

From: [Christianson, Jessica](#)
To: [Paulk, Ryan R](#); [Westberg, Mary Ann](#)
Cc: kallen@mstlaw.com; [Burns, Nancy](#)
Subject: RE: Isleta
Date: Friday, August 25, 2017 11:35:14 AM
Attachments: CatEx - EPE Telet...
~~CatEx - EPE Telet... - August 2017.pdf~~

message and any attachments and immediately notify the sender

From: Paulk, Ryan R
Sent: Thursday, August 24, 2017 9:27 AM
To: Christianson, Jessica; Westberg, Mary Ann
Cc: kallen@mstlaw.com; Burns, Nancy
Subject: RE: Isleta

Ok, thanks for the update Jessica.

Ryan R. Paulk, P.E. | El Paso Electric Company
Director, Support Services
P O Box 982 | El Paso, Texas 79960
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From: Christianson, Jessica
Sent: Thursday, August 24, 2017 9:12 AM
To: Paulk, Ryan R <ryan.paulk@epelectric.com>; Westberg, Mary Ann <maryann.westberg@epelectric.com>
Cc: kallen@mstlaw.com; Burns, Nancy <Nancy.Burns@epelectric.com>
Subject: RE: Isleta

Word on the cat-ex per BIA environmental this morning is this:
The cat-ex is at the Region for cultural review. I talked to the Regional Archaeologist who said he should be able to complete his process by tomorrow. After that I just need the Superintendent's signature and we'll be done.

With any luck we'll see it the week after next.

From: Paulk, Ryan R
Sent: Thursday, August 24, 2017 7:21 AM
To: Westberg, Mary Ann; Christianson, Jessica
Cc: kallen@mstlaw.com; Burns, Nancy
Subject: Isleta

Mary Ann,

Have you received any update from Tim Solinski on the survey and the approval of the survey? If not, can you check in with him again. Additionally, can you get with Norma (if you haven't already) and make sure we have all we need for the application ready and waiting.

Jessica,

Any word from BIA on the categorical exclusion determination?

Looks like we are very close on the agreement and would like to know where we are with the other remaining items.

Thanks.

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From: [Westberg, Mary Ann](#)
To: [Paulk, Ryan R](#)
Subject: RE: NM State Land Check
Date: Friday, August 28, 2015 9:04:46 AM

Thanks Ryan

Liz said it would not generate in Oracle until the next day (today at some point).

State already has everything possible to make their decision; but now decides they need the additional form, and \$\$\$, to break out the road improvements under a separate "RW application" so they can grant earlier. All the information is the same.....just different form!! We should have expanded the lease area a year ago, when all this began. Would not be dealing with these issues now.

Thank You! Took care of Adrian's request also on Isleta.

Have a good weekend!

Mary Ann

Mary Ann Westberg, SRWA | [El Paso Electric Company](#)
Principal Land Management
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555 South Compress Road, Las Cruces, New Mexico 88005
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From: Paulk, Ryan R
Sent: Friday, August 28, 2015 7:56 AM
To: Westberg, Mary Ann
Subject: NM State Land Check

Mary Ann,

Got your message. As of yet, I don't have anything to approve. Perhaps it takes a day or something. As soon as I get something, I will approve it.

Thanks for all of your help with this one!

Ryan R. Paulk, P.E. | [El Paso Electric Company](#)
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From: [Westberg, Mary Ann](#)
To: [Paulk, Ryan R](#)
Subject: RE: Scope of Work - Isleta Pueblo
Date: Wednesday, October 22, 2014 3:00:28 PM
Attachments: [image002.png](#)

Additions to Scope of Work:

- Provide Time Lines for both the tasks associated with G & P's processes, as well as a proposed time line for the completion of the renewal through the BIA/Pueblo
- NEPA work – how this will be handled. Directed by EPE
- ROW acquisition to be handled by G & P; directed by and in communication with EPECO.
- G & P coordination of all meetings with the BIA/Pueblo with representation from both EPE and G & P
- G & P to handle the Right-of-Entry for both lands of the BIA/Pueblo and private land owners. Especially important with addressing access roads.
- Complete follow thru from G & P until final Easement document is acquired

Deliverables:

- Project goals and Time Lines – specific
- NEPA Regs.– all communication
- Complete copy of all Title Search and associated surveys including the BIA/Pueblo lands and associated private land owners, with current address and contact numbers. Title Search to be taken back to specific date ____?? To include an encumbrances of record
- Complete set of maps indicating boundaries of the BIA/Pueblo, and adjacent private land owners
- Survey providing location of existing transmission powerline within the boundaries of the 100' right-of-way
- Survey providing complete location of proposed access roads, along with associated land ownership information
- Negotiated amount (\$\$\$), in communication with EPECO, on obtaining land rights from private land owners for access
- Executed easement from associated land owner for access rights.
- Copies of all documents sent to the BIA/Pueblo or private individuals, provided in both hard copy and electronic forms
- Milestones
- Conference call schedules for updates – How often?
- Final secured easement documentation from the BIA/Pueblo

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From: Paulk, Ryan R
Sent: Thursday, October 16, 2014 5:01 PM
To: Christianson, Jessica; Westberg, Mary Ann
Subject: RE: Scope of Work

Mary Ann / Jessica,

Aside from a line item about having a preliminary meeting with the BIA and Pueblo in this phase. I agree, that seems like a decent idea.

I would also like to add a section called "Deliverables", which clearly states the work product we will be getting. A road map of what we need to do, do you all see anything else we should add?

At this point we are looking for how to approach and how to bid the actual renewal.

Mary Ann,

Can you take a stab at modifying this scope of work to reflect what we our comments?

Thanks.

