils and low to	No suitable habitat present- does
mouse	ramona		moderate shrub cover.	not occur
PLANTS				
rock nettle	Eucnide rupestris	CNPS List 2	Sonoran desert scrub habitats in rocky terrain at	Outside of species range- does
	•		elevations between 500 and 600 m (1,640 - 2,000 ft).	not occur
			Only known occurrence in San Diego County in	
			rocky rubble at Indian Gorge and in Imperial County	
			from Painted Gorge.	
sticky geraea	Geraea viscida	CNPS List 2	High, transitional chaparral habitats (often disturbed)	No suitable habitat present- does
			desert dominated by chamise at elevations between	not occur
			450 and 1,700m (1,500-5,600 ft).	
curly herissantia	Herissantia crispa	CNPS List 2	Sonoran desert scrub habitats at elevations between	Outside of species range- does
			700 and 725 m (2,300 - 2,375 ft). Two known	not occur
			locations in CA.	
Mexican hulsea	Hulsea mexicana	CNPS List 2	Chaparral habitats (often disturbed) at 1,200 (3,900	No suitable habitat present- does
			ft) in elevation. One known location in CA.	not occur
slender-leaved	Ipomopsis tenuifolia	CNPS List 2	Chaparral, pinyon-juniper woodland, Sonoran desert	May occur
ipomopsis			scrub habitats with gravelly or rocky substrates.	
			Elevations between 100 and 1,200 m (330 – 3,900ft).	
pygmy lotus	Lotus haydonii	CNPS List	Pinyon-juniper woodland and Sonoran desert scrub	Outside of species elevational

Common Name	Scientific name	Status <sup>1</sup>	Habitat Requirements	Potential for Occurrence
		1B	at elevations between 520 and 1,200m (1,700 – 3,900	range- does not occur
			ft).	
Mountain Springs bush	Lupinus excubitus var.	CNPS List	Shrub; pinyon and juniper woodland, Sonoran desert	Outside of species elevational
lupine	medius	1B	scrub at elevations between 425 and 1,370 m (1,400	range- does not occur
			-4,500  ft).	
Parish's desert-thorn	Lycium parishii	CNPS List 2	Coastal scrub and Sonoran desert scrub at elevations	Outside of species elevational
			between 305 and 1,000 m (1,000 – 3,300 ft).	range- does not occur
brown turbans	Malperia tenuis	CNPS List 2	Rocky slopes in Sonoran desert scrub at elevations	No suitable habitat present- does
			between 15 and 335 m $(50 - 1,100 \text{ ft})$ .	not occur
hairy stickleaf	Mentzelia hirsutissima	CNPS List 2	Rocky hillsides and mesas in Sonoran desert scrub at	No suitable habitat present- does
			elevations between 0 and 700 m $(0 - 2,300 \text{ ft})$ .	not occur
creamy blazing star	Mentzelia tridentata	CNPS List	Mojavean desert scrub at elevations between 700 and	Outside of species elevational
		1B	1,160 m (2,300 – 3,800 ft).	range- does not occur
slender woolly-heads	Nemacaulis denudata	CNPS List 2	Coastal dunes, desert dunes, and Sonoran desert	No suitable habitat present- does
	var. gracilis		scrub at elevations between 50 and 400 m (160 -	not occur
			1,300 ft).	
desert spike-moss	Selaginella eremophila	CNPS List 2	Sonoran desert scrub at elevations between 200 and	May occur
			900 m (660 – 3,000 ft).	
Orcutt's woody-aster	Xylorhiza orcuttii	CNPS List	Rocky canyons and washes in Sonoran desert scrub	No suitable habitat present- does
		1B	at elevations between 20 and 365 m (65 $-$ 1,200 ft).	not occur

<sup>&</sup>lt;sup>1</sup> FT = federal threatened

FE = federal endangered FC = federal candidate

ST = state threatened

SE = state endangered SSC = state species of special concern

The area represents suitable habitat for a number of BLM sensitive species which may occur in the area. These include several birds (i.e., burrowing owl and Le Conte's thrasher), bats (i.e., cave myotis, Yuma myotis, western mastiff, and Townsend's big-eared), and reptiles (i.e., flat-tailed horned lizard). No BLM sensitive species were observed during field investigations.

