

June 6,2013

In Reply Refer To:  
(C030) AZA-36142

**NOTICE OF AVAILABILITY**  
**Environmental Assessment for a Right-of-Way Grant**  
**And Proposed Construction of a 12kV Electric Distribution Line**  
**(DOI-BLM-AZ-C030-2013-0022-EA)**

Dear Interested Party:

Please be advised that an Environmental Assessment has been prepared (DOI-BLM-AZ-C030-2013-0022-EA) for a right-of-way grant which would authorize the construction, operation, and maintenance of a 12kV electric distribution line in La Paz County, Arizona. This EA is a public document, and is available for your review and comment.

The proposed action analyzed in the EA is to construct a 12kV distribution line which would provide a source of electricity to northern Butler Valley. Arizona Public Service Company (APS), would construct, operate, and maintain the distribution line for their customer, the McMullen Valley Water Conservation and Drainage District. In turn, the Water District would provide power to Farms International, Inc., aka Butler Valley Farms, an agricultural entity operating on State Trust Land.

At the present time, power for the central pivot irrigation water pumps on Butler Valley Farms is provided by diesel powered generators. Under the no action alternative, the 12kV overhead distribution line would not be constructed and no new ground disturbance would take place. Power for the irrigation pumps would then continue to be provided by diesel powered generators.

This proposed action is in conformance with the Lake Havasu Field Office (LHFO) Resource Management Plan (RMP) approved in May 2007.

Copies of the EA are available from the State BLM Website at:

<http://www.blm.gov/az/st/en/info/nepa.html>

Written comments may be submitted to:

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The public review and comment period for this EA will extend for 30 days, from June 10, 2013 through July 10, 2013. All written comments must be received by the close of business on July 10, 2013. The BLM encourages and welcomes all public comments. Only those who comment will receive further notice of actions connected with this proposed right-of-way project.

By law, the names and addresses of those commenting are available for public review during regular business hours. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment - including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. All comments from organizations or businesses will be available for public inspection in their entirety.

Sincerely,

Signed by:

\_\_\_\_\_/s/\_\_\_\_\_  
Michael Rice  
Project Manager,  
BLM APS Master Agreement Team

**U.S. Department of the Interior  
Bureau of Land Management**

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**ENVIRONMENTAL ASSESSMENT**

**DOI-BLM-AZ-C030-2013-0022-EA**

**AZA-036142**

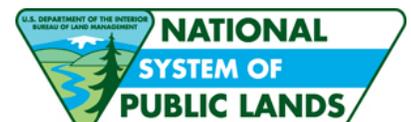
**BUTLER VALLEY  
12 KV DISTRIBUTION LINE  
LA PAZ COUNTY**

Applicant: Arizona Public Service

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Date: May 17, 2013



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# **1. CHAPTER 1 - INTRODUCTION**

## **A. Project Location**

The project site is located within Butler Valley, northeast of Bouse in La Paz County, Arizona. The proposed distribution line generally follows existing McVay Road, and traverses private, federal, and state land within Sections 5, 8, and 17 in Township 6 North, Range 15 West, Sections 9-16, 21, 28, 29, and 32 in Township 7 North Range 15 West, and Section 7 in Township 7 North Range 14 West of the Gila and Salt River Meridian (Map 1; Appendix A). Federal lands managed by BLM are located specifically in the following sections:

- S  $\frac{3}{4}$  mile of Section 5, T6N R15W (along the section line),
- NE  $\frac{1}{4}$ , SE  $\frac{1}{4}$  and SE  $\frac{1}{4}$ , NE  $\frac{1}{4}$  of Section 29 T7N R15W (along the section line),
- Meets and Bounds in the NW  $\frac{1}{4}$  of Section 28 T7N R 15W, and
- Meets and Bounds in the SW  $\frac{1}{4}$  and SE  $\frac{1}{4}$  of Section 21 T7N R 15W.

## **B. Project Background**

Arizona Public Service (APS) proposes the construction of a 12 kilovolt (kV) distribution line to provide electricity for central pivot irrigation water pumps at Butler Valley Farms, an existing farm leased from the Arizona State Land Department (ASLD). The right-of-way requested for the project on federal lands is 40 feet wide for a period of 30 years. The construction and operation of the project would provide a source of electrical power to northern Butler Valley for the McMullen Valley Water Conservation and Drainage District to administer to Butler Valley Farms. This will allow the farm to power their wells with cost-effective electrical power rather than diesel power as is currently.

## **C. Purpose and Need for the Proposed Action**

The BLM's purpose is to respond to the APS application for a 30-year right-of-way grant for an overhead 12 kV power line. The need for action arises from Title V of the Federal Land Management Act (FLPMA) (43 United States Code [USC] 1701), which requires BLM to respond to right-of-way applications.

## **D. Decision to be Made**

The BLM Lake Havasu Field Office (LHFO) will decide whether to approve, to approve with modification, or to deny the right-of-way grant.

## **E. Scoping and Issues**

The Proposed Action was presented to the BLM interdisciplinary NEPA team on November 27, 2012. The following scoping issues were identified: Air Quality, Cultural, Historic & Paleontological Resources, Floodplains, Invasive & Non-Native Species, Lands & Realty,

Migratory Birds, Native American Religious Concerns, Noise, Public Health & Safety, Recreation, Socioeconomics, Threatened or Endangered Species, Vegetation, Visual Resources, and Wildlife.

## **2. CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES**

### **A. Proposed Action (Alternative 1)**

APS proposes the construction of a 12 kV distribution line to provide electricity for central pivot irrigation water pumps at the Butler Valley Farms, an existing farm leased from the ASLD. The right-of-way requested for the project on federal lands is 40 feet wide for a period of 30 years. The proposed distribution line generally follows existing McVay Road, and traverses private, federal, and state land. The length of the entire route is approximately 14 miles, which includes approximately 2.3 miles of BLM administered land, 0.4 miles of BLM administered land with a right-of-way issued to the US Bureau of Reclamation (BOR) for the Central Arizona Project (CAP) canal, 8.3 miles Arizona State Trust Lands, and 3 miles private land, owned by APS. The proposed right-of-way occurs on approximately 45 acres of undeveloped land, including approximately 14.55 acres on private land owned by APS, 17.73 acres of Arizona State Land, 10.49 acres of BLM land, and 1.8 acres of BLM land with a right-of-way for the CAP canal. An additional 13.22 acres of right-of-way are located within the previously-developed Butler Valley Farm leased from ASLD. An additional 3 acres outside the right-of-way may be used during construction on private land as a construction yard, if needed. Construction is anticipated to begin in July 2013 and continue for approximately 9 months.

#### **1. Project Component – Distribution Line Design**

The proposed distribution line would be designed for one 12kV three-phase (three conductors) circuit and one static wire. Single-pole, galvanized steel structures are proposed for the project. An illustration of a typical single-pole structure is provided in Figure 2. The span length between structures will range between 300 feet and 700 feet. Typical design characteristics are listed in Table 1.

<b>TABLE 1 TYPICAL DESIGN CHARACTERISTICS</b>	
Line length	Approximately 14 miles
Type of structure	Single-pole dilled steel
Structure height	55 to 95 feet
Span length	Approximately 300 to 700 feet

<b>TABLE 1 TYPICAL DESIGN CHARACTERISTICS</b>	
Number of structures per mile	8 to 10 using 75' structures, 14 to 16 using 50' to 55' structures
Right-of-way width	Approximately 40 feet
Land disturbed (approximate): <u>Temporary</u> - Wire pulling, splicing sites	An all-terrain vehicle would be used for wire pulling along the right-of-way.
Construction yards (on private land)	Maximum of 3 acres total if needed
<u>Permanent</u> - Structure	Approximately 4 square feet; additional space may be needed in the locations where the pole is guyed.
Access roads	Right-of-way will provide access
Voltage	12,470
Circuit configuration	Single circuit 12kV
Conductor size	1.1-inch
Ground clearance of conductor	21 feet minimum
Pole foundation depth	7 to 25 feet

Pole data for the distribution line is provided in Table 2 below. There are 164 poles proposed for the entire project. Of these, 23 poles are proposed on BLM administered federal land. Of these 23 poles, 4 are special order poles within the CAP right-of-way, 16 are 75' poles, 1 is a 50' pole (with the capacitor bank), 1 is a 80' angle pole, and 1 is a special order pole (closest to the CAP canal). The design includes 36 guy anchors (10' depth with a 1' hole diameter) of which two would be installed at one pole on federal land.

<b>TABLE 2 POLE DATA</b>				
<b>Quantity</b>	<b>Pole</b>	<b>Description</b>	<b>Hole Diameter</b>	<b>Hole Depth</b>
42	1907.501W	50' CL- 1 Steel	1.5'	7'
26	1907.55H2	55' H2 Steel	1.5'	7.5'
72	1907.75H3G	75' H3 Steel	2'	11.5'
2	1907.551G	45' CL-2 Steel	1'	6.5'
16	1907.452G	55' CL-1 Steel	1.5'	7.5'
3	Special Order	Tan 65' Above Ground	4'	25'
1	Special Order	35 Degree Self Supporting 75' Above Ground	4'	25'
1	Special Order	Tan 85' Above	4'	25'

<b>TABLE 2 POLE DATA</b>				
		Ground		
1	1962.G	69A15	4'	15'
Total 164				

Additional equipment off of the existing farm lease consists of 1 Recloser, 3 capacitor banks, and 1 regulator. Of these, one capacitor bank is located on federal land, with the remaining equipment on state or private land. Additional equipment proposed to be located on the existing farm lease consists of the following: 1 Gang operated “J” Switch, 3 Capacitor Banks, 1 regulator, 6 fused disconnects, and 9 transformer banks.

### **2. Project Component – Right-of-Way Acquisition**

A grant for a 40-foot right-of-way for the 2.68 miles of the distribution line that will cross federal lands administered by BLM has been requested for a period of 30 years, encompassing 12.29 acres. This includes the 0.38 miles (1.8 acres) of BLM-administered federal lands with an existing right-of-way for the CAP canal. BLM receives right-of-way rental payments for those portions of the distribution line located on federal lands. No additional access road requirements are anticipated as the right-of-way will provide access, or existing McVay Road in areas where it directly abuts the right-of-way.

### **3. Project Component – Project Construction**

Construction activities will include digging holes, assembling and erecting structures, wire stringing, cleanup, and site reclamation. The number of workers and type of equipment expected to be used to construct the proposed distribution line are provided in Table 3.