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From: Christianson, Jessica
Sent: Friday, October 03, 2014 4:25 PM
To: Paulk, Ryan R; Westberg, Mary Ann
Subject: RE: Scope of Work

Ryan:

Looks pretty good – just a few comments – in item 2 : “Develop a high-level description of the project goals, timeline, projected status updates, and definition of the final work product to be **archived** that will be used in the Request For Proposal (RFP).” – Do they really mean archived? Perhaps achieved? Reads kind of strangely.

Are you comfortable that from this scope of work we will have enough info to understand the extent of the environmental document – and consequently scope the next phase? I think that was one of our objectives.- I’m not sure we will have that with the work as described. To get there, I think we need to sit down with a representative from BIA and probably the pueblo and discuss, once we have all the information in hand that G&P proposes to assemble.

Not sure what your thoughts are on having that meeting with the agencies, EPE, and with or without G&P and/or another NEPA contractor. If you are thinking w/G&P I would say it belongs as a line item in this scope.

Let me know if you have any questions.

Thanks,

Jessica Christianson, PWS, LEED AP | [El Paso Electric Company](#)
Principal Environmental Scientist / NEPA
P.O. Box 982 | El Paso, Texas 79960
T: (915) 351.4258 | C: (915) 487.1262
jessica.christianson@epelectric.com

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From: Paulk, Ryan R
Sent: Friday, October 03, 2014 3:58 PM
To: Westberg, Mary Ann; Christianson, Jessica
Subject: FW: Scope of Work

FYI, here is the scope to scope the project! Sounds kind of odd...

Anyway, looks good to me. Let me know if you have any suggestions before I have a \$\$ put together and turn them loose.

Thanks!

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From: Mark Murray [<mailto:mm@gandpland.com>]
Sent: Friday, October 03, 2014 1:50 PM
To: Paulk, Ryan R
Subject: Scope of Work

Hi Ryan

Attached is the Scope of Work (SOW) we discussed at our meeting last Friday. I believe completing this SOW will provide EPE the information it will need to include in an RFP. Let me know your thoughts and edits. Once we have agreed on the SOW, I will provide a NTE estimate.

Best Regards,

Mark Murray
Vice President - G & P Land
5804 Solterra PL NE
Albuquerque, New Mexico 87111
mm@gandpland.com
www.gandpland.com
(C) 562-505-5391
(Corporate Office) 210-824-0500



From: Mark Murray
To: Paulk, Ryan R
Subject: Re: Scope of Work
Date: Friday, October 31, 2014 10:00:06 AM
Attachments: 4018C032-1C0-1E10-0-VEE50-1A5-KE51.png
image.png
Isleta Public Easement Version 4.xls
EPE Scope of Work.docx

Ryan

Attached is the scope of work reflecting your comments and edits. Hopefully I was able to capture what you were looking for regarding a road map or summary of tasks needed for an RFP.

The estimate is also attached. I believe we will be able to complete the work in less than 30 work days, however, I wanted to make sure we have enough in the proposal to cover any unforeseen issues that might come up during the investigation and development of a plan for renewal of the easement.

Please call me if you want to discuss or have questions.

Best Regards,

Mark Murray
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From: <Paulk>, Ryan Paulk <ryan.paulk@epelectric.com>
Date: Thursday, October 30, 2014 11:27 AM
To: Mark Murray <mm@gandpland.com>
Subject: RE: Scope of Work

Mark,

I don't have an example. Just somewhat of an outline, or task list, of items that need to be completed to finish the renewal. Something we will use to create a bid and to educate us regarding what needs to be done. At this stage I don't need time lines, or detailed project plan or anything, just identification of buckets basically.

I realize that we won't know all of the answers, but something that identifies individual tasks.

Does that help?

Forgive me if I am not extremely explicit, as I have an idea of what I would like to see, but don't have a similar work product to refer to.

Thanks.

<!--[if !vml]--><!--
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El Paso Electric
[endif]-->
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From: Mark Murray [<mailto:mm@gandpland.com>]
Sent: Thursday, October 30, 2014 11:20 AM
To: Paulk, Ryan R
Subject: Re: Scope of Work

Hi Ryan,

Maybe I am making this more difficult than it needs to be, but can you help me out with your request for a "road map" type of deliverable. An example would be great.

Best Regards,

Mark Murray
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From: <Paulk>, Ryan Paulk <ryan.paulk@epelectric.com>
Date: Thursday, October 30, 2014 9:47 AM
To: Mark Murray <mm@gandpland.com>
Subject: RE: Scope of Work

Hey Mark,

Sorry for taking a while to get back with you. The scope of work is good with the following adjustments;


Include an item to more specifically scope out the extent of environmental documentation that may be needed for the renewal. To the extent that we can scope it out. This may include a sit down with Isleta, the Southern Pueblo Agency, or the BIA, if necessary.

More specifically spell out deliverables. What is format or work product going to look like. An outline or "road map" type deliverable would be best.

Archived in item #2 should likely be "achieved".

Let me know if you have any questions, then let's put together a price and get a work authorization.

Thanks.

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From: Mark Murray [<mailto:mm@gandpland.com>]
Sent: Wednesday, October 29, 2014 8:29 AM
To: Paulk, Ryan R
Subject: Re: Scope of Work

Good morning Ryan

I hope things are well with you. The last visited you were headed out of town and thought you might have time when you returned to discuss the scope of work to renew EPE's easement across the Isleta Pueblo. We are excited to begin the investigative work and prepare a plan for the renewal. Let me know when you have time to discuss.

Best Regards,

Mark Murray


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From: <Paulk>, Ryan Paulk <ryan.paulk@epelectric.com>
Date: Thursday, October 16, 2014 4:56 PM
To: Mark Murray <mm@gandpland.com>
Subject: RE: Scope of Work

Hi Mark. I received your message. Crazy day over here and to top it off, I am going to be heading out of town for a few days. I will look try to get back to you sometime later next week.