A number of raptors are known to occur in the general area (Dan Steward, BLM wildlife biologist–El Centro field office, personal communication). Golden eagles are known to nest on cliffs in the general vicinity. The area also supports large seasonal migrations of Swainson's hawk and a number of neotropical migrants (Dan Steward, BLM wildlife biologist–El Centro field office, personal communication).

#### **Environmental Consequences**

Potential environmental consequences associated with the proposed MET tower include the loss of habitat, disturbance and/or displacement of animals, mortality of individuals as a result of construction activities and collisions with the tower.

The proposed MET tower will result in an extremely small area of temporary ground disturbance associated with the tower footprint. Construction activities will also result in the temporary disturbance of less than 10,000 square feet (potential area within 200 foot radius around the tower site). This temporary disturbance would be associated with overland travel of construction vehicles and equipment/materials laydown areas, during which some low lying vegetation could be crushed at the tower site. The existing roadway will be utilized to maximum extent practicable, and off-road travel route(s) will be designated to access the tower site. This will help to minimize temporary disturbance and habitat loss. All disturbances would occur in creosote bush scrub habitat, and no unique or sensitive habitats will be disturbed because of the proposed MET tower installation. Given the small area of temporary habitat loss, the tower installation would not result in a adverse effect to any plant or wildlife species that occur in or in the vicinity of the site. No ocotillo shrubs will be removed during installation.

Human activity and vehicle traffic could result in the disturbance and/or displacement of individual wildlife species that occur within or in the vicinity of the site. Disturbance and displacement effects would be limited to the duration of construction (a few days). These temporary effects will not result in an adverse effect to any of the wildlife species that utilize the site or adjacent areas.

The proposed action could result in mortality of individual plants and animals during construction and operation of the MET tower. Construction activities, including vehicle traffic and equipment storage, could result in the loss of plants and animals that occur on the site. Animal species that are relatively immobile or that utilize burrows would be most susceptible to mortality resulting from construction activities. Tower installation and operation has been designed to minimize the potential for such mortality. The existing road will be utilized for access to minimize the need for off-road travel. Where off-road travel is required to access the tower site, vehicles will be limited to designated off-road route(s). These route locations will be established to avoid plants and animal burrows. Prior to the initiation of construction the route will be flagged and workers will be advised to maintain low vehicle speeds and avoid plants and animals whenever possible. Given the relatively small area and short duration of construction, the potential for construction-related mortality will be relatively minor and will not represent a significant adverse effect.

The proposed tower installation could also result in avian and bat mortality as a result of collisions with the MET tower and associated guy wires. In order to minimize the potential for collision-related mortality, the tower installation and operation will conform to the recommendations outlined in the U.S. Fish and Wildlife Service <u>Guidance on the Siting</u>, <u>Operation</u>, <u>and Decommissioning of Communication Towers</u> (USFWS 2000). In accordance with these guidelines, the MET tower will be less than 199 feet above ground level. The tower location is situated in the valley rather than on a ridge or mountain pass area, though the tower will occupy a high spot within the valley, and it's location will therefore reduce the potential for bird collision. There are no significant numbers of breeding, feeding or roosting birds in the area, and there are no ecological magnets or habitats that attract birds or bats into the area. Finally, daytime visual markers will be installed on the guy wires to reduce the potential for avian collisions and associated mortality. The use of markers will be particularly beneficial given the location of the site along migratory route for raptors and neotropical migrants. The tower design and location, as well as the implementation of markers on the guy wires, will reduce the potential for avian and bat mortality.

The proposed tower installation is not likely to adversely affect special status species. Construction activities could disturb and displace bighorn sheep near the site. However, given the temporary nature of construction activities and the limited potential for bighorn sheep use of the area, disturbance or displacement are not likely to adversely affect special status species.

Construction of the proposed MET tower could temporarily displace prairie falcon, Le Conte's thrasher, and other raptor species that are foraging in the area, and will potentially result in the loss of negligible amount of potential foraging habitat. The location of the tower and the use of daytime marking devices on guy wires will prevent collision-related mortality of these species. The proposed action will not result in adverse impacts to these species.

Construction activities could result in the temporary displacement of badger and flat-tailed horned lizard utilizing the site. The tower and guy wires could potentially create perches for logger head shrikes or other predators that may eat flat-tails. The Proposed Action will comply with the BLM Flat-tailed Horned Lizard Rangewide Management Strategy, including having a biological monitor present and providing payment of a mitigation fee. Therefore, it is not expected to result in any adverse effects to these species.