<b>TABLE 3 TYPICAL DISTRIBUTION LINE CONSTRUCTION ESTIMATED PERSONNEL AND EQUIPMENT REQUIRED</b>		
Hole digging	2 people	Equipment: 1 hole digger 1 pickup truck
Pole haul	2 people	Equipment: 1 pole haul truck
Structure erection	4 people	Equipment: 1 line truck 1 pickup truck

<b>TABLE 3  TYPICAL DISTRIBUTION LINE CONSTRUCTION  ESTIMATED PERSONNEL AND EQUIPMENT  REQUIRED</b>		
Conductoring	12 people	Equipment: 1 drum puller 1 splicing truck 1 double-wheeled tensioner 1 wire reel trailer 1 line truck 1 sagging equipment 2 pickup trucks
Clean-up	4 people	Equipment: 2 pickup trucks
Rehabilitation	2 people	Equipment: 1 pickup truck
Approx. personnel required	31 people	

Access Roads – Distribution line construction requires the movement of vehicles along the right-of-way. For this project, the right-of-way itself will provide access for construction and maintenance vehicles. Trees and small shrubs within the proposed right-of-way may be cleared or trimmed. Existing access roads within the CAP canal right-of-way will be used to access the route in the vicinity of the canal.

Structure Sites and Right-of-way – Overland construction methods will be used. The clearing of some natural vegetation may be required; however, selective clearing will be performed only when necessary to provide for surveying, electrical clearance, line reliability, and construction and maintenance operations. In construction areas where recontouring is not required, vegetation will be left in place wherever possible to avoid excessive root damage and allow for resprouting. All construction and maintenance activities will be conducted in a manner that would minimize disturbance to vegetation and desert washes. In addition, dust control measures will be utilized as necessary during construction in sensitive areas. An existing APS pump at the CAP canal may be used as needed to provide water for dust control.

Foundation Installation – Excavations for poles are made with power equipment. Area of disturbance associated with each pole is less than 20 square feet, and varies with each pole type as shown in Table 2 (hole diameter). Where the soil permits, a vehicle-mounted power auger or backhoe is used. In rocky areas, the foundation holes may be excavated by drilling and blasting, or special rock anchors may be installed. Blasting would require drilling holes in the area to be excavated. Conventional or plastic explosives would be used. Safeguards such as blasting mats may be used as necessary to protect adjacent property. Construction holes left open overnight will be covered to prevent livestock or wildlife from damage. After

the hole is augured, poles will be set, backfilled, and tamped using existing spoils. Remaining spoils material will be spread on the ground. In the vicinity of the CAP span, six special order poles will be set with concrete to ensure stability. The concrete backfill will be finished no more than 6 inches above natural ground with a slight slope away from the poles and does not require additional disturbance area.

Structure Assembly and Erection – Poles and associated hardware are shipped to each structure site by truck. Structure assembly and mounting of associated line hardware takes place at each site. The assembled structure is then raised and placed in the pre-dug holes. Safety measures such as barriers, flagmen, or other traffic control are used as needed during construction.

Following structure assembly, a pilot line is pulled from structure to structure (or strung) by a vehicle and threaded through the stringing sheaves at each tower. Then a larger diameter, stronger line (the pulling line) is attached to the pilot line and strung. This process is repeated until the ground wire or conductor is pulled through all sheaves. The ground wire and conductor are strung using power pulling equipment at one end and power braking or tensioning equipment at the other end.

The proposed hardware and conductor will limit the audible noise, radio interference (RI), and television interference (TVI), due to corona. Tension will be maintained on all insulator assemblies to assure positive contact between insulators, thereby avoiding sparking. Caution will be exercised during construction to avoid scratching or nicking the conductor surface, which may provide points for corona to occur.

Cleanup and Reclamation – Construction sites and material storage areas will be kept in an orderly condition throughout the construction period. Refuse and trash, including stakes and flags, will be removed from the sites and disposed of in an approved manner. No construction equipment oil or fuel will be drained on the ground. Oils or chemicals will be hauled to an approved site for disposal. No open burning of construction trash will be conducted as part of this project. Following construction and cleanup, reclamation of disturbed areas will be completed. Graded or disturbed surfaces will be restored to the original contour of the land surface and scarifying will be conducted in compacted areas to promote vegetation regrowth.

#### **4. Project Component – Project Operation and Maintenance**

Ground maintenance patrols will review the line periodically. Routine maintenance will include replacing damaged insulators as needed, tightening nuts and bolts, and providing maintenance of vegetation within the right-of-way. Typical maintenance vehicles include standard pick-up trucks, medium sized bucket trucks (2 axle, 6 tires), and very large bucket trucks (3 axle, 10 tires). Maintenance visits are anticipated to occur once twice per year with a

standard pick-up truck, and twice per year with a medium sized bucket truck. Vegetation maintenance will include vehicle access to and within the distribution line corridor and the pruning and removal of vegetation. Vegetation will be pruned and removed by hand tools (chain saws, hand saws, rope) to cut branches and trunks of vegetation and then lop and scatter the limbs and logs within the corridor, or vegetation will be removed by mechanical methods using a mower to cut and masticate vegetation. During operation of the distribution line, the right-of-way will be maintained free of construction related non-biodegradable debris.

## **5. Design Features of the Proposed Action**

- i. A Storm Water Pollution Prevention Plan (SWPPP), including spill prevention, will be prepared for construction of the Proposed Action in compliance with the Arizona Pollutant Discharge Elimination System (AZPDES) requirements. In accordance with the Best Management Practices in the SWPPP, totally enclosed containment will be provided for all hazardous materials (if needed) and trash. All construction waste including trash, litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials will be removed to a disposal facility authorized to accept such materials.
- ii. Structures will be constructed to conform to Suggested Practices for Avian Protection on Power Lines: State of the Art in 2006 (Avian Power Line Interaction Committee).
- iii. APS is committed to safety for its workers and contractors and thus has established policies, procedures, practices, and rules to manage safety, work practices, and conditions to reduce injuries and illnesses. APS implements safety practices for employees and contractors through its *Accident Prevention Manual and Safe Working Rules* (2011). The manual is routinely updated and provides safety requirements, instructions, and guidelines for various work situations and practices that APS employees and APS contractors are likely to encounter, including field practices pertaining to the proposed fiber-optic installation, access roads, and related project features. During construction, safety measures include the use of barriers, flagmen, or other traffic control as necessary.
- iv. If previously unrecorded cultural or paleontological resources are encountered during ground-disturbing activities, these activities will be discontinued in the immediate vicinity of the discovery, and the landowner notified. APS will suspend operations in the area until an evaluation is completed to prevent the loss of cultural or scientific values.

- v. APS will clean off-road equipment (power or high-pressure cleaning) of all mud, dirt, and plant parts prior to moving equipment onto public land to minimize the potential for introduction of non-native species.
- vi. The APS avian protocol will be followed to search for nests prior to construction to avoid impacts to active nests. In compliance with the Migratory Bird Treaty Act, if an active nest is found, BLM or the appropriate landowner will be contacted immediately to determine a course of action.
- vii. Prior to construction, all construction personnel will be instructed on the protection of cultural, paleontological, and ecological resources. To assist in this effort, the construction contract will address (a) federal and state laws regarding antiquities, fossils, and plants and wildlife, including collection and removal; and (b) the importance of these resources and the purpose and necessity of protecting them.
- viii. Guidelines for handling Sonoran Desert Tortoises Encountered on Development Projects (Arizona Game and Fish Department 2007) will be followed.
- ix. APS will protect all survey monuments found within the right-of-way. Survey monuments include but are not limited to General Land Office and BLM Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, APS will immediately report the incident, in writing, to the authorized officer and the respective installing authority, if known. Where General Land Office or BLM right-of-way monuments or references are obliterated during operations, APS shall secure the services of a registered land surveyor or a BLM cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the *Manual of Surveying Instructions for the Survey of the Public Lands of the United States*, latest edition. APS will record such survey in the appropriate county and send a copy to the authorized officer. If the BLM cadastral surveyors or other federal surveyors are used to restore the disturbed survey monument, APS will be responsible for the survey cost.
- x. APS will inform the authorized officer within 48 hours of any accidents on federal lands that require reporting to the Department of Transportation as required by 49 CFR Part 195.

## **6. Similar, Connected and/or Cumulative Actions**

Connected actions include the portion of the proposed distribution line on non-federal land,

including 8.3 miles of state trust lands and 3.0 miles of private land. A right-of-way has been requested from ASLD for the portion of the distribution line that would cross state trust land. Private lands necessary for distribution line are already owned by APS. Impacts from the whole line, including the Proposed Action and connected actions, are analyzed in this EA.

### **B. No Action Alternative (Alternative 2)**

Under the No Action Alternative, none of the Proposed Action components or alternatives would be built.

### **C. Alternatives Considered but Eliminated From Detailed Analysis**

The original proposed route consisted of rebuilding the existing distribution line along the eastern side of the Section 18 line (T6N R15W) which serves the CAP's Cunningham Wash siphon. From the siphon in Section 29 (T7N R15W), the proposed line would have continued underground along the existing CAP right-of-way east to McVay Road on the east side of Section 29, and then continue north overhead as in the existing proposed route. This alternative was preferred by the applicant but was denied by CAP and is therefore not considered further.

### **D. Conformance with Land Use Plan**

The proposed action is in conformance with the *Lake Havasu Field Office Resource Management Plan* (RMP) which was approved on May 10, 2007. The proposed action is in conformance with the applicable RMP because it is specifically provided for in the following RMP decision(s):

- WF-15. During construction and tree pruning associated with plan implementation, identify and avoid all migratory bird nests.
- WF-20. Construction sites for wind turbines, power lines, telecommunication, towers, solar power sites, and any other new technology, etc., will conform with guidelines developed by USFWS to minimize impacts to wildlife species, particularly migratory birds and bats.
- LR-8. Locating facilities outside of designated corridors and communications sites will be avoided in Wildlife Habitat Areas if practicable.
- LR-14. In utility corridors, uses including but not limited to transportation, pipelines, and electrical transmission lines will be allowed when the uses are compatible. These designated corridors apply only to BLM-administered lands.
- LR-11. New utility facilities will be located in designated corridors unless an evaluation of the project shows that location outside of a designated area is the only practicable alternative.
- LR-21. Central Arizona Project (CAP) (LGN-2) designated utility corridor (1 mile width).

## **E. Relationship to Statutes, Regulations, or Other Plans**

Statutes and regulations that apply to the Proposed Action include the following:

- National Environmental Policy Act of 1969 (Public Law 91-190)
- Endangered Species Act of 1973; 16 U.S.C. 1531-1544 as amended 1976-1982, 1984 and 1988.
- Migratory Bird Treaty Act, 16 USC 703-712 as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989
- The Clean Water Act of 1972
- Native American Graves Protection and Repatriation Act (NAGPRA) 1990
- National Historic Preservation Act (NHPA) of 1966 as amended (16 U.S.C. 470).