Thanks.

<!--[if !vml]--><!--
The logo for El Paso Electric Company features the words 'El Paso Electric' in a blue, stylized font, with 'Company' in a smaller font below it. To the right of the text is a yellow triangle.
Ryan R. Paulk, P.E. | El Paso Electric Company
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From: Mark Murray [<mailto:mm@gandpland.com>]
Sent: Tuesday, October 07, 2014 12:00 PM
To: Paulk, Ryan R
Subject: Re: Scope of Work

Ryan

No problem, I just wanted to make sure I stayed on top of it.

Best Regards,
Mark Murray
562-505-5391

On Oct 7, 2014, at 11:58 AM, Paulk, Ryan R <ryan.paulk@epelectric.com> wrote:

Mark,

Will try to look it over a little more and get back with you soon. Been slammed the last few days.

Thanks

<image001.jpg>

Ryan R. Paulk, P.E. | El Paso Electric Company
Manager, Land Management
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From: Mark Murray [<mailto:mm@gandpland.com>]
Sent: Tuesday, October 07, 2014 10:14 AM
To: Paulk, Ryan R
Subject: Re: Scope of Work

Hello Ryan

I wanted to follow up with you on the scope of work and if we need to make any changes.

Best Regards,
Mark Murray
562-505-5391

On Oct 3, 2014, at 4:03 PM, Paulk, Ryan R <ryan.paulk@epelectric.com> wrote:

Mark,

No worries on the timing. Thanks for the scope.

It looks good to me. I forwarded it to Jessica and Mary Ann and will get back with you shortly.

Thanks again and have a nice weekend.

<image001.jpg>

Ryan R. Paulk, P.E. | El Paso Electric Company
Manager, Land Management

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From: Mark Murray [<mailto:mm@gandpland.com>]
Sent: Friday, October 03, 2014 1:50 PM
To: Paulk, Ryan R
Subject: Scope of Work

Hi Ryan

Attached is the Scope of Work (SOW) we discussed at our meeting last Friday. I believe completing this SOW will provide EPE the information it will need to include in an RFP. Let me know your thoughts and edits. Once we have agreed on the SOW, I will provide a NTE estimate.

Best Regards,

Mark Murray
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<image002.png>

From: [Westberg, Mary Ann](#)
To: [Rowe, Carly](#)
Cc: [Paulk, Ryan R](#); [Christianson, Jessica](#); [Monteros, Daniel J](#)
Subject: RE: West Mesa-Arroyo Bi-weekly calls
Date: Wednesday, August 19, 2015 12:46:22 PM

Carly

Thank you for your email and introduction. Bi-weekly Conference call up-dates look good for Wednesday. If it works for Tetra Tech, G&P Land and CobbFindley, could we schedule 1:30 pm beginning Wednesday, August 26? Conference call should include myself, Ryan Paulk, Daniel Monteros and Jessica Christianson from El Paso Electric Company. I believe that Tetra Tech has email contacts for all of us. Please send out a meeting invite to include all.

I did speak with Mel Apachee, G&P Land, this morning. Mel will email me with a request for specific information to begin the renewal of the ROW application. We also discussed the need for preparation of an official letter of authorization from El Paso Electric Company, addressed to BIA Southern Pueblo Agency and Isleta Pueblo, authorizing G&P Land, Tetra Tech and CobbFindley to perform right-of-way renewal functions. I will have that letter drafted next week, with copies forwarded to all involved.

Will touch base with you on Monday, August 24, prior to our conference call on Wednesday. Thank you for your help in managing this project for Tetra Tech. Look forward to working with you and Tetra Tech.

Mary Ann

Mary Ann Westberg, SRWA | [El Paso Electric Company](#)
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maryann.westberg@epelectric.com

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From: Rowe, Carly [<mailto:Carly.Rowe@tetrattech.com>]
Sent: Wednesday, August 19, 2015 11:09 AM
To: Westberg, Mary Ann
Cc: Keith, Larry
Subject: West Mesa-Arroyo Bi-weekly calls

Hi Mary Ann,

Larry forwarded me the voice mail that you left for him yesterday afternoon with regard to his phone call on Monday concerning scheduling calls to discuss progress on the West Mesa-Arroyo project. I will be managing the project for Tetra Tech and wanted to introduce myself to you.

Wednesdays are a good day for calls on our end. I currently have a standing 8 AM and 9 AM (mountain time) call on Wednesdays but I am available any other time that day. Is there a specific time that works best for you? With respect to members of your team that should be included on the call, please let me know who you would like invited.

Currently, G&P Land is working on compiling the BIA ROW application materials and will be sending a request for information to you in the next week or so with respect to the application. Additionally, Tetra Tech has started working on drafting the resource maps to identify the potential for sensitive resources to occur in proximity to the transmission line. We can discuss these materials further during the first biweekly call, which I was thinking could be scheduled for Wednesday, August 26.

Please give Larry or I a call if there is anything that you would like to discuss.

Carly R. Rowe | Project Manager/Environmental Planner
Direct **(303)291-6290** | Cell **(303) 520-0043** | carly.rowe@tetrattech.com

Tetra Tech | Complex World, Clear Solutions™
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From: [Christianson, Jessica](#)
To: [Paulk, Ryan R](#)
Cc: [Buraczyk, Steven T](#); [Doyle, Robert C](#); [Boomer, John](#); [Westberg, Mary Ann](#); [Kirk R. Allen \(kallen@mstlaw.com\)](#)
([kallen@mstlaw.com](#))
Subject: Regional Transmission Slides
Date: Monday, June 13, 2016 12:28:11 PM
Attachments: [West Mesa Arroyo Regional Transmission.pptx](#)

Ryan:

I've attached the three slides from the presentation that apply to the regional transmission discussion and slightly focus on the Arroyo West Mesa line. In reviewing them, they may be just the right amount of detail for this discussion.