Ground disturbance associated with construction of the METt tower could adversely affect slender-leaved ipomopsis and desert spike-moss that occur in the area. There are no large populations of either species in the area and given the limited area of permanent disturbance, the potential for affecting individual plants is limited. No significant adverse effects are expected upon these plant species.

# Mitigation Measures

To reduce minor potential impacts caused by construction vehicles (pick-up trucks), the exterior limits of the off-road overland access areas (approximately 150-feet long and 10-feet wide) shall be flagged prior to commencement of construction activities. Any tracks that occur shall be carefully raked out without disturbing existing ground cover after erection of the tower is complete.

# 3.2.2 Floodplains, Wetlands and Water Resources

## Affected Environment

The tower site is located in the Salton Sea Watershed, a low desert environment with very little annual rainfall (EPA 2006). Nearby Ocotillo, California averages 4.2 inches of precipitation per year, with the highest rainfall, about 0.7 inches, occurring in January (NCDC 2006).

Streams in the study area are intermittent, generally flow to the east, and are not hydrologically connected to any major waterway as tributaries. The only named drainage near the study area is the Palm Canyon Wash which is a tributary to Coyote Wash to the east.

There is a desert riparian floodway located north of the site that contributes runoff to the Palm Canyon Wash which is subject to flash flooding that often occurs in the desert environment that characterizes the area (Imperial County General Plan 2003). The area, however, is located on high ground with above the surrounding valley, and is not subject to flash flooding.

Groundwater development in the Salton Trough portion of the Salton Sea Watershed has been primarily in the Coachella Valley, well to the north of the area. According to U.S. Geological Survey, the most important source of groundwater recharge in the region is from the Colorado River and the unlined irrigation canals, not from mountain runoff. Near the margins of the Imperial Valley, basin-fill deposits are derived from the adjacent mountains and are mostly sand and gravel. Wells in the area that are several hundred feet deep yield moderate to large volumes of water, sometimes 50 gallons-per-minute or more. Groundwater flows in the Project Area are generally towards the northeast (USGS 2006).

The communities of Ocotillo and Coyote Wells near the Project Area are dependent on groundwater for all uses. Historically, water has been of good quality. Recently, however, data seems to indicate a possible decline in water quality in some areas of the basin. Ocotillo is serviced by individual water wells. Shallow groundwater quality is best on the eastern and western sides of the County. Significant groundwater of good quality can also be found in the Ocotillo-Coyote Wells Groundwater Basin (ONCA 2003).

National Wetland Inventory data indicates that there are no wetlands located within the study area. Intermittantly flooded "Riverine Riparian Streams" are located in the channels down-slope from the study area in the Palm Canyon Wash and related tributaries.

# **Environmental Consequences**

There will be no impacts related to water, floodplains, wetland or floodplain resources as a result of MET tower installation, operation or decommissioning, because no significant ground disturbance activities will occur. The only potential for impacts will occur as a result of vehicle fluid or fuel spill as a result of malfunctioning equipment or accident. The potential impact from a vehicular fluid or fuel leak will be low due to the total volumes that may be spilled. There will be no discharges of solid or hazardous wastes as a result of the Proposed Action.

# 3.2.3 Air Quality

### Affected Environment

The climate in the region is dependent on the "Pacific High" system in the eastern Pacific Ocean that causes storms to be directed to the north. This semi-permanent high pressure system brings clear skies and consistently high temperatures throughout the year. The mean temperature for nearby Ocotillo is 73.1°F, and the mean maximum and mean minimum temperatures are 87.7° F and 58.5° F, respectively (NDCA 2006).

The area is subject to pollution from Mexico to the south, and air quality standards for the basin are often violated. Local sources of air pollution come from motor vehicles (including OHV), road dust produced

by vehicles, wind-blown dust and agricultural equipment and operations. Visibility is an important air quality resource within the desert region and is most easily affected by activities that generate dust and sulfur dioxide.

The federal Clean Air Act established National Ambient Air Quality Standards (NAAQS). The State of California air quality standards are defined by the California Ambient Air Quality Standards (CAAQS). Imperial County Air Pollution Control District (APCD) is the agency responsible for administering federal and state air quality laws, regulations and policies.

The tower site is located in the Salton Sea Air Basin as identified by the California Air Resources Board. Enforcement and management of air quality standards are conducted by the California Air Resources Board under California Ambient Air Quality Standards (CAAQS).