## **3. CHAPTER 3 - AFFECTED ENVIRONMENT**

This section describes the existing conditions of the affected environment. The table below summarizes the resources and concerns reviewed for this project. Resources not present within the project study area, as well as those present and not affected, are not discussed. Those resources that have been identified by an interdisciplinary team as present and potentially affected are discussed below.

### **A. General Project Setting**

The distribution line corridor is located in Butler Valley northeast of Bouse in La Paz County, Arizona. The distribution line ties in to an existing line on private land at the southwest corner of Section 17 (T6N R15W) that begins at the Utting substation at State Route (SR) 72. Butler Valley is within the Basin and Range physiographic province in Arizona. The Granite Wash Mountains occur to the southeast of the project area, State Highway 72 occurs to the west, Cunningham Wash lies to the west, the Bouse Hills occur to the northwest, the Harcuvar Mountains lie to the northeast, and the Buckskin Mountains occur to the north of the project corridor. Butler Valley Farms, the distribution line destination, is operated on a state trust land agricultural lease by Farms International, Inc. The farm produces alfalfa and has been in production since the 1970's.

Climate in the project area is typical of the arid southwest, which is characterized by long, hot summers and mild winters. The average annual high temperature in Bouse, Arizona is 86.5 degrees Fahrenheit (F), with the warmest temperatures in July (average high 108 degrees F) and the coolest in December (average high 64 degrees F). The average annual low temperature is 55 degrees, with the lowest temperatures in December (average low 36 degrees F) and the warmest lows in July (average low 78 degrees F). The average annual precipitation is 5.77 inches, with the majority of the precipitation occurring in January, February, and August

(www.weather.com). Elevation within the corridor ranges from approximately 1,300 ft above mean sea level (msl) to 1,500 ft above msl.

## B. Resources / Concerns

The following table is a list of resources/concerns that were considered in this Environmental Assessment. Areas of Critical Environmental Concern are not present in the project vicinity. Environmental justice issues are not present in the project area as there is no significant minority or low-income populations that could be impacted by the proposed project. There are no prime or unique farmlands on BLM-administered lands within the Lake Havasu Field Office area. As no intermittent or perennial streams occur in the project vicinity, fish habitat is not present in the project area. Fuels/fire management issues are not present in the project area. Grazing occurs within the vicinity of the project area but would not be affected by installation of a 12kV distribution line. County law enforcement is present in the project area but would not be affected by the proposed right-of-way. Rangeland is present but not affected by the proposed right-of-way. Soils are present but not affected by the proposed right-of-way. Travel management issues occur within the project vicinity but would not be affected by the proposed right-of-way. Hazardous or solid wastes are not present and would not be affected by the proposed project. Drinking or groundwater quality issues are not present within the proposed project area. Wetlands or riparian zones do not occur within or adjacent to the proposed right-of-way. There are no Wild & Scenic Rivers in the vicinity of the project area. There are no Wilderness Areas within or adjacent to the proposed right-of-way. These resources/concerns that are either not present or present but not affected by the Proposed Action will not be addressed further in this Environmental Assessment (EA).

<b>PROJECT RESOURCE REVIEW</b>			
<b>Resources &amp; Programs Considered</b>	<b>Not Present</b>	<b>Present and Not Affected</b>	<b>Present and/or Potentially Affected</b>
Air Quality*			X
Areas of Critical Environmental Concern	X		
Cultural, Historic & Paleontological Resources*			X
Environmental Justice*	X		
Farmlands (Prime or Unique)	X		
Fish Habitat*	X		
Floodplains*			X
Fuels/Fire Management	X		
Grazing		X	
Invasive & Non-Native Species			X
Lands & Realty			X
Law Enforcement		X	
Migratory Birds*			X

<b>PROJECT RESOURCE REVIEW</b>			
Minerals	X		
Native American Religious Concerns*	X		
Noise			X
Public Health & Safety			X
Rangelands and Forests*		X	
Recreation			X
Socioeconomics			X
Soils		X	
Threatened or Endangered Species*			X
Travel Management		X	
Vegetation			X
Visual Resources			X
Wastes (Hazardous or Solid)*	X		
Water Quality (Drinking or Groundwater)*	X		
Wetlands/Riparian Zones*	X		
Wild & Scenic Rivers*	X		
Wild Horses/Burros	X		
Wilderness*	X		
Wildlife			X

\*Consideration Required by Law or Executive Order

## **1. Air Quality**

La Paz County is designated an Attainment Area by the Arizona Department of Environmental Quality (ADEQ), which means that La Paz County has pollution levels equal to or less than the national air quality standards. Under the National Ambient Air Quality Standards, the air quality rating for BLM-administered lands within the LHFO planning area is Class II. Class II standards allow for moderate deterioration of air quality associated with moderate controlled industrial and population growth (BLM 2007). Existing air emissions in the project vicinity include dust from travel on unpaved roads in the project vicinity. These emissions are typically dispersed by prevailing winds.

## **2. Cultural, Historic, and Paleontological Resources**

A Class III pedestrian cultural resources survey of the proposed distribution line (including federal, state, and private lands) was conducted on November 28 and 29, 2012 by Four Corners Research, Inc. (January 2012). No archaeological sites and five isolated occurrences of cultural materials (historic land survey markers) were identified, none of which occur on federal lands. None of the isolated occurrences are considered eligible to the National Register of Historic Places as they are not significant. As the CAP fenced right-of-way was comprehensively surveyed twice before construction of the canal (in 1972 and 1978) and was completely disturbed by construction of the canal and related features, this area was not included in this 2012 survey.

No previously recorded sites are located within the fenced CAP right-of-way within the proposed project area.

### **3. Floodplains**

Floodplains do not occur within the project area, based on Federal Emergency Management Agency (FEMA) Federal Insurance Rate Maps (FIRM Panel No. 04012C0825C and 04012C1100C) dated August 28, 2008. The nearest 100 year floodplain mapped by FEMA is the Cunningham Wash floodplain. FEMA has not mapped any floodplains in the area north of the CAP canal, near the headwaters of Cunningham Wash where the floodplain limits are very close to or meet the edges of the ephemeral wash.

The majority of the proposed right-of-way is located approximately ¼ mile or more from the Cunningham Wash 100 year floodplain designated by FEMA. Two locations where the proposed right-of-way is closest to Cunningham Wash is at the CAP canal span, where the right-of-way lies approximately 900 ft east of Cunningham Wash, and at the intersection of McVay Road and Butler Valley Farm Road on State Trust Lands (approximately 2.5 miles north of the CAP canal), where Cunningham Wash lies approximately 550 feet to the west.

### **4. Invasive and Non-Native Species**

Invasive or non-native species were not observed on federal lands within the project site. Russian thistle (*Salsola kali*) and puncture vine (*Tribulus terrestris*) occurs within the previously-developed Butler Valley Farm right-of-way on state trust lands, located to the north of BLM-administered lands.

### **5. Lands/Realty**

The majority of the project site is located within the existing one-mile wide utility corridor designated by the BLM for the CAP canal (LGN-2). Approximately 2.5 miles of the proposed distribution line which lies north of the CAP canal leading to the existing Butler Valley Farm, including both federal and state trust lands, are located outside the CAP canal utility corridor. The on-farm portion of the line within the existing state lease is also outside the BLM utility corridor designation. Existing land uses within the proposed project site include open space, McVay Road, and the CAP canal.

### **6. Migratory Birds**

Migratory birds occur in the project vicinity. Bird species that may occur in the project vicinity include black-throated sparrow (*Amphispiza bilineata*), Costa's hummingbird (*Calypte costae*),

cactus wren (*Campylorhynchus brunneicapillus*), roadrunner (*Geococcyx californianus*), Gambel quail (*Lophortyx gambeli*), black-tailed gnatcatcher (*Polioptila melanura*), common raven (*Corvus corax*), and mourning dove (*Zenaida macroura*).

## **7. Noise**

The project site is generally undeveloped. SR 72 occurs approximately 3 miles to the east. The most common noise at the project site is from motor vehicles, including automobiles and trucks in the project area.

## **8. Public Health & Safety**

Public use of the project vicinity is generally very low and limited to use of McVay Road and other unpaved roadways in the area for recreational or other uses, including trucks to Butler Valley Farm, although an alternate access to the farm does exist.

## **9. Recreation**

The project site is located within the LHFO Desert Management Unit, the largest unit within the planning area and is not located within a Special Management Area (SMA). The site's recreation opportunity spectrum is Rural Natural in the southern part of the line, and Semi-Primitive and north of the CAP (see RMP Map 3-6). The primary recreational activities in the Desert Management Unit are OHV riding, camping, rock hounding, hunting, birding, nature study/appreciation, picnicking, horseback riding, and target shooting (RMP page 3-84). Dispersed camping involves camping overnight in undeveloped site. The Parker 250 and 500 Desert OHV races occur immediately north of the project area in January and February. The desert race includes Grahams Well, just north of the northern portion of the distribution line. There are no designated spectator areas in the vicinity.

## **10. Socio-economics**

The project site is located in an unincorporated part of La Paz County, with a population of 20,489 in 2010 with 4.6 persons per square mile (Census 2010). Per capita income in La Paz County was \$25,318 in 2010. Agriculture adds approximately \$83 million to the county's economy (Arizona Department of Commerce 2008). The incorporated Town of Bouse, the nearest town northwest of the project area, has a population of 996 with 51 percent of the population 65 years or older (Census 2010). The population density is 60.9 people per square mile. The median per capita income is \$13,623. The economy of Bouse is tourism, agriculture, and retirees. The annual influx of winter visitors doubles Bouse's population and usually fills the

RV parks to capacity. Butler Valley Farms is an existing agricultural lease from ASLD, which is currently not profitable due to high operating costs.

## **11. Threatened or Endangered Species and Special Status Species**

No federally-listed species have the potential to occur within or adjacent to the project site based on existing habitat and known species range, as described in the Biological Evaluation (Appendix B). Special status species that may occur in the vicinity of the project area consist of the Mojave fringe-toed lizard (*Uma scoparia*), Sonoran desert tortoise (*Gopherus agassizi*), gilded flicker (*Colaptes chrysoides*), Le Conte's thrasher (*Toxostoma lecontei*), western burrowing owl (*Athene cunicularia hypugea*), California leaf-nosed bat (*Macrotis californicus*) and the cave myotis (*Myotis velifer*). Suitable habitat for the Mojave fringe-toed lizard was not observed within the proposed right-of-way. No bat roosts or burrows suitable for burrowing owls or desert tortoises were observed during biological surveys of the distribution line corridor.