Second point – you were correct the western spirit/clean line request is for a 150 foot right-of way, offset 25 feet from EPE's 100 foot existing right-of-way . My only source for that information is the general project description prefacing the SWCA cultural report so I don't have additional detail from Clean Line.

Let me know what I can do to help prepare for Wednesday.

Thanks,

Jessica Christianson | [El Paso Electric Company](#)

Manager, Environmental

P O Box 982 | El Paso Texas, 79960

T 915 351 4258 | C 915 487 1262

Jessica.Christianson@epelectric.com



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From: [Westberg, Mary Ann](#)
To: [Paulk, Ryan R](#)
Subject: Scope of Work Road Map
Date: Thursday, October 23, 2014 3:08:13 PM
Attachments: [G & P Scope of Work - 10-23-2014.docx](#)

Ryan

Here are a few comments for our "road map". Not much to add at this point; however, hopefully this will help. Your concern was not so much cost, but experience and quality. Not sure IF you wanted to mention this in preparation of the Scope. We did discuss this issue with them in our meeting.

Mary Ann

Mary Ann Westberg, SRWA | [El Paso Electric Company](#)
Principal, Land Management Representative
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From: Mark Murray
To: Paulk, Ryan R
Subject: Scope of Work
Date: Friday, October 03, 2014 1:49:49 PM
Attachments: 4019C923-160- [REDACTED] 4019C923-160- [REDACTED].png
EPE Scope of Work.docx

Hi Ryan

Attached is the Scope of Work (SOW) we discussed at our meeting last Friday. I believe completing this SOW will provide EPE the information it will need to include in an RFP. Let me know your thoughts and edits. Once we have agreed on the SOW, I will provide a NTE estimate.

Best Regards,

Mark Murray
Vice President - G & P Land
5804 Solterra PL NE
Albuquerque, New Mexico 87111
mm@gandpland.com
www.gandpland.com
(C) 562-505-5391
(Corporate Office) 210-824-0500



From: [Mark Murray](#)
To: [Paulk, Ryan R](#)
Cc: larry.keith@tetrattech.com
Subject: Status of the 345kV Renewal Project on the Istela Pueblo
Date: Wednesday, June 03, 2015 2:00:09 PM

Hi Ryan,

I wanted to follow up with you regarding the last conversation you, Larry Keith and I had about the renewal project on the Isleta Pueblo. I believe during our last discussion you mentioned you needed to meet with the project team to discuss next steps. Have you been able to have that meeting? Are there any additional items, or information you will need before providing a notice to process on the project?

I am available by phone at 562-505-5391, or email mmurray@cobb fendley.com or you can contact Larry Keith at 303-291-6291 or his email at larry.keith@tetrattech.com.

We are excited about moving forward with the project and look forward to hearing from you.

Mark Murray
Director, Renewable Energy &
Electric Utility Engineering Services
mmurray@cobb fendley.com

Cobb, Fendley & Associates, Inc.
5541 Midway Park Place NE | Albuquerque, NM 87109
Phone: 505.508.0786 | Fax: 505.508.0837 | Mobile: 562.505.5391
www.cobb fendley.com

T&D Business Case Overview

Original Version:	02/06/2017
Date of Current Version:	Click here to enter a date.
Dates Revised:	Click here to enter a date.

This form and supplemental documentation should be submitted to Financial Forecasting when requesting funds for a capital project greater than \$500,000 and for an individual work order, included in a blanket project, over \$500,000.

PROJECT OVERVIEW			
Project Description:* ISLETA PUEBLO LAND RENEWAL	Project Manager:* RYAN PAULK		
Project Number: TL249	Project Manager Phone Number:* 915-521-4427		
Owning Cost Center:* 7295	Project Location:* 28-NM Trans Line New Mexico		
Business Segment:* 203 Below 345KV	Must tie to Upload Template Total Project Cost; excludes AFUDC Total Project Cost:* \$12,266,490		
Has the RFP process been completed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, Bid Estimate Date:*	Excludes AFUDC; mandatory if RFP process complete Bid Estimate:*		
First month of cash estimates Anticipated Start Date:* 2/10/2017	Last month of cash estimates Anticipated Closing Date:* 8/31/2017		
Enter "N/A" if no associated projects Associated Projects:* N/A			
Project overview/scope:* Renewal of approximately 100 acres of transmission line ROW across the Isleta Pueblo Tribal Trust land for the 345 kV Arroyo - West Mesa line.			
External Mandate (and/or): <input type="checkbox"/> Obligation to Serve/Reliability <input type="checkbox"/> Safety <input type="checkbox"/> Program <input type="checkbox"/> Law <input checked="" type="checkbox"/> Other Describe: Required by: Choose an item.			
Internal or Customer Request: Reason for Expenditure:* <input type="checkbox"/> Capacity Expansion/Growth If yes, <input type="checkbox"/> Voltage/Load <input type="checkbox"/> Future Expansion <input type="checkbox"/> Customer Load Identify customer, if applicable: What is the timing requirement? <input checked="" type="checkbox"/> System Performance and Reliability (describe): Necessary to ensure the West Mesa - Arroyo line stays in service. <input type="checkbox"/> Quality Enhancement/New Technology (describe): <input type="checkbox"/> Other (describe):			
Has Environmental been contacted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If "No", please explain why not			
List and provide evidence for expenditure (i.e. impact study and/or load forecast including version & date): Expiring ROW from 1967.			
Does this project replace another asset? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, please identify asset being replaced:		
Please list major milestones:*			
Milestone:	Completed by:		
Agree upon amount with Isleta Pueblo	05/31/2017		
Issuance of renewed ROW with concurrence of BIA.	07/31/2019		
	Click here to enter a date.		
	Click here to enter a date.		
	Click here to enter a date.		
	Click here to enter a date.		
	Click here to enter a date.		
	Click here to enter a date.		
	Click here to enter a date.		
	Click here to enter a date.		
Please list internal and external resources assigned to this project:*			
Resource Name:	Department/Company:	Have you contacted this resource about the project & related timing:	
Ryan Paulk	MGR - LAND MANAGEMENT	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If no, explain why not:
Jessica Christianson	MGR - ENVIRONMENTAL	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If no, explain why not:
Jessica Goldman	Legal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If no, explain why not:
		<input type="checkbox"/> Yes <input type="checkbox"/> No	If no, explain why not:

T&D Business Case Overview

	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, explain why not:
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, explain why not:
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, explain why not:
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, explain why not:
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, explain why not:
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, explain why not:
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, explain why not:
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, explain why not:

Please identify any risks and/or constraints related to this project: Risk to bulk system if not renewed.

CASH FLOW ANALYSIS

Proposed Project:*

A cash flow for all proposed projects must be submitted separately. Please use the Shared Services Capital Budget Upload Template located in the 1. [T&D Templates Ready for Updates](#) folder in the *2017 Capital Budget Revision November 2016 Actuals* folder in Livelink.

Do your cash flows include any incremental revenue enhancements and/or cost reductions? ☐ Yes ☒ No

- If yes, please describe in detail (by year if necessary):
- If yes, please identify the date to verify that the benefits of the project have been implemented: [Click here to enter a date.](#)

Alternative Project:

A financial analysis is required only when alternatives are considered. If applicable, an NPV analysis must be submitted for each alternative. Please use the [Cash Flow Analysis for Alternatives](#) form located in Livelink under the *2017 Capital Budget Revision November 2016 Actuals* folder.

Were alternatives considered?* ☐ Yes ☒ No **Describe alternatives:** High level analysis of alternatives proved not feasible. No further action required.

What was the reason for selecting the proposed project over the alternatives considered?

Is this project in the ten year plan? ☐ Yes ☒ No

CHECKLIST FOR ITEMS TO BE SUBMITTED

Have all the applicable line items on the Business Case Overview been completed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Do the milestones you identified take into consideration availability of resources?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
A cash flow projection with detail must be submitted for the project, is it enclosed?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Did you provide supporting documents for cash flows (i.e. L&R, Promod)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Does the Total Project Cost on page 1 equal the Total Project Cost on your cash flow analysis?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
If applicable, did you attach the financial analysis for each alternative?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A

Please provide additional information not disclosed for the committee's consideration:

Preparer:*

Name: Ryan Paulk

Date: 02/06/2017

From: Rowe, Carly
To: [Westberg, Mary Ann](#); [Christianson, Jessica](#); [Paulk, Ryan R](#); [Monteros, Daniel J](#); [Mark Pickering](#); [mmurray@cobbfindley.com](#); [Mel Apachee](#); [Keith, Larry](#); [Kraus, Jennifer](#)
Subject: 8/26 West Mesa-Arroyo Call Notes
Date: Friday, August 28, 2015 10:16:01 AM
Attachments: [150826 CEP West Mesa-Arroyo Notes.docx](#)

All,

Please find the call notes and action item list from our call on Wednesday attached to this email. If you have any comments or edits, please let me know. Thanks.

Carly

Carly R. Rowe | Project Manager/Environmental Planner

Direct (303)291-6290 | Cell (303) 520-0043 | carly_rowe@tetrattech.com

Tetra Tech | Complex World, Clear Solutions™

350 Indiana Street, Suite 500, Golden, CO 80401 | tetrattech.com

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From: Rowe, Carly
To: [Westberg, Mary Ann](#); [Christianson, Jessica](#); [Paulk, Ryan R](#); [Monteros, Daniel J](#); [Mark Pickering](#); [mmurray@cobbfindley.com](#); [Mel Apachee](#); [Keith, Larry](#); [Kraus, Jennifer](#)
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Carly R. Rowe | Project Manager/Environmental Planner
Direct (303)291-6290 | Cell (303) 520-0043 | carly_rowe@tetrattech.com

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From: Westberg, Mary Ann
To: Paulk, Ryan R
Subject: 345KV - Isleta Pueblo WO#
Date: Thursday, November 06, 2014 10:07:33 AM

Good Morning Ryan:

Darcy is working on obtaining a Transmission Capital Blanket number for us. Should receive from her by tomorrow and I will then follow through with obtaining a PO.

Mary Ann

Mary Ann Westberg, SRWA | El Paso Electric Company
Principal, Land Management Representative
P O Box 910 , Las Cruces, NM 88004
T (575) 523-3682 C (575) 644-3751
Maryann.westberg@epelectric.com

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From: [Paulk, Ryan R](#)
To: [Westberg, Mary Ann](#)
Subject: Arroyo - West Mesa 345 kV ROW renewal (Isleta)
Date: Monday, August 11, 2014 3:39:00 PM

Mary Ann,

Also, we have to renew some ROW on the 345 kV Arroyo – West Mesa line by 2017. I am going to give that one to you as well.

I will get with you and go over this project. We will get outside help to assist us with this one and, as it is a Native American renewal. You will be coordinating efforts on this one.

Thanks.