The Clean Air Act developed NAAQS for a finite number of pollutants called "criteria pollutants" that consist of sulfur dioxide, carbon monoxide, total suspended particulates, nitrogen oxides, lead, ozone, and particulate matter less than 10 microns in diameter (PM10). State of California standards, which are stricter than federal standards, include additional standards for hydrogen sulfide and particulate sulfates. The Salton Sea Air Basin currently does not meet California State Air Quality Standards for ozone and particulate matter (PM10) and is classified as a nonattainment area. State carbon monoxide standards are "unclassified" in the study area. Air basin emissions from mobile, stationary, and area-wide sources for nitrogen oxide compounds (NOx), reactive organic gases (ROG), carbon monoxide (CO), and particulate matter (PM10) in 2001 were 63.8, 48.8, 299.8 and 266.0 tons per day, respectively, in the basin (CARB 2006).

Factors that influence the quantity of fugitive dust generated during construction activities include the type of work being conducted, the intensity of activities occurring at any given time, the area of land being worked, the silt content of the soil (particles smaller than 75 microns in diameter), and soil moisture.

## **Environmental Consequences**

The construction and operation phases will produce two types of air contaminants: exhaust emissions and fugitive dust. The emissions and fugitive dust produced during construction will be of short-term duration and will cease upon completion of the construction phase. Operation of the MET tower will involve periodic maintenance on the tower and potential emergency repair work.

Expected air quality impacts of tower installation will be low, with emissions from motorized vehicles and equipment being the main source of pollutants (pick-up trucks). The short term nature of the installation activities will cause low, short term impacts which will not be significant.

Uncontrolled fugitive dust emissions could create localized clouds of dust that could impair air quality in the area surrounding a construction site, potentially affecting workers in the immediate breathing zone or reducing visibility. Vehicle speed on the unpaved or overland access areas will be limited to minimize entrainment of dust.

# 3.2.4 Geology and Soils

### Affected Environment

The area occupies mesas west of the Imperial Valley, and lies near the interface of Quaternary sedimentary and Tertiary sedimentary rock deposits near the south end of the Elsinore Fault line (CGS 2006). No USDA soils data is currently available for this area. Available data covers areas to the east of the Project Area in the Imperial Valley. Expected soils include Torrifluvents, Aridisols and Entisols with hyperthermic soil temperature regime and aridic soil moisture regime (USFS 2006).

The soils of the area are typical of arid low desert ecosystems. The surface layer is typically hydrophobic surface crusted silts and sands that are often subject to wind erosion. These soils are typically deep, poorly consolidated, and subject to erosive forces. The surface horizon layer of desert soil is susceptible to compaction. Soils are course-textured, shallow, rocky or gravely with good drainage and have no subsurface water. All of the principle, natural, soil protective elements in the desert are highly vulnerable to disturbances such as vehicle use. A single vehicle pass on undisturbed soil can destroy many types of plants, desert pavement and mechanical crusts (BLM 2002).

Slopes are not steep in the area of the MET tower, but there is some local variation in topography in the form of knolls and small ridges. South and west of the existing access road, the slopes are steeper. The site occupies a higher elevation than the adjacent Imperial Highway. Overall drainage is typically away from the installation site because the tower will occupy a high spot, and generally flows to the northeast.

There are no known hazardous or solid wastes existing in the study area, and some disturbance in the form of general litter is evident in the Project Area.

### **Environmental Consequences**

Impacts to soils and geology as a result of tower installation will be limited to very small areas where guy anchors are installed, where the base plate of the tower is secured to the ground, and where equipment (pick-up truck) causes compaction of soils and fugitive dust. The site is on the top of a hill, and will be accessed by an existing trail located adjacent to the Imperial Highway (S2), so a very small area of potential soil compaction could result.

# **3.2.5 Land Use**

# Affected Environment

The study area consists entirely of public lands administered under the jurisdiction of the BLM, El Centro Field Office. The dominant land use in the area is related to recreational activities such as sightseeing, hiking, camping and OHV use. All vehicle travel is restricted to "open" routes of travel.

The main roadway servicing the Project Area the Imperial Highway (S2), is identified in the Imperial County Plan as a Major Collector. Traffic volumes through Ocotillo on S2 in 2003 were approximately 2000 ADT (average daily traffic) (CSHE 2003). Road closure status and off-road vehicular use within the California Desert Conservation Area (CDCA) are detailed in the CDCA Plan and Western Colorado Routes of Travel Designation (WECO) Plan. The existing access roads, Roads 110 and 109, are designated as open by the BLM (BLM 2002).