## **12. Vegetation**

Vegetation communities within the project vicinity are described as Lower Colorado River Valley subdivision of the Sonoran Desert by Brown (1994). Vegetation within the proposed right-of-way is dominated by creosotebush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), saltbush (*Atriplex canescens*), burrobrush (*Hymenoclea salsola*), paloverde (*Cercidium floridum*), and mesquite (*Prosopis juliflora*). Cacti and succulents include saguaro (*Carnegiea gigantea*), hedgehog cactus (*Echinocereus englemannii* and *E. fendleri*), staghorn cholla (*Opuntia versicolor*), jumping cholla (*Opuntia fulgida*), ocotillo (*Fouquieria splendens*), and desert Christmas cactus (*Opuntia leptocaulis*). Crucifixion thorn (*Canotia holocantha*) occurs in the northern half of the proposed right-of-way. The proposed right-of-way traverses several small ephemeral washes along the 14-mile route. Vegetation along the wash banks typically includes a higher density of creosotebush, paloverde, and mesquite, and in the northern half of the proposed right-of-way, crucifixion thorn.

## **13. Visual Resources**

The BLM classifies lands that it administers into four Visual Resource Management (VRM) Class objectives, which provide management direction and threshold standards to which management activities are measured. The VRM Class Objectives range from Class I, the most scenic and therefore the most sensitive to development changes, to Class IV, the least scenic and also least sensitive. The BLM currently manages the project site as a Class IV area (see RMP Map 33). Class IV objectives are to provide for management activities, which require major modification of the existing character of the landscape, as follows:

1. The level of change to the characteristic viewshed can be high.
2. Management activities may dominate the view and be the major focus of viewer attention.
3. Every attempt should be made to minimize the impact of activities through careful location, minimal disturbance, and repeating the basic design elements.

The visual setting in the proposed project area is characterized by Butler Valley and the natural topography of the surrounding mountain ranges. The valley is formed by the Buckskin Mountains to the northwest, the Rawhide Mountains to the north, the Bouse Hills to the southwest, the Harcuvar Mountains to the east and the Granite Wash Mountains to the southeast. Development within portions of the valley, including the Arizona & California railroad, public roads, the CAP canal, area farms, low-density residential, and area power lines, have altered the native character of the project area.

The project site is partially visible in long-distance views from SR 72, where the project site lies 2-3 miles away from southeastern bound SR 72 and 4-5 miles away for northwestern bound travelers. The alignment of the project site, however, lies at an approximate 45 degree angle to SR 72, which reduces overall visibility of the location. The project site is visible along McVay Road, an unpaved public roadway located adjacent to the proposed right-of-way. The project site is relatively flat, allowing views of the site from all directions.

### **13. Wildlife**

The project site is located within Arizona Game & Fish Department (AGFD) Game Management Unit 44A. Game within this unit consists of mule deer, quail, dove, bighorn sheep, and elk. Deer and bighorn sheep are typically found in the mountainous areas in the vicinity including the Harcuvar, Buckskin, and Harquahala Mountains.

Wildlife and/or wildlife sign observed in the project vicinity includes desert cottontail (*Sylvilagus auduboni*), coyote (*Canis latrans*), pocket mice (*Perognathus* sp.), common raven (*Corvus corax*), and mourning dove (*Zenaida macroura*). Reptile species are generally hibernating in the winter so would not be expected to be seen at the time of year surveyed (December). During the field inspection, bird activity was also limited due to the time of year. Bird species that may also occur in the project vicinity include black-throated sparrow (*Amphispiza bilineata*), Costa's hummingbird (*Calypte costae*), cactus wren (*Campylorhynchus brunneicapillus*), roadrunner (*Geococcyx californianus*), Gambel quail (*Lophortyx gambeli*), and black-tailed gnatcatcher (*Polioptila melanura*). Reptile species anticipated to occur in the project vicinity include whiptails (*Aspidoscelis* sp.), rattlesnakes (*Crotalus* sp.), desert spiny lizard (*Sceloporus magister*), and brush or tree lizards (*Urosaurus* sp.). Mammal species that may be anticipated to occur in the project vicinity include ground squirrels (*Ammospermophilus harrisi*), javelina (*Dicotyles tajacu*), kangaroo rats (*Dipodomys* sp.), white-throated woodrat (*Neotoma albigula*), and kit fox (*Vulpes macrotus*).

## **4. CHAPTER 4 - ENVIRONMENTAL CONSEQUENCES**

### **A. Potential Direct and Indirect Effects**

This section describes the environmental consequences of those resources/concerns identified in Chapter 3 as present and/or potentially affected. Resources not present within the project study area, as well as those present and not affected, are not discussed.

#### **1. Air Quality**

##### **a) Proposed Action**

###### **- Air Quality**

Existing air emissions in the project vicinity including motor vehicle exhaust is typically dispersed by prevailing winds and would not change substantially from existing conditions. Grading and construction activities along a maximum of 48 acres may result in a temporary increase in fugitive dust, although this would be minimized by the use of water for dust control. Impacts are anticipated to be short-term and would not significantly impact air quality. Indirect impacts to air quality would be beneficial as operation of the distribution line would allow the conversion from diesel power to electrical at the Butler Valley Farms well pumps.

###### **- Climate Change**

Existing climate prediction models are global in nature, therefore they are not at the appropriate scale to estimate potential impacts on climate change from the direct or indirect effects of the Proposed Action.

##### **b) No Action Alternative**

No Action would result in no change from existing air quality at the project site.

#### **2. Cultural, Historic, and Paleontological Resources**

##### **a) Proposed Action**

As no significant cultural, historic, or paleontological resources were identified within the project site, the Proposed Action would result in no impacts to these resources (Appendix C).

##### **b) No Action Alternative**

As no cultural, historic, or paleontological resources occur within the project site, the No Action Alternative would result in no impacts to these resources.

### **3. Floodplains**

#### **a) Proposed Action**

As floodplains do not occur within the project site, the Proposed Action would result in no direct impacts to this resource. Best management practices implemented during construction as part of the SWPPP would prevent any indirect impacts associated with runoff offsite onto the floodplain.

#### **b) No Action Alternative**

The No Action Alternative would result in no impacts to floodplains in the project vicinity.

### **4. Invasive and Non-Native Species**

#### **a) Proposed Action**

Construction and operation of the proposed distribution line is not anticipated to result in an increase in invasive or non-native species growth on federal lands. As APS has proposed to clean off-road equipment (power or high-pressure cleaning) prior to moving equipment onto public land, the potential for introduction of non-native species is minimized.

#### **b) No Action Alternative**

The No Action Alternative would result in no change to existing conditions of invasive and non-native species at the project site.

### **5. Lands & Realty**

#### **a) Proposed Action**

The Proposed Action would result in the issuance of a right-of-way grant for a 12 kV distribution line by BLM for a period of 30 years. The distribution line would also cross the existing CAP right-of-way. There are no other effects to lands and realty from this alternative.

#### **b) No Action Alternative**

The No Action Alternative would result in no change to existing land and realty conditions at the project site.

## **6. Migratory Birds**

### **a) Proposed Action**

The Proposed Action would not result in a major change to the existing migratory bird habitat in Butler Valley. As the APS avian protocol will be followed for work conducted from February 15 through August 1 (nesting season), impacts to active nests would be avoided.

### **b) No Action Alternative**

The No Action alternative would result in no change to existing conditions for migratory birds.

## **7. Noise**

### **a) Proposed Action**

Short-term noise would be generated from general construction of the distribution line. Once construction is complete, noise is anticipated to drop to ambient conditions as noise from maintenance vehicles would be infrequent (four times a year or less) and minimal.

### **b) No Action Alternative**

The No Action Alternative would result in no change in noise from existing conditions.

## **8. Public Health & Safety**

### **a) Proposed Action**

During construction, public safety measures as described in the Proposed Action (Design Criteria) would be implemented as necessary to ensure the safety of the public and employees. Due to the limited use of area roadways and these safety measures proposed, impacts to public health & safety are considered to be negligible from the Proposed Action.

### **b) No Action Alternative**

The No Action Alternative would result in no change in public health & safety from existing conditions.

## **9. Recreation**

### **a) Proposed Action**

The Proposed Action would have no effect on the recreation opportunities in the area. Existing recreational opportunities in the area accessed by McVay Road including OHV riding, dispersed camping, rock hounding, hunting, birding, picnicking, horseback riding, and target shooting

may continue in areas that it is allowed. The construction and operation of the proposed distribution line would have no effect on the Parker 250 and 500 Desert OHV races, as the course lies to the north of the project site and there are no designated spectator areas in the vicinity.

**b) No Action Alternative**

The No Action alternative would result in no change to the existing recreation in the project area.

**10. Socioeconomics**

**a) Proposed Action**

The Proposed Action would directly result in the employment of an estimated 31 APS personnel during construction. Implementation of the Proposed Action would result in annual direct payments to the BLM and ASLD for rights-of-way. The Proposed Action would allow Butler Valley Farms to convert to electrical power, resulting in the continuation of agricultural operations. Indirect benefits to Federal, State, and County governments would also occur through the payment of payroll and sales taxes from both Butler Valley Farms and APS and a continuation of payments to the state per lease agreements.

**b) No Action Alternative**

The No Action alternative would result in no change to the socioeconomic conditions in the project area.

**11. Threatened or Endangered Species and Special Status Species**

**a) Proposed Action**

The Proposed Action would result in no impact to any federally-listed threatened or endangered species as none occur in the project vicinity. Grading and removal of vegetation for construction of the distribution may reduce potential habitat for BLM sensitive species including the cave myotis, California leaf-nosed bat, desert tortoise, and Le Conte's thrasher by up to 48 acres (including federal, state, and private lands). Potential direct impacts to Le Conte's thrasher can be avoided by following the APS avian protocol.

As a connected action, project implementation could affect the gilded flicker through direct impacts to three potential saguaro cactus nest sites on private land or through disturbance or other indirect effects that could cause nest failure. As with the Le Conte's thrasher above, potential direct impacts to the flicker can be avoided by following the APS avian protocol.

**b) No Action Alternative**

The No Action alternative would result in no change to threatened or endangered species and special status species in the project area.

**12. Vegetation**

**a) Proposed Action**

Direct impacts would occur to a maximum of 48 acres (including federal and non-federal lands) of Lower Colorado River Valley subdivision of the Sonoran Desert vegetation type, including the loss of trees and shrubs within the right-of-way during construction and through continued maintenance (trimming and/or clearing of vegetation) over the long-term. As disturbed areas will be recontoured and compacted areas scarified to promote vegetation regrowth, the loss of vegetation is anticipated to be minor over the long-term.