Ryan R. Paulk, P.E. | [El Paso Electric Company](#)
Manager, Land Management
P O Box 982 | El Paso, Texas 79960
100 N Stanton | Loc 127 | El Paso, TX 79901
T (915) 521-4427 | C (915) 319-9144 | F (915) 543-4073
ryan.paulk@epelectric.com

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From: [Christianson, Jessica](#)
To: [Westberg, Mary Ann](#); [Paulk, Ryan R](#)
Cc: [Boomer, John](#)
Subject: Arroyo West Mesa Isleta
Date: Tuesday, October 20, 2015 11:19:19 AM

Maryann/Ryan:

I've lost track of exactly where we are on this but wanted to let you know, I received a call from SWCA in ABQ yesterday regarding cultural resource work within the ROW. They had done a survey back in 2001 and have been hired to conduct an updated cultural survey in area either directly adjacent to our ROW and potentially overlapping with it for another apparent ROW. They were not comfortable disclosing their client to us but wanted to pass my information along to them, which I asked them to please do.

Obviously there is a potential to coordinate field work on this, which makes a lot of sense. Additionally there may be some other interplay in the ROW negotiations. I will let you know as soon as I hear from them.

In the meantime, please let me know if you are away of any other ROW applicants.

Are we having the scheduled call tomorrow?

Thanks,

Jessica Christianson, PWS, LEED AP | [El Paso Electric Company](#)
Manager, Environmental
P O Box 982 | El Paso, Texas 79960
T (915) 351 4258 | C (915) 487 1262
jessica.christianson@epelectric.com

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From: Westberg, Mary Ann
To: Paulk, Ryan R; Monteros, Daniel J; Christianson, Jessica
Subject: Authorization for Tetra Tech
Date: Monday, August 03, 2015 9:36:32 AM
Attachments: Authorization for Tetra.docx

Here is a copy of the Authorization for Tetra Tech, still awaiting finalization with Julie Banuelos.

Mary Ann



Albuquerque Office
5647 Jefferson Street NE
Albuquerque, New Mexico 87109
Tel 505.254.1115 Fax 505.254.1116
www.swca.com

Technical Memorandum

To: Jessica Christianson
El Paso Electric Company
P.O. Box 982
El Paso, Texas 79960

From: Ian Dolly and Jennifer Hyre, SWCA Environmental Consultants

Date: January 12, 2016

Re: **El Paso Electric 115-kV Transmission Line/ SWCA Project No.35934**

INTRODUCTION

SWCA Environmental Consultants (SWCA) was retained by El Paso Electric Company (EPEC) to complete a biological survey to assess potential impacts to natural resources throughout a section of an existing 115-kilovolt (kV) transmission line located on Pueblo of Isleta lands in Bernalillo and Valencia Counties, New Mexico (see Appendix A [Figure A.1])

SWCA conducted a 100 percent pedestrian survey of the transmission line right-of-way from November 17 to 19, 2015. This technical memorandum describes the results of the survey, including the following:

- A description of vegetation and wildlife observed;
- Location and photo documentation of potential jurisdictional waters of the U.S. within or adjacent to the transmission line right-of-way; and
- Determination of the potential presence of listed species and evaluation of the potential effects of the existing transmission line on federal and state threatened or endangered species listed under the Endangered Species Act of 1973 (ESA), as amended (16 United States Code [USC] 1531–1544 et seq.), State of New Mexico threatened or endangered species listed under the New Mexico Wildlife Conservation Act (17-2-41 New Mexico Statutes Annotated [NMSA] 1978), and the state's endangered plant species regulations (75-6-1 NMSA 1978).

PROJECT DESCRIPTION AND LOCATION

EPEC is in the process of renewing its 50-year right-of-way lease for an 8.43-mile-long segment of existing 115-kV transmission line traversing through Pueblo of Isleta lands in Bernalillo and Valencia Counties, New Mexico. The segment occurs on a parcel of land owned by the Pueblo of Isleta west of

Interstate 25 and approximately 22 miles southwest of Albuquerque, New Mexico, and is located on the Dalies (34106-G7) and Wind Mesa (34106-H7) U.S. Geological Survey 7.5-minute quadrangles.

METHODS

Prior to the biological survey, U.S. Geological Survey (USGS) topographic maps were reviewed to determine the location and elevation of the survey area. Soil types were evaluated using the Natural Resources Conservation Service (NRCS) Web Soil Survey mapper (NRCS 2015a). Wetland and drainage data were also evaluated using National Hydrography Dataset (USGS 2015) and National Wetland Inventory maps (U.S. Fish and Wildlife Service [USFWS] 2015a), as well as geographic information system (GIS) data. SWCA biologists reviewed the USFWS (2015b) Information for Planning and Conservation (IPaC) System, the New Mexico Department of Game and Fish (NMDGF) Biota Information System of New Mexico (BISON-M 2015), the New Mexico Rare Plants website (New Mexico Rare Plant Technical Council 1999), and the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD) state endangered plant species list (EMNRD 2015) for the survey area.

SWCA biologists Ian Dolly, Ariel Peraglio, Thomas Staudt, and Joanna Franks conducted the survey from November 17 to 19, 2015. During the biological surveys, a 200-foot-wide survey buffer was used for the project area. The pedestrian surveys of the project area involved two SWCA biologists per day walking side by side, with spacing necessary to adequately observe and assess general vegetation and habitat suitability for USFWS and State of New Mexico protected native plants and special status species. Maps and shapefiles provided by EPEC were used for general orientation and to locate the proposed project boundaries.

During the biological surveys, SWCA also investigated the presence of potential waters of the U.S. and special aquatic sites, including wetlands. Potential waters of the U.S. were identified by the presence of an ordinary high water mark (OHWM), defined bed and bank, or the three mandatory U.S. Army Corps of Engineers (USACE) wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. The presence/absence of wetlands was identified in the field using routine on-site delineation methods according to the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a). Determination of wetland habitat type was based on the classification system developed by Cowardin et al. (1979). Other sources used to identify the presence/absence of wetlands include the *Pocket Guide to Hydric Soil Field Indicators, Version 7.0* (Wetland Training Institute, Inc. 2013). The presence/absence of lotic systems (e.g., creeks, rivers, arroyos, human-made ditches; collectively streams) were identified in the field using the methods outlined in the *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (USACE 2008b).