There are no ACEC's in the study area, although the Table Mountain ACEC and Yuha Basin ACEC are approximately 8 miles and 7 miles away, respectively.

There are no Wilderness Areas in the study area. The nearest Wilderness Areas are the Jacumba Wilderness, Coyote Mountain Wilderness, and Anza-Borrego Wilderness, approximately 2.75 miles, 2.25 miles, and 4 miles away, respectively.

Prime and Unique Farmlands are restricted to irrigated areas of the Imperial Valley. There are no Prime and Unique Farmlands in the study area.

There are no designated or eligible Wild & Scenic Rivers in the Project Area.

### **Environmental Consequences**

Potential land use impacts will be less than significant as a result of installation, operation and decommissioning of the MET tower. The highest impacts will be the result of recreational user restrictions imposed as a result of the physical presence of the MET tower occupying lands that would otherwise be used for dispersed recreation. OHV users in the area are restricted by road designation, and may not travel more than 300-feet off the established road.

Other recreation users, such as sightseers, will be impacted at a moderate or low level, mostly as a result of visual impacts of the MET tower and warning balls (see Section 3.2.6).

### 3.2.6 Visual Resources

### Affected Environment

The Project Area is located in the Salton Trough section of the Basin and Range physiographic province, which is characterized, by desert alluvial slopes and delta plains (Fennemen 1931). The landscape is surrounded by the scenic wilderness areas, including the Coyote Mountains to the north, and the Jacumba Wilderness and Anza-Borrego Wilderness to the south. The Project Area scenery, however, is common, or average for the region.

Development occurs mainly to the southeast near the unincorporated townsite of Ocotillo and Coyote Wells. Moderate to High visually sensitive areas near the Proposed Action include the S2, State Route 98/Interstate 8, Shell Canyon Road, and residences located on the west side of Ocotillo. Interstate 8 from Sunset Cliffs Boulevard in San Diego to Route 98 near Coyote Wells is an eligible state scenic highway. Interstate 8 is approximately 2.1 miles to the south of the tower site.

The only sensitive receptors within ½ mile of the proposed MET tower are travelers along the Imperial Highway. Travelers using the highway are expected to be moderately sensitive to visual change in the landscape because of low use levels, moderate viewing duration, and moderate user attitude towards change.

There are no designated BLM Visual Resource Management Classes (VRM) identified in the CDCA Plan.

### **Environmental Consequences**

Visual impacts of tower installation will be limited due to distance to most visually sensitive receptors in the area. The structure contrast created by the installation of a tower where none presently exist will be short term in duration (less than a year), and not a dominant feature in the landscape. The tower and marker balls will provide a moderate to strong structure contrasts in the surrounding landscape. The state eligible scenic highway is over two miles away to the south and southwest, and views to the MET tower location will be limited due to topography and distance. Nearby residences are also fairly far from the MET tower, nearly three miles away. Moderate sensitivity travelers viewing from the Imperial Highway will experience strong structure contrast but are expected to be minimally impacted by the presence of the tower because of no landform and very low vegetation contrasts.

### 3.2.7 Cultural Resources

### Affected Environment

Cultural resources are districts, sites, buildings, structures, or objects considered to be important to a culture, subculture, or community for scientific, traditional, religious or other reasons. For this EA, cultural resources have been divided into three major categories: archaeological resources, architectural resources, and traditional cultural properties (TCPs). Archaeological resources are locations where human activity has measurably altered the earth or left deposits of physical remains (e.g., stone tools, cans, bottles, milling stations, petroglyphs, house foundations, cemeteries). Architectural resources include standing buildings (e.g., houses, schools, churches) and intact structures (e.g., canals, bridges). Traditional cultural properties (TCPs) are resources that are important to a community's traditional practices and beliefs and for maintaining the community's cultural identity (Parker and King 1998).

Several laws and regulations require that information about cultural resources be kept confidential to protect them from vandalism. For this reason, this section offers only limited descriptions of the characteristics and locations of cultural resources in the tower installation area of potential effect.