**b) No Action Alternative**

The No Action alternative would result in no change to vegetation within the project site.

**13. Visual Resources**

**a) Proposed Action**

The visual setting of the project area would not change significantly from development of the Proposed Action. Localized, minor impacts on the visual character of the immediate landscape would occur by introducing steel poles and associated infrastructure in a generally undeveloped area. However, distribution lines are already a part of the built environment in the project vicinity. Since the project area is partially visible in long-distance views from SR 72, although with reduced views at an angle from SR 72, the project may become more noticeable from the addition of the distribution line. The distribution line would be clearly visible to those travelling along the adjacent, unpaved arterial McVay Road. The Proposed Action is consistent with the VRM Class IV objectives and would not dominate the view of Butler Valley.

**b) No Action Alternative**

The No Action alternative would result in no change to the existing visual resources in Butler Valley.

**14. Wildlife**

**a) Proposed Action**

Construction of the Proposed Action would result in adverse impacts to wildlife located within the right-of-way. Most wildlife would be expected to move to adjacent areas to avoid construction activities. However, some mortality for displaced animals is expected. Net loss of a maximum of 48 acres of habitat would occur. Following construction, disturbed areas will be recontoured and compacted areas scarified to promote habitat restoration. Therefore, loss of vegetation is anticipated to be minor over the long-term.

#### **b) No Action Alternative**

The No Action alternative would result in no change to existing wildlife resources within the project site.

### **B. Cumulative Effects**

#### **1. Introduction**

Cumulative effects are the impacts on the environment that may result from the incremental effect of the Proposed Action or No Action alternative in combination with other past, present, and reasonably foreseeable future actions on BLM-administered lands, as well on those lands under other jurisdictions that are adjacent to or within BLM boundaries. Cumulative effects must consider the likely impact of the Proposed Action or No Action alternative when combined with these additional actions. This section describes the cumulative effects of those resources/concerns identified in Chapter 3 as present and/or potentially affected.

#### **2. Past and Present Actions**

Butler Valley was named for Sam Butler, who was living in the area in 1888. Butler Valley Farms has been in operation since the early 1970's. Over time, native vegetation has been cleared to construct the CAP canal right-of-way, McVay Road, SR 72, farms and access roads in the area, the Utting Siding airstrip, dispersed camping sites near Cunningham Wash, and for off-road vehicle use. An existing APS distribution line occurs within Butler Valley, one mile to the east of the project corridor, to serve the CAP's Cunningham Wash siphon. A Western Area Power Administration (WAPA) transmission line traverses the northern portion of Butler Valley. An inactive APS pilot groundwater recharge project, which was in operation from about 2001-2003, occurs adjacent to the proposed right-of-way.

#### **3. Reasonably Foreseeable Action Scenario**

The existing federal right-of-way request is to operate for 30 years. If development of Butler Valley occurs, the 12kV distribution line could be upgraded to a 69 kV line. No new actions are

known to be currently planned within Butler Valley at this time. However, the State of Arizona has indicated an interest in the potential future development of a Butler Valley groundwater recharge project.

**a) Cumulative Effects to Resources**

This section describes the cumulative effects of those resources/concerns identified in Chapter 3 as present and/or potentially affected. Cumulative effects are not anticipated to occur to the following resources, however, as the Proposed Action would result in little or no change from current conditions or would have no impact on these resources: air quality, cultural, historic, and paleontological resources, floodplains, invasive and non-native species, migratory birds, noise, public health & safety, recreation, and visual resources.

**(1) Land Use & Realty**

**(a) Proposed Action**

The Proposed Action would cumulatively add up to 48 acres to the previous disturbances within Butler Valley. The right-of-way would result in a cumulative increase to the available utility system within the region. Implementation of the Proposed Action is therefore not expected to result in adverse cumulative impacts to lands or realty.

**(b) No Action Alternative**

No Action would result in no cumulative change from existing conditions.

**(2) Socioeconomics**

**(a) Proposed Action**

The Proposed Action would result in a cumulative beneficial impact to socioeconomics of the region through employment, direct realty payments to the state and BLM, and the support of the agricultural industry in the region.

**(b) No Action Alternative**

No Action would result in no cumulative change from existing socioeconomic conditions.

**(3) Threatened & Endangered Species**

**(a) Proposed Action**

The Proposed Action would result in no change to federally-listed threatened and endangered species as none would be impacted by the project. The Proposed Action would result in a cumulative loss of up to 48 acres (federal and non-federal lands) of Sonoran desert vegetation which may impact potential cave myotis and California leaf-nosed bat foraging habitat, as well as habitat for the Sonoran desert tortoise and Le Conte's thrasher in Butler Valley.

As a connected action, project implementation may result in a cumulative impact to the gilded flicker through direct impacts to three potential saguaro cactus nest sites on private land or through disturbance or other indirect effects that could cause nest failure. Cumulative impacts to the species can be avoided by following the APS avian protocol.

**(b) No Action Alternative**

No Action would result in no cumulative change from existing conditions to threatened and endangered species.

**(4) Vegetation**

**(a) Proposed Action**

The Proposed Action would result in a cumulative loss of a maximum of 48 acres of Sonoran desert vegetation in Butler Valley. As areas disturbed from construction will be recontoured and compacted areas scarified to promote vegetation regrowth, loss of vegetation is anticipated to be minor over the long-term.

**(b) No Action Alternative**

No Action would result in no cumulative change from existing vegetation conditions.

**(5) Wildlife**

**(a) Proposed Action**

The Proposed Action would result in an additive impact to wildlife from clearing up to 48 acres of potential Sonoran desert habitat in Butler Valley. As areas disturbed from construction will be recontoured and compacted areas scarified to promote vegetation regrowth, loss of wildlife habitat is anticipated to be minor over the long-term.

**(b) No Action Alternative**

No Action would result in no cumulative change from existing wildlife conditions.

## **5. CHAPTER 5 - TRIBES, INDIVIDUALS, ORGANIZATIONS OR AGENCIES CONSULTED**

### **1. Bureau of Land Management (List of Preparers)**

Michael Rice, Project Manager  
Christopher McLaughlin, Archaeologist  
Mary Gilbert, Wildlife Biologist  
Lisa Stapp, Realty Specialist  
Doug Adams, Wildlife Biologist  
George Shannon, Archaeologist  
Amanda Deeds, Visual Resources  
Dave Daniels, District Planning and Environmental Coordinator  
Amanda Dodson, Assistant Field Manager

### **2. Federal, State, and County Agencies**

Arizona Department of Environmental Quality  
Arizona State Land Department  
Central Arizona Project  
McMullen Valley Water Conservation & Drainage District  
U.S. Fish & Wildlife Service  
U.S. Army Corps of Engineers

## **6. CHAPTER 6 – REFERENCES**

Arizona Department of Commerce. 2008. Profile: La Paz County, Arizona.

Arizona Game & Fish Department. 2007. Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects. October 23.

Arizona Game & Fish Department. 2009. Burrowing Owl Project Clearance Guidance for Landowners. Arizona Burrowing Owl Working Group. January.

Avian Power Line Interaction Committee. 2006. Suggested Practices for Avian Protection on Power Lines: State of the Art in 2006. Pier Final Project Report CEC-500-2006-022.

Brown, David E., 1994. Biotic Communities, Southwestern United States and Northwestern Mexico. University of Utah Press; Salt Lake City.

Bureau of Land Management, 2007. Record of Decision and Approved Resource Management Plan. Lake Havasu Field Office.

Bureau of Land Management, 2010. Updated BLM Sensitive Species List for Arizona. Instruction Memorandum No. AZ-2011-005. December 22.

Federal Emergency Management Agency. 2008. Flood Insurance Rate Maps, Unincorporated La Paz County, 04012C0825C and 04012C1100C. August.

Four Corners Research 2013. A Cultural Resources Survey of the Proposed Butler Valley 12.5 kV Distribution Line, La Paz County, AZ. Final Report. Report Number 12-494.

Himes Consulting, L.L.C. 2013. Butler Valley 12 kV Distribution Line, La Paz County, AZ, Biological Evaluation. April.

National Resources Conservation Service. 2012. Websoil Survey: Kofa Area, Arizona. Parts of La Paz and Yuma Counties (AZ657).

U.S. Fish & Wildlife Service. 2013. La Paz County Species List. February 5.

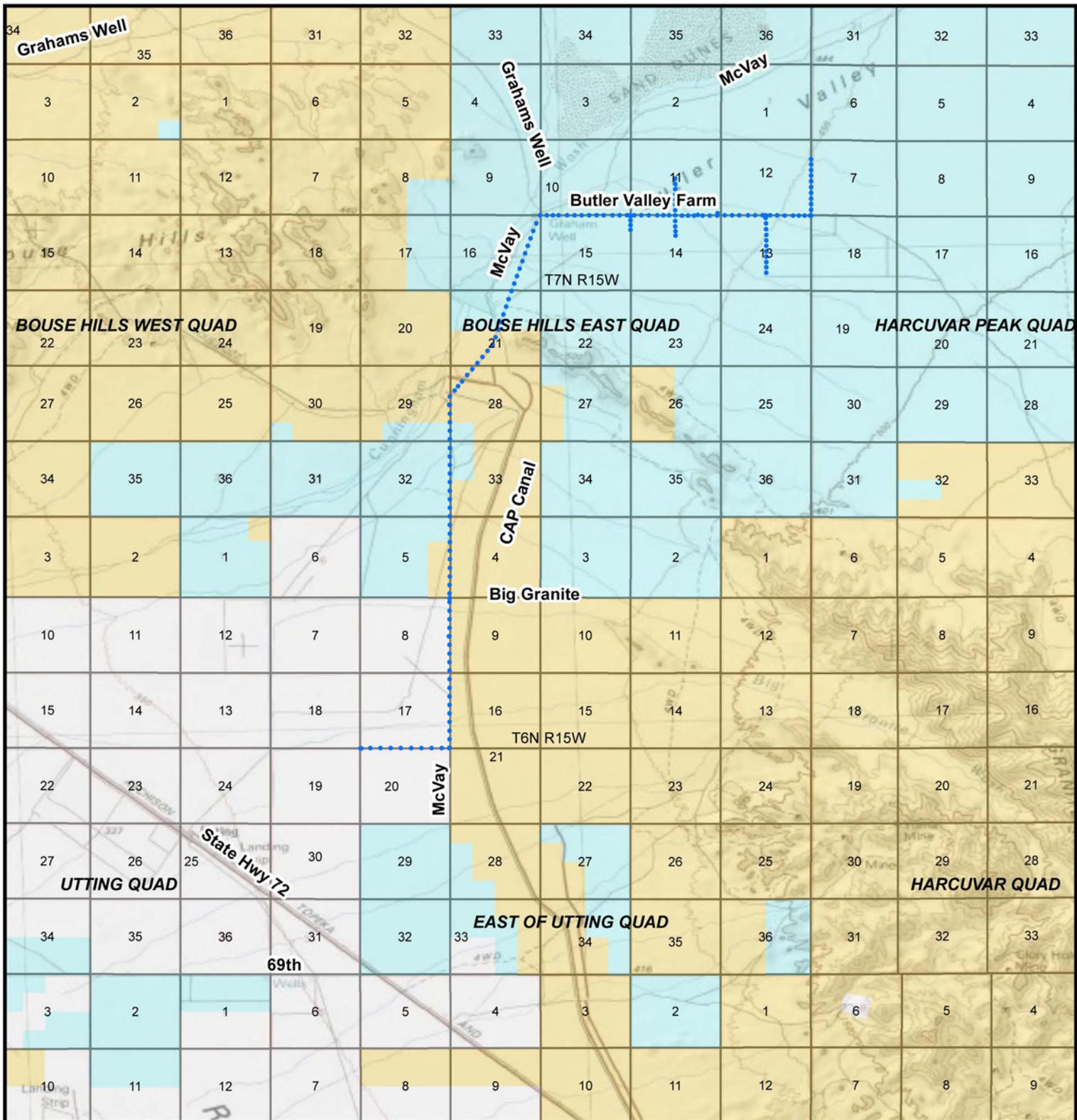
U.S. Geological Survey. 1990. East of Utting, AZ and Bouse Hills East, AZ, 7.5-Minute Topographical Maps.