RESULTS

General Characteristics

The average elevation of the survey area ranges from 5,228 to 5,480 feet above mean sea level (amsl). Climate data for the survey area was obtained from records for Los Lunas, New Mexico (Station No. 295147 in Valencia County, which is located approximately 9.2 miles south of the Pueblo of Isleta on Interstate 25). The area has an average annual maximum temperature of 71.8 degrees Fahrenheit (°F), with an average annual minimum temperature of 37.1°F. The average annual precipitation is 8.0 inches with the majority occurring between July and September, while the average annual total snowfall is 6.4 inches, which largely occurs between December and February (Western Regional Climate Center 2015). A summary of the weather data during the survey is provided in Table 1.

Table 1. Weather during the Biological Survey

Date	Temperature (°F)	Weather Description
November 17, 2015	40–50	Partly cloudy, windy
November 18, 2015	40–60	Sunny, breezy
November 19, 2015	60–70	Sunny, calm

The survey area is largely open, undeveloped land with the exception of the existing 115-kV transmission line and associated service road. Several two-track roads, a cellular tower, a livestock corral, and a stock tank are located in the surrounding area.

Soils

The NRCS (2015a) identifies 11 mapped soil types within the survey area (Table 2). None of these soil types meet the criteria for hydric soils. The three dominant soils found in the survey area are characterized as being well drained, deep, and moderately permeable. These soils are not classified as prime or important farmland.

Table 2. Soils in the Project Area

Map Unit Symbol	Soil Type Name	Acres	Percent of Project Area
PbB	Pajarito fine sandy loam	20 40	19 96%
WU	Wink-Madurez association	16 49	16 14%
MWA	Madurez-Wink association, gently sloping	13 19	12 90%
BCC	Bluepoint loamy fine sand, 1 to 9 slopes	15 63	15 29%
Bb	Bluepoint fine sand, hummocky	12 69	12 42%
KOE	Kokan gravelly sand, 10 to 40 percent slopes	7 37	7 21%
BO	Bluepoint loamy fine sand, 1 to 9 percent slopes	4 90	4 80%
BK	Bluepoint loamy sand, hilly	4 46	4 37%
PAC	Pajarito loamy fine sand, 1 to 9 slopes	4 04	3 96%
AR	Akela-Rock outcrop complex, 1 to 9 slopes	2 73	2 67%
BKD	Bluepoint-Kokan association, hilly	0 31	0 30%

Source: NRCS (2015a).

Vegetation

The survey area is located within the Arizona/New Mexico Plateau: Albuquerque Basin U.S. Environmental Protection Agency Level IV ecoregion (Griffith et al. 2006). The Arizona/New Mexico Plateau represents a sizeable transitional region between drier shrublands and wooded higher relief tablelands of the Colorado Plateaus in the north; the lower, hotter, less vegetated Mojave Basin and Range in the west; and the forested mountain regions of the northeast and south. Vegetation of this ecoregion is generally composed of a mix of sand scrub and desert grassland habitats and topography is characterized by plains with alluvial fans and scattered hills (Griffith et al. 2006). One vegetation community, plains grassland, was identified within the survey area and is described below.

- **Plains grassland:** This vegetation community is found throughout the survey area. The community is characteristic of a grassland with blue grama (*Bouteloua gracilis*) and/or other grammas (*B. hirsuta*, *B. chondrosioides*, *B. eriopoda*, *B. curtipendula*). Other important grasses, either locally or generally, include buffalo grass (*Buchloe dactyloides*), Indian ricegrass (*Oryzopsis hymenoides*), and alkali sacaton (*Sporobolus airoides*). Shrubs such as fourwing saltbush (*Atriplex canescens*), sagebrush (*Artemisia* sp.), winterfat (*Krascheninnikovia lanata*), cholla (*Opuntia* sp.), soapweed yucca (*Yucca glauca*), rabbitbrush (*Chrysothamnus* sp.), and

snakeweed (*Gutierrezia* sp.) may be scattered throughout, or, because of grazing and/or soils, be noticeably conspicuous (Brown 1994).

Photographs representative of the vegetation community taken throughout the survey area are provided in Appendix B. Plant species recorded during the biological survey are listed in Table 3.

No noxious weeds listed by the State of New Mexico or U.S. Department of Agriculture were identified within the survey area (New Mexico Department of Agriculture 2009; U.S. Department of Agriculture 2015).

Table 3. Plant Species Observed during the Biological Survey

Common Name	Scientific Name
Western ragweed	<i>Ambrosia psilostachya</i>
Purple threeawn	<i>Aristida purpurea</i>
Sand sagebrush	<i>Artemisia filifolia</i>
Fourwing saltbush	<i>Atriplex canescens</i>
Silver bluestem	<i>Bothriochloa saccharoides</i>
Walking stick cactus	<i>Cylindropuntia spinosior</i>
Broom pea	<i>Dalea scoparia</i>
Fluffgrass	<i>Dasyochloa pulchella</i>
Mormon tea	<i>Ephedra viridis</i>
Rubber rabbitbrush	<i>Ericameria nauseosa</i>
Wild buckwheat	<i>Eriogonum</i> sp
Spinystar cactus	<i>Escobaria vivipara</i>
Devil's cholla	<i>Grusonia kunzei</i>
Broom snakeweed	<i>Gutierrezia sarothrae</i>
Kochia	<i>Kochia scoparia</i>
Winterfat	<i>Krascheninnikovia lanata</i>
Creosote bush	<i>Larrea tridentata</i>
Pale wolfberry	<i>Lycium pallidum</i>
Manyflowered mentzelia	<i>Mentzelia multiflora</i>
Plains pricklypear	<i>Opuntia polyacantha</i>
Indian ricegrass	<i>Oryzopsis hymenoides</i>
Devil's claw	<i>Proboscidea parviflora</i>
Dock	<i>Rumex</i> sp
Russian thistle	<i>Salsola kali</i>
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>
Scarlet globemallow	<i>Sphaeralcea coccinea</i>
Sand dropseed	<i>Sporobolus cryptandrus</i>
Plains yucca	<i>Yucca glauca</i>