Data on cultural resources came from several sources:

- A records search at the Southeast Information Center (SEIC), Imperial Valley College Desert Museum on May 8, 2006. The SEIC is part of the California Historical Resources Information System (CHRIS) of the Office of Historic Preservation (OHP).
- The National Register Information System (NRIS) of the National Register of Historic Places (National Register).
- The National Historic Landmarks Survey of the National Park Service (NPS).
- California Historical Landmarks listed by the OHP
- Conversations with BLM and OAHP staff.
- A cultural resources survey performed by ASM Affiliates, Inc. on June 16, 2006.

 A request by BLM that the California Native American Heritage Commission (NAHC) review its records for the presence of any Native American sacred lands or traditional cultural properties within the site boundary.

As a result of the background research, five previously recorded cultural resources were identified within one mile of the proposed MET tower site. All were Native American archaeological sites. Only one of the previously recorded sites was within 600 feet of the proposed tower location. No National Register-listed properties, National Historic Landmarks, or California Historic Landmarks occur within or near the Tower location site.

The intensive cultural resources survey covered 2.9 acres and dirt access roads leading to the tower site. The 2.9-acre survey area included all land within 200 feet of the MET tower location. No cultural resources were observed within the area of potential effects for the MET tower. The NAHC identified no sacred lands within the area of the proposed action.

## **Environmental Consequences**

Federal and State laws protect cultural resources or require their consideration in assessing the effects of a proposed undertaking. Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800) outline procedures for considering the effects of proposed Federal undertakings on cultural resources. Procedures are outlined for identifying resources, evaluating their significance, assessing effects, and implementing measures to mitigate adverse effects.

Federal and State laws protect cultural resources if they are found to have some level of significance under the criteria of the National Register or under State guidance. However, most of the cultural resources previously recorded in the area have never been evaluated for National Register eligibility.

An undertaking results in adverse effects on a cultural resource eligible to the National Register when it alters the resource's characteristics, including relevant features of its environment or use, that qualify it for inclusion in the National Register. Potential impacts could include:

- Physical destruction, damage, or alteration of all or part of the property;
- Isolation of the property from, or alteration of the character of the property's setting when that character contributes to the property's qualification to the National Register;
- Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting;
- Neglect of a property resulting in its deterioration or destruction; and
- Transfer, lease, or sale of the property.

Direct impacts on cultural resources that could occur as a result of the proposed MET tower include ground disturbance and visual impacts. Ground disturbance will result from guy anchor installation. Because cultural resources are non-renewable, even temporary ground disturbance can result in impacts to these resources. Visual impacts on cultural resources can occur when there is a change in setting at a resource for which visual setting is one element in its National Register eligibility. Visual setting is usually not a consideration in the National Register eligibility of most archaeological sites.

The background research and cultural resources survey for the proposed MET tower identified no cultural resources within 200-feet of the tower location and along the access road. Therefore, no impacts to cultural resources are expected.

BLM has found that there will be no historic properties affected by this undertaking (see Attachment A).

### **Mitigation Measures**

Potential impacts to cultural resources as a result of the proposed action are very low, but the potential remains for there to be undiscovered cultural resources in this location. Construction monitoring at the MET tower site by a qualified archaeologist meeting the Secretary of the Interior's standards will reduce the already small potential for disturbance even further.

### Native American Religious Concerns

The NAHC performed a sacred lands records search, which failed to identify the presence of sacred sites or traditional cultural properties that would be affected by the proposed undertaking.

### 3.2.8 Socioeconomics and Environmental Justice

### Affected Environment

This section presents a demographic profile of population, race, employment, wages, and income. The potentially affected area for socioeconomic impacts includes Imperial County, California and the census-designated place (CDP) of Ocotillo. Data was taken from the U.S. Census (USCB 2006).

Executive Order (E.O.) 12898 requires Federal agencies to address disproportionately high and adverse human health and environmental effects of their actions, programs, and policies on minority and low-income populations. The three primary steps in this assessment are to determine: 1) the geographic distribution of low-income and minority populations; 2) whether any impacts would be high and adverse; and 3) whether these impacts would disproportionately affect the low-income and minority populations. BLM criteria as identified in the BLM Wind Programmatic EIS (BLM 2004) was used in the identification of low-income and minority populations. These are defined as:

- A minority population exists where the percent age of minority persons for the given geographic unit is more than 20 percentage points higher than the percentage of minority persons for the referenced geographic unit, or where a minority population exists in any geographic unit where the number of minority persons exceeds 50% of the total population.
- A low-income population exists where the percentage of low-income persons for any given geographic unit is more than 20 percentage points higher than the percentage of low-income persons for the reference geographic unit, or where the number of low-income persons in the geographic unit exceeds 50% of the total population.