## **7. APPENDICES**

- A. Appendix A – Maps**
- B. Appendix B – Biological Clearance**
- C. Appendix C – Cultural Clearance**
- D. Appendix D – Plan of Development**

**APPENDIX A**

**MAPS**



# Butler Valley 12kV Distribution Line

## Legend

- Proposed Pole Locations (Along West Side of McVay Rd.)
- BLM
- State
- Private

Figure 1



**APPENDIX B**  
**BIOLOGICAL CLEARANCE**

May 13, 2013

To: Michael Rice, Project Manager, BLM/APS Master Agreement Team  
From: Mary Gilbert, Wildlife Biologist, BLM/APS Master Agreement Team  
Re: Review of “Butler Valley 12 kV Distribution Line Final Biological Evaluation”

Arizona Public Service has submitted a right-of-way permit application for construction of a 12 kV power line in Butler Valley, which lies just a few miles east of the town of Bouse, La Paz County, Arizona. The Biological Evaluation (BE) was contracted to Himes Consulting, Chandler Arizona, which submitted the final version in April 2013.

In summary, the BE determined that the following species could occur in the project area:

Reptiles:	Mohave fringe-toed lizard	( <i>Uma scoparia</i> )	BLM Sensitive
	Sonoran Desert tortoise	( <i>Gopherus morafkai</i> )	Fed. Candidate
Birds:	Gilded flicker	( <i>Colaptes chrysoides</i> )	BLM Sensitive
	Le Conte’s thrasher	( <i>Toxostoma lecontei</i> )	BLM Sensitive
	Western burrowing owl	( <i>Athene cunicularia hypugaea</i> )	BLM Sensitive
Mammals:	California leaf-nosed bat	( <i>Macrotis californicus</i> )	BLM Sensitive
	Cave myotis	( <i>Myotis velifer</i> )	BLM Sensitive

Himes Consulting evaluated the project’s impacts on these species using current literature, online evaluation tools and a field review. The findings are as follows:

- Sonoran Desert tortoise habitat occurs within the project area. Tortoises dispersing across the ROW during construction would be vulnerable to vehicular traffic. Guidance is included for avoiding such incidents.
- Mohave fringe-toed lizards do not occur within 3 miles of the project so will not be impacted.
- Although the gilded flicker has not been found during bird surveys within three miles of the project area, three saguaros (*Carnegiea gigantea*) on private land within the ROW likely would be destroyed, resulting in a loss of nesting flickers. Work crews will follow the APS Avian Protocol to avoid loss of individuals.
- LeConte’s thrashers have been seen during bird surveys in the vicinity, but not within 3 miles of the project area. Work crews will follow the APS Avian Protocol to avoid loss of nests.
- No sign of burrowing owls was found. Both habitat and rodent populations are insufficient.
- Any impacts to California leaf-nosed bats and/or cave myotis from the loss of vegetation (which supports insects on which bats subsist) would be short-term as the ROW revegetates.

This BE has adequately reviewed special status species in the project area and includes procedures for minimizing potential impacts to those species. I accept the conclusions and recommend project clearance.

/s/

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Mary Gilbert

**APPENDIX C**  
**CULTURAL CLEARANCE**

May 13, 2013

To: Michael Rice, Project Manager, BLM/APS Master Agreement Team

From: Chris McLaughlin, Archaeologist, BLM/APS Master Agreement Team

Re: Review of “A Cultural Resources Survey of the Proposed Butler Valley 12kV Power Line, La Paz County, Arizona” – dated April 11, 2013

Arizona Public Service has submitted a right-of-way permit application for construction of a 12 kV power line in Butler Valley, which lies just a few miles east of the town of Bouse, La Paz County, Arizona. The Cultural Resources Survey (CRS) was contracted to DMG Four Corners Research, Incorporated (DMG), which submitted the final version to Himes Consulting of Chandler Arizona.

DMG surveyed a total 55.99 acres using a single pedestrian transect no more than 20 meters in width to cover the right-of-way (either 53, 40 or 20 feet wide) within the Area of Project Effect (APE). The result was identification and recording of five isolated occurrences (IOs) of cultural materials, but no archaeological sites.

DMG recommended that all five IOs should be avoided as they are historic General Land Office survey markers and federal law forbids disturbing cadastral survey markers. None of the IOs or recent trash in the APE are considered significant under Criteria (a)-(d) of 36 CFR 60.4, so are not eligible for the National Register of Historic Places (NRHP); and they have limited potential to provide information relating to an identified historic context.

Other than the isolates discussed above, no cultural resources were found within or near the APE. Therefore, no impacts to any significant cultural resources are anticipated as a result of this project. DMG’s conclusion is that construction of the Butler Valley 12kV Power Line will not result in adverse impacts to NRHP-eligible properties.

As part of my review of DMGs procedures and results, I checked AZSITE’s online records, and have reviewed this report to ensure it meets BLM standards and guidelines. Dr. George Shannon, BLM Lake Havasu Field Office archaeologist, concurrently reviewed the report. Via an April 5, 2013 email, he stated he had no comments to add to the final report after completing his review.

This survey and final report meet all requirements and fully cover the project’s Area of Potential Effect. I accept the conclusions and recommend project clearance.

/s/

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Christopher McLaughlin

**APPENDIX D**  
**PLAN OF DEVELOPMENT**

**PLAN OF DEVELOPMENT**  
**FOR THE**  
**BUTLER VALLEY**  
**12kV DISTRIBUTION LINE PROJECT**

Submitted to:

**Bureau of Land Management**  
**Havasu Field Office**  
2610 Sweetwater Avenue  
Lake Havasu City, AZ 86406

Prepared by:

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3301 West Genoa Way  
Chandler, AZ 85226  
(480) 899-5708

In Conjunction With:

Arizona Public Service  
Lands Services Department  
Mail Station 3286  
P.O. Box 53933  
Phoenix, Arizona 85072

**March 2013**

# **BUTLER VALLEY 12kV DISTRIBUTION LINE PROJECT PLAN OF DEVELOPMENT**

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APS proposes the construction of a 12 kilovolt (kV) distribution line to provide electricity for central pivot irrigation (CPI) water pumps at the Butler Valley Farms, northeast of Blythe in La Paz County, Arizona. This plan of development includes descriptions of and guidelines for the design, construction, operation, reclamation, and maintenance of the Butler Valley 12 kV distribution line project. APS will construct and operate the project in conformity with the approved plan of development that shall be included as part of the right-of-way grant. These guidelines have been developed jointly by APS, McMullen Valley Water Conservation & Drainage District (the District), and the Bureau of Land Management (BLM), and will apply to the proposed route under consideration. The design, construction, operation, and maintenance of the project will meet or exceed the requirements of the National Electrical Safety Code and U.S. Department of Labor Occupational Safety and Health Standards, as well as APS' requirements for the safety and protection of landowners and their property.