Note Nomenclature follows the PLANTS Database (NRCS 2015b)

Wildlife

The Albuquerque Basin ecoregion (Griffith et al. 2006) provides habitat for a variety of wildlife species. SWCA biologists detected 14 bird species, five mammal species, and one reptile species during the biological survey (Table 4). The means of detection for each species is noted in the table below. A few small- to medium-sized burrows were also observed (see Figure A.2 and Photograph B.6).

Table 4. Wildlife Detected during the Biological Survey

Common Name	Scientific Name
Birds	
Western meadowlark ¹	<i>Sturnella neglecta</i>
Horned lark ¹	<i>Eremophila alpestris</i>
Red-tailed hawk ¹	<i>Buteo jamaicensis</i>
Sagebrush sparrow ¹	<i>Artemisiospiza nevadensis</i>
Common raven ¹	<i>Corvus corax</i>
American kestrel ¹	<i>Falco sparverius</i>
Loggerhead shrike ¹	<i>Lanius ludovicianus</i>
Scaled quail ¹	<i>Callipepla squamata</i>
Canyon towhee ¹	<i>Pipilo fuscus</i>
Northern mockingbird ¹	<i>Mimus polyglottos</i>
Bewick's wren ¹	<i>Thryomanes bewickii</i>
Rock wren ¹	<i>Salpinctes obsoletus</i>
Sandhill crane ¹	<i>Grus canadensis</i>
Northern harrier ¹	<i>Circus cyaneus</i>
Mammals	
Domestic cattle	<i>Bos taurus</i>
North American porcupine ¹	<i>Erethizon dorsatum</i>
Black-tailed jackrabbit ¹	<i>Lepus californicus</i>
Coyote ³	<i>Canis latrans</i>
White-throated woodrat ²	<i>Neotoma albigula</i>
Reptiles	
Side-blotched lizard ¹	<i>Uta sp</i>

Note ¹ Direct observation (visual/aural), ² mounds and/or nests, ³ tracks and/or scats

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) provides federal protection to most bird species, as well as their nests and eggs. EPEC is in the process of updating its avian protection plan that outlines its procedures for complying with the MBTA. The avian protection plan has been developed to identify and minimize injuries or fatalities to raptors and migratory birds. The plan provides a special purpose permit for temporarily possessing carcasses and injured birds. It does not, however, allow the removal or disturbance of active nests unless such nests pose an imminent threat to human health, safety, property, or inability to maintain the line in an emergency situation.

During the survey, 14 bird species were observed or identified by call (see Table 4). Three inactive passerine nests were identified within the survey area. Two nests were found in separate oneseed juniper (*Juniperus monosperma*) trees, and the other nest was located on one the transmission towers. The nests are depicted on Figure A.2 in Appendix A. Suitable nesting habitat for grassland and shrubland nesting migratory birds is present throughout the survey area. The existing transmission line and towers also provide perching habitat for multiple avian species. Vegetation treatments to control the growth of woody species along the right-of-way are conducted as needed based on the rate of encroachment and EPEC's vertical clearance requirements. These treatments consist of selective, mechanical removal.

Potential for impacts to migratory birds would vary depending on timing of maintenance activities relative to the migratory bird breeding season (March–August); however EPEC has established procedures for conducting nesting bird surveys prior to performing vegetation management and other maintenance activities.

Bald and Golden Eagle Protection Act

Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are protected under the MBTA and the Bald and Golden Eagle Protection Act. Bald eagles are found typically in association with water and nest and breed from October to July throughout the state. Bald eagles prey on fish, but also on mammals, especially prairie dogs (*Cynomys* sp.). Bald eagles are known to winter nearby along the Rio Grande, which is approximately 5 miles east of the existing transmission line (Zwank 1996).

Golden eagles nest primarily on rock ledges or cliffs and occasionally in large trees or on transmission towers at elevations ranging from 4,000 to 10,000 feet amsl. Golden eagles occur in nearly all habitats from desert grasslands to timberline, but tend to prefer mountainous regions during breeding and open woodland and prairies during the winter (New Mexico Avian Protection Working Group 2005). Both bald and golden eagles are carnivores. Golden eagles feed mainly on small mammals, as well as invertebrates, carrion, and other wildlife (BISON-M 2015; Stahlecker and Walker 2010).

No bald or golden eagles were observed during the biological survey. Refer to the Special Status Species section below for additional analysis of potential project effects on bald eagles. Golden eagles could occur in the survey area, especially outside the breeding season, when they can perch on the transmission towers far from cliffs and other rugged terrain. The proposed project is not anticipated to cause take of individual bald or golden eagles, their nests, or eggs.

Wetlands and Waterways

The survey area is located in the Cedar Wash Watershed (Hydrologic Unit Code 130202030602) and the Cañon Monte Largo-Rio Grande Watershed (Hydrologic Unit Code 1302020306).

No wetlands were identified during the survey; 19 ephemeral drainages were identified within the survey area (see Figure A.3–Figure A.5 in Appendix A). The transmission line currently spans across all drainages. One human-made stock tank is located directly east of the access road and will not hinder EPEC staff during regular maintenance activities (see Photograph B.8. in Appendix B).

Special Status Species

Special status species evaluated in this technical memorandum consisted of 1) federally protected (endangered and threatened) species, 2) additional species listed by