The government sector was the largest civilian employer in Imperial County according to February 2006 data, with federal, state and local government agencies employing 17,100 people. Agriculture and "Trade, Transportation, and Utilities" are second and third, with 14,100 and 11,600 employed, respectively. The total county civilian employment in February 2006 was 58,000 (CEDD 2006). Total retail sales in

Imperial County was \$940.0 million, which represents approximately 0.3 percent of total California retail sales from a sales and use tax rate of 7.75% (CDOF 2006). Census data indicates that most of those working in Ocotillo are employed in the sales and office occupations (31.1% of those employed), with construction, extraction, and maintenance occupations employing 26.2% of the total workforce. Private industry and governmental positions employ 67.2% and 20.5% of the total workforce, respectively.

The Project Area is in a rural area, with the closest city over 25,000 people being El Centro, located approximately 28 miles to the east in the Imperial Valley agricultural region. According to the 2000 United States Census, Imperial County had 142,361 residents and El Centro had 37,835 residents. Ocotillo is the closest census-designated place (CDP).

Data for the unincorporated CDP of Ocotillo shows 296 residences in the year 2000 with an average income of \$14,849. The racial makeup of the Ocotillo CDP was 87.8% White, 0.7% Black or African American, 1.7% Native American, 0.3% Asian, 0.3% Pacific Islander, 4.4% from other races, and 4.7% from two or more races. 19.9% of the population was Hispanic or Latino of any race.

The 2000 Imperial County census (USCB 2006) recorded a minority population of 113,872, or 80.0% of the total population. Data for the Ocotillo CDP shows a minority population of 82, or 27.7% of the total population. This is 52.3 percentage-points below the county.

According to poverty statistics for 1999, 22.6% of the population of Imperial County was identified as low-income. About 16.6% of Ocotillo's population lived below the poverty level in 1999.

#### **Environmental Consequences**

The Project Area is sparsely inhabited. Identified environmental impacts associated with the construction, operation, maintenance, and decommissioning of the MET tower will affect the area's population equally, without regard to ethnicity or income. With a low-income population actually lower than the reference Imperial County, the CDP of Ocotillo does not fit the requirements as defined by the BLM as a low income population, and therefore no Environmental Justice impacts will occur. Based on CEQ guidelines, Imperial County and Ocotillo CDP demographic data, no minority will be disproportionately affected from construction and operation of the proposed Met tower.

Socioeconomic impacts could be slightly positive as a result of associated food, lodging and other expenditures, with an expected influx of 2-3 workers for several days during installation of the MET tower.

# 3.3 Airspace

The Imperial County Airport Land Use Commission (ALUC) representative was contacted (Cabanilla 2006) regarding potential airspace conflicts that may result, requirements for lighting, and other air traffic related issues. The ALUC provided guidance for coordination with three military facilities: Naval Air Facility-El Centro, March Air Reserve Base, and Yuma Marine Air Station. Each of these facilities were contacted by email and subsequently contacted by phone and/or letter.

The Project Area is located in a United States Air Force military air space corridor under Visual Route (VR)-288 as administered by March Air Reserve Base located in Riverside County, California (Backs 2006, Durham 2006). VR-288 is a low level route with a minimum required altitude of 300-feet above ground level (AGL).

The tower height will be below the 300-minimum flight level assigned VR-288, and will be below the 200' threshold for FAA lighting requirements, so will not impact military or commercial aviation activities. No lighting or other requirements have been identified by the military (Durham 2006).

# 3.4 Cumulative Effects

The installation of additional MET towers or moving the tower will cause similar impacts as described in the Proposed Action. Additional impacts will result from the use of equipment used to move and/or erect other towers in different locations. Biological and cultural surveys will be performed at the site of each tower location to ensure impacts to those resources are avoided or minimized.

BLM currently has two additional pending applications for installation of up to five MET towers in the general area. Each application is being analyzed separately. Similar impacts will occur at each site if these projects are approved.

# **Section 4 - Consultation and Coordination**

### 4.1 Initial BLM Coordination

Wind Hunter, POWER and BLM staff initially met on February 8, 2006 to identify key issues in the development of this Environmental Assessment. Native American and agency consultation and expected biological and cultural survey as well as BLM scoping requirements were discussed.