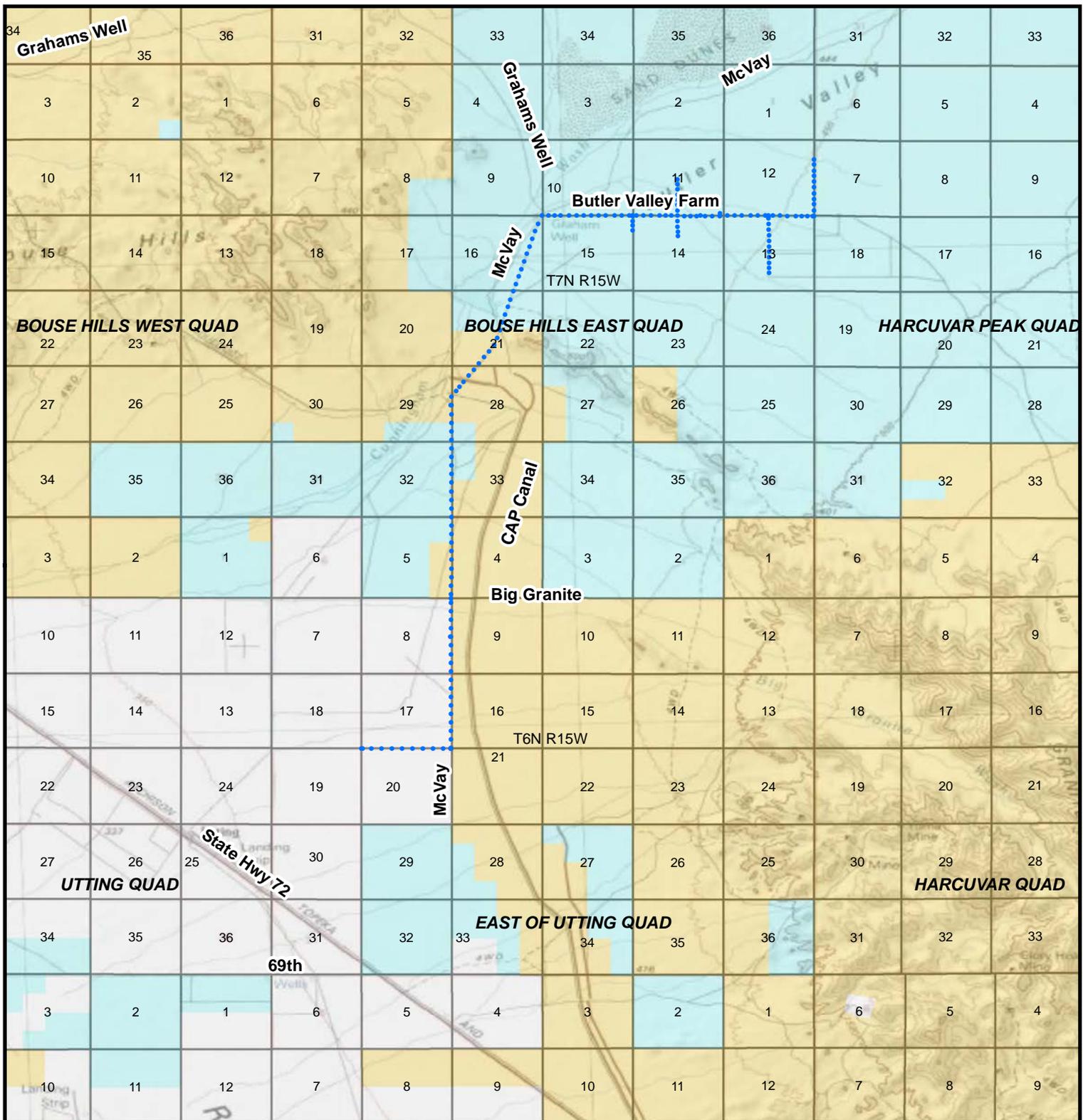
## **PROPOSED ACTION**

The proposed action is to construct a 12kV distribution line originating at the southeast corner of Section 5, T6N, R15W, generally following McVay Road, crossing the Central Arizona Project (CAP) canal, and terminating at the existing Butler Valley Farm wells, the furthest located in Section 12, T7N R14W (Figure 1). The construction and operation of the project provides a source of electrical power to northern Butler Valley for the District to administer to the Butler Valley Farms northeast of Bouse in La Paz County, Arizona. This will allow the farm to power their wells with cost-effective electrical power rather than diesel power as is currently.

The estimated length of the route is approximately 14 miles, of which approximately 2.3 miles will cross BLM land (10.49 acres). In addition, the line will cross approximately 0.4 miles Central Arizona Project (CAP) land, 8.3 miles Arizona State Trust Lands, and 3 miles private land, owned by APS. The proposed route follows McVay Road, an existing roadway through federal lands. The permanent right-of-way requested for the project on federal lands is approximately 40 feet. The survey map and preliminary construction drawings show the location of each pole structure and equipment (Appendix A).

## **DISTRIBUTION LINE DESCRIPTION**

The proposed distribution line would be designed for one 12kV three-phase (three conductors) circuit and one static wire. Single-pole, galvanized steel structures are proposed for the project. An illustration of a typical single-pole structure is provided in Figure 2. The span length between



# Butler Valley 12kV Distribution Line

## Legend

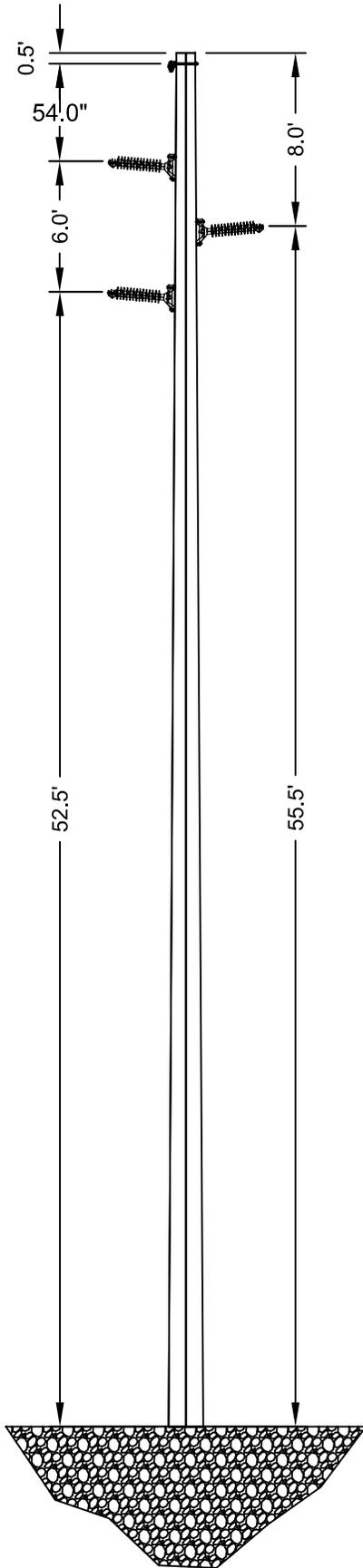
• Proposed Pole Locations  
(Along West Side of McVay Rd.)

- BLM
- State
- Private

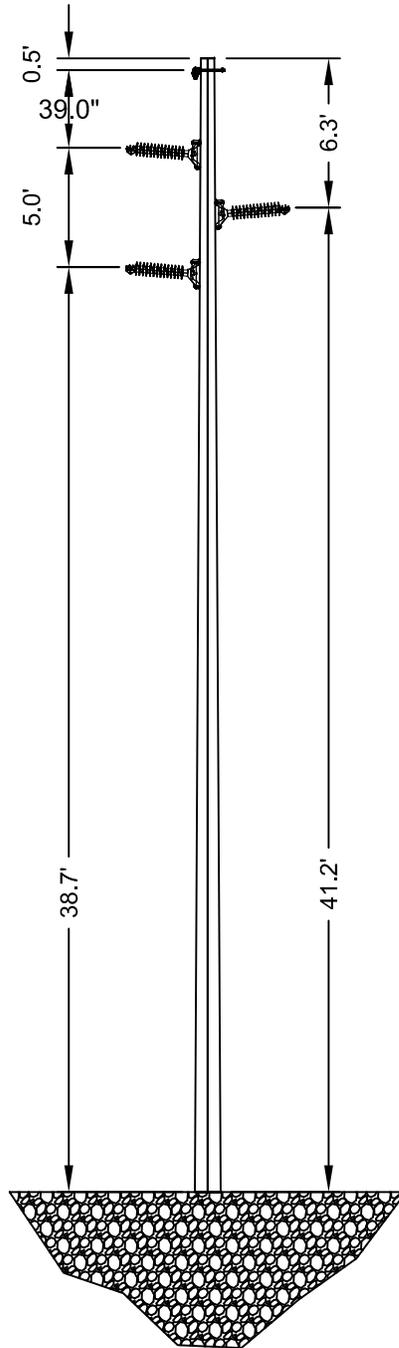
Figure 1



### TYPICAL 75' POLE FRAMING



### TYPICAL 55' POLE FRAMING



WA92331  
TYPICAL POLE FRAMING

WO#:	WA92331	DATE:	11/13/2012
BY:	FULTON	SCALE:	1:1
FILENAME:	DRAWING1.DWG	SHEET	1 OF 1

structures will range between 300 feet and 700 feet. Typical design characteristics are listed in Table 1 below. Final design characteristics will be determined in the detailed design phase of the project.

<b>TABLE 1 TYPICAL DESIGN CHARACTERISTICS</b>	
Line length	Approximately 14 miles
Type of structure	Single-pole dented steel
Structure height	55 to 85 feet
Span length	Approximately 300 to 700 feet
Number of structures per mile	8 to 10 using 75' structures, 14 to 16 using 50' to 55' structures
Right-of-way width	Approximately 40 feet
Land disturbed (approximate): <u>Temporary</u> Wire pulling, splicing sites  Construction yards (on private land)  <u>Permanent</u> Structure	An all-terrain vehicle would be used for wire pulling along the permanent right-of-way.  Maximum of 3 to 4 acres total  Approximately 4 square feet; additional space may be needed in the locations where the pole is guyed
Access roads	Right-of-way will provide access
Voltage	12,470
Circuit configuration	Single circuit 12kV
Conductor size	1.1-inch
Ground clearance of conductor	23 feet minimum
Pole foundation depth	7 to 25 feet

Pole data for the distribution line is provided in Table 2 below. There are 164 poles proposed for the entire project. Of these, 16 poles are proposed on federal land (12 on BLM administered lands and 4 special order poles on CAP lands). Of the 12 poles on BLM administered lands, there are 9 - 75' poles, 1 - 50' pole (with the capacitor bank), 1 - 80' pole, and 1 special order pole (closest to CAP).

<b>TABLE 2 POLE DATA</b>				
<b>Quantity</b>	<b>Pole</b>	<b>Description</b>	<b>Hole Diameter</b>	<b>Hole Depth</b>
42	1907.501W	50' CL- 1 Steel	1.5'	7'
26	1907.55H2	55' H2 Steel	1.5'	7.5'
72	1907.75H3G	75' H3 Steel	2'	7.5'
2	1907.551G	45' CL-2 Steel	1'	6.5'

16	1907.452G	55' CL-1 Steel	1.5'	7.5'
3	Special Order	Tan 65' Above Ground	4'	25'
1	Special Order	35 Degree Self Supporting 75' Above Ground	4'	25'
1	Special Order	Tan 85' Above Ground	4'	25'
1	1962.G	69A15	4'	15'
Total 164				

Additional equipment off of the existing farm lease consists of 1 Recloser, 3 capacitor banks, and 1 regulator. Of these, one capacitor bank is located on federal land, with the remaining equipment on state or private land. Additional equipment proposed to be located on the existing farm lease consists of the following: 1 Gang operated “J” Switch, 3 Capacitor Banks, 1 regulator, 6 fused disconnects, and 9 transformer banks.

## **RIGHT-OF-WAY ACQUISITION**

New land rights-of-way will be required for the distribution line to be obtained in the name of APS. A grant for up to a 40-foot right-of-way for the portion of the distribution line that will cross federal lands administered by BLM has been requested. BLM receives right-of-way rental payments for those portions of the distribution line located on federal lands. No additional permanent access road requirements are anticipated. In addition, grants for rights-of-way have been requested from the Arizona State Land Department for the portion of the distribution line that would cross state trust land, and from the CAP for the portion of the line crossing the CAP. Private lands necessary for distribution line are owned by APS.

## **PROJECT CONSTRUCTION, OPERATION, AND MAINTENANCE**

The following section generally describes the activities that are anticipated to occur before and during project construction and throughout operation and maintenance of the project. Existing roads will provide access for project construction, operation, and maintenance. Overland construction methods will be used when existing access is not available. Mitigation measures are provided at the end of this section.