### 4.2 Others Consulted

Table 4-1 shows a complete list of those consulted during the development of the Environmental Assessment.

Table 4-1. List of Individuals Consulted

Name of Person Consulted	Title/Area of Responsibility or Specialty
Bureau of Land Management	
Rolla Queen	Archaeologist
Daniel Steward	Biologist
Lynda Kastoll	Project Manager
Imperial County	
David Black	Planner II
Chris Garcia	Planner I
Richard Cabanilla	Imperial County ALUC
El Centro Navel Air Facility	
Mike Cox	Air Space
March Air Reserve Base	
O. J. Durham	Deputy Airfield Manager
Yuma Marine Air Station	
Paula Backs	Air Space
Native American Heritage Commission	
Rob Wood	Environmental Specialist III

# 4.3 Public Review of the EA

Public review of the EA will be completed following a 30-day comment period. If no significant impacts are identified and the Proposed Action is approved, the BLM will issue a Finding of No Significant Impact (FONSI), and subsequently grant a 3-year temporary right-of-way for the purpose of installing one MET tower within a 6,280 acre Project Area.

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# **Section 6 - Primary Preparers and Contributors**

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Mark Becker - ASM Affiliates, Inc.

# ATTACHMENT A

Agency Findings and Determinations under Section 106 Of the National Historic Preservation Act

# United States Department of the Interior BUREAU OF LAND MANAGEMENT

El Centro Field Office 1661 South 4<sup>th</sup> Street El Centro, CA 92243 www.blm.gov/ca/elcentro/

In Reply Refer To: CA-670-07-21/CA-47518/EA CA-670-2005-95 (8100)/(2800)P

#### Memorandum

To:

Field Manager, El Centro Field Office (CA-670)

From

Archaeologist, El Centro Field Office (CA-670)

Subject:

Agency Findings and Determinations under Section 106 of the National Historic

Preservation Act

Project:

Wind Hunter Testing and Monitoring, Imperial County, California

The Bureau of Land Management, El Centro Field Office, proposes to authorize Wind Hunter, LLC to install one meteorological tower that will be used to collect and record wind data in a project area consisting of approximately 6,280 acres. The tower is 197 feet tall, does not have a concrete base and will not cause any permanent ground disturbance. It will be constructed on site, using pick up trucks for material delivery. Removable anchors will be used to secure the guy wires.

Pursuant to the State Protocol Agreement Between The California State Director of The Bureau of Land Management And The California State Historic Preservation Officer (2004) (Section V A and V.B), and in accordance with 36 CFR Part 800, the BLM has reviewed this undertaking, has made a reasonable effort to identify historic properties that may be located within the Area of Potential Effect (APE), and has assessed the effect of this undertaking on historic properties

Identification and evaluation efforts for this specific undertaking and the area of potential effects are described in a letter report entitled An Intensive Pedestrian Survey of 2.9 Acres for a Proposed MET Tower, Northwest of Ocotillo, California prepared by Mark Becker (ASM Affiliates, Carlsbad, California, 2006) Survey took place on June 16, 2006 and ASM identified no cultural resources within the APE for the proposed MET tower but did note the presence of one site and various isolates outside the APE. Therefore, to ensure that resources outside the APE are avoided, the BLM staff archaeologist is requiring an archaeological monitor to be present during construction of the meteorological tower. The inventory effort conducted by ASM Affiliates was adequate to identify historic properties on public lands that might be affected by this undertaking and the BLM archaeologist has recommended that the proposed undertaking would have no effect on historic properties.

The BLM makes the following finding for this undertaking:

The BLM finds that there will be no historic properties affected by this undertaking

This memorandum documents the recommendations of the cultural resources staff, the acceptance of these recommendations by the Agency Official (as defined in 36 CFR §800 2(a), Protection of Historic Properties), and constitutes the formal statement of Agency findings and determinations for Section 106 of the National Historic Preservation Act as implemented in the Protocol. In accordance with the Protocol, BLM has satisfied its responsibilities to take into account the effects of this undertaking on historic properties that may be included or eligible for inclusion on the National Register of Historic Places

Recommended by:	11/2/06
Archaeologist, El Centro Field Office	Date
Acceptance by the Agency Official:	
Vicki L. Wood	11/2/06
Field Manager, El Centro Field Office	Date /