### **Preconstruction Activities**

Engineering Surveys – Construction surveying was completed in November 2012. The centerline and pole locations were flagged and staked.

Cultural Resource Surveys – Four Corners Research, a BLM-permitted contractor, surveyed the proposed route on November 28 and 29, 2012. Any cultural property that will be directly or indirectly impacted will be subject to evaluation and determination through BLM Section 106 consultation. No archaeological or cultural sites were observed, and only 5 isolated occurrences were found.

Biological Surveys – General biological surveys and native plant surveys were conducted in December 2012. Specific mitigation measures for biological resource areas will be developed as part of the environmental assessment.

### Construction Activities

Following preconstruction activities, construction activities will include digging holes, assembling and erecting structures, wire stringing, cleanup, and site reclamation. The number of workers and type of equipment expected to be used to construct the proposed distribution line are provided in Table 2.

<b>TABLE 2 TYPICAL DISTRIBUTION LINE CONSTRUCTION ESTIMATED PERSONNEL AND EQUIPMENT REQUIRED</b>		
Hole digging	2 people	Equipment: 1 hole digger 1 pickup truck
Pole haul	2 people	Equipment: 1 pole haul truck
Structure erection	4 people	Equipment: 1 line truck 1 pickup truck
Conductoring	12 people	Equipment: 1 drum puller 1 splicing truck 1 double-wheeled tensioner 1 wire reel trailer 1 line truck 1 sagging equipment 2 pickup trucks
Clean-up	4 people	Equipment: 2 pickup trucks
Rehabilitation	2 people	Equipment: 1 pickup truck

Approx. personnel required	31 people	
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Access Roads – Distribution line construction requires the movement of vehicles along the right-of-way. For this project, the right-of-way itself will provide access, or alternatively, McVay Road may be used in areas where the road directly abuts the right-of-way.

Structure Sites and Right-of-way – Overland construction methods will be used. The clearing of some natural vegetation may be required; however, selective clearing will be performed only when necessary to provide for surveying, electrical clearance, line reliability, and construction and maintenance operations.

Foundation Installation – Excavations for poles are made with power equipment. Where the soil permits, a vehicle-mounted power auger or backhoe is used. In rocky areas, the foundation holes may be excavated by drilling and blasting, or special rock anchors may be installed. Blasting would require drilling holes in the area to be excavated. Conventional or plastic explosives would be used. Safeguards such as blasting mats may be used as necessary to protect adjacent property. After the hole is augered, poles will be set, backfilled, and tamped using existing spoils. Remaining spoils material will be spread on the ground. In the vicinity of the CAP span, six special order poles will be set with concrete to ensure stability.

Structure Assembly and Erection – Poles and associated hardware are shipped to each structure site by truck. Structure assembly and mounting of associated line hardware takes place at each site. The assembled structure is then raised and placed in the pre-dug holes.

Following structure assembly, a pilot line is pulled from structure to structure (or strung) by a vehicle and threaded through the stringing sheaves at each tower. Then a larger diameter, stronger line (the pulling line) is attached to the pilot line and strung. This process is repeated until the ground wire or conductor is pulled through all sheaves. The ground wire and conductor are strung using power pulling equipment at one end and power braking or tensioning equipment at the other end.

Cleanup and Reclamation – Construction sites, material storage areas, and the access road will be kept in an orderly condition throughout the construction period. Refuse and trash, including stakes and flags, will be removed from the sites and disposed of in an approved manner. No construction equipment oil or fuel will be drained on the ground. Oils or chemicals will be hauled to an approved site for disposal. No open burning of construction trash will occur on BLM-administered lands. Following construction and cleanup, reclamation of disturbed areas will be

completed. Graded or disturbed surfaces will be restored to the original contour of the land surface and scarifying will be conducted in compacted areas. Existing barbed wire fencing along McVay Road will remain.

### **Operation and Maintenance**

Ground maintenance patrols will review the line periodically. Routine maintenance will include replacing damaged insulators as needed and tightening nuts and bolts, as well as vegetation maintenance. Access for operation & maintenance will be traveling overland within the right-of-way and/or from McVay Road.

### **Safety & Health Requirements**

APS is committed to safety for its workers and contractors and thus has established policies, procedures, practices, and rules to manage safety, work practices, and conditions to reduce injuries and illnesses. APS implements safety practices for employees and contractors through its *Accident Prevention Manual and Safe Working Rules* (2011). The manual is routinely updated and provides safety requirements, instructions, and guidelines for various work situations and practices that APS employees and APS contractors are likely to encounter, including field practices pertaining to the proposed fiber-optic installation, access roads, and related project features. During construction, safety measures include the use of barriers, flagmen, or other traffic control as necessary.

### **MITIGATION MEASURES**

As part of standard operating procedures, mitigation measures (Table 3) will be implemented throughout the project in order to reduce potential adverse environmental impacts. Most of the impacts are short-term and generally occur during the construction period. Project design and implementation of mitigation measures will minimize the effect of the project where the potential for long-term adverse impacts may occur.

<b>TABLE 3 MITIGATION MEASURES</b>
1. All construction vehicle movement outside of the right-of-way will be restricted to public roads.
2. In construction areas where recontouring is not required, vegetation will be left in place wherever possible to avoid excessive root damage and allow for resprouting.

**TABLE 3  
MITIGATION MEASURES**

<p>. Any cultural and/or paleontological resource discovered during construction by APS or any person working on APS' behalf on public or federal land will be reported immediately to the authorized officer. APS will suspend operations in the area until an evaluation is completed to prevent the loss of cultural or scientific values.</p>
<p>4. All construction and maintenance activities will be conducted in a manner that would minimize disturbance to vegetation and ephemeral streambanks. In addition, dust-control measures will be utilized as necessary during construction.</p>
<p>5. All requirements of those entities having jurisdiction over air quality matters will be adhered to and any necessary permits for construction activities would be obtained. Open burning of construction trash (cleared trees, etc.) will not be allowed on BLM-administered lands.</p>
<p>6. During operation of the distribution line, the right-of-way will be maintained free of construction related, non-biodegradable debris.</p>
<p>7. Totally enclosed containment will be provided for all hazardous materials (if needed) and trash. All construction waste including trash, litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials will be removed to a disposal facility authorized to accept such materials.</p>
<p>8. Structures will be constructed to conform to Suggested Practices for Raptor Protection on Power Lines: <i>State of the Art in 1996</i> (Raptor Research Foundation, Inc.).</p>
<p>9. Construction holes left open overnight will be covered to prevent livestock or wildlife from damage.</p>
<p>10. APS will clean off-road equipment (power or high-pressure cleaning) of all mud, dirt, and plant parts prior to moving equipment onto public land.</p>
<p>11. The proposed hardware and conductor will limit the audible noise, radio interference (RI), and television interference (TVI), due to corona. Tension will be maintained on all insulator assemblies to assure positive contact between insulators, thereby avoiding sparking. Caution will be exercised during construction to avoid scratching or nicking the conductor surface, which may provide points for corona to occur.</p>
<p>12. Guidelines for handling Sonoran Desert Tortoises Encountered on Development Projects (Arizona Game and Fish Department 2007) will be followed.</p>
<p>13. The holder will protect all survey monuments found within the right-of-way. Survey monuments include but are not limited to General Land Office and BLM Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, APS will immediately report the incident, in writing, to the authorized officer and the respective installing authority, if known. Where General Land Office or BLM right-of-way monuments or references are obliterated during operations, APS shall secure the services of a registered land surveyor or a BLM cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the <i>Manual of Surveying Instructions for the Survey of the Public Lands of the United States</i>, latest edition. APS shall record such survey in the appropriate county and send a copy to the authorized officer. If the BLM cadastral surveyors or other federal surveyors are used to restore the disturbed survey monument, APS will be responsible for the survey cost.</p>

<b>TABLE 3</b> <b>MITIGATION MEASURES</b>
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14. The holder will inform the authorized officer within 48 hours of any accidents on federal lands that require reporting to the Department of Transportation as required by 49 CFR Part 195.
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**APPENDIX A**  
**SURVEY MAP AND CONSTRUCTION DRAWINGS**

## Technical Review:

Supplemental Authorities /Other Resources or Concerns	May Be Affected		If May affect / Mitigations Assigned	Signature Name/Title	Date
	Yes	No			
Air Quality				<i>Mike Rice</i>	
Areas of Critical Environmental Concern					
Cultural Resources/ Paleontological Resources				<i>George Shannon</i>	
Environmental Justice					
Farm Lands (Prime or Unique)		X	By definition, there are no "prime farmlands" on BLM-administered land within LHFO.		
Floodplain				<i>Mike Rice</i>	
Fuels / Fire Management					
Public Health and Safety					
Invasive & Non-Native Species				<i>Doug Adams</i>	
Lands/Realty				<i>Lisa Stapp</i>	
Law Enforcement					
Migratory Birds				<i>Doug Adams</i>	
Minerals					

## Technical Review:

Supplemental Authorities /Other Resources or Concerns	May Be Affected		If May affect / Mitigations Assigned	Signature Name/Title	Date
	Yes	No			
Native American Religious Concerns					
				<i>George Shannon</i>	
Operations/ Engineering Review					
				<i>Bill Parry</i>	
Public Health and Safety					
				<i>Bill Parry</i>	
Rangeland					
Recreation					
				<i>Amanda Deeds</i>	
Socio-economics					
				<i>Mike Rice</i>	
Soils					
Threatened or Endangered Species					
				<i>Doug Adams</i>	
Travel Management					
Vegetation					
				<i>Doug Adams</i>	
Visual Resources Management					
				<i>Amanda Deeds</i>	
Wastes, Hazardous or Solid					
Water Quality, Drinking or Ground					
Wetlands/Riparian Zones					

## Technical Review:

Supplemental Authorities /Other Resources or Concerns	May Be Affected		If May affect / Mitigations Assigned	Signature Name/Title	Date
	Yes	No			
Wild and Scenic Rivers					
Wild Horses/ Burros					
Wilderness & WSA					
Wildlife				<i>Doug Adams</i>	

**Compliance and assignment of responsibility** (Type Program or Employee):

\_\_\_\_\_

**Monitoring and assignment of responsibility:** (Type Program or Employee):

\_\_\_\_\_

**Review:**

**Prepared by:** \_\_\_\_\_  
 Michael Rice Date

**Reviewed by:** \_\_\_\_\_  
 Dave Daniels Date  
 Planning and Environmental Coordinator

**Reviewed by:** \_\_\_\_\_  
 Amanda Dodson Date  
 Assistant Field Manager

**Reviewed by:** \_\_\_\_\_  
 Kim Liebhauser Date  
 Field Manager,  
 Lake Havasu Field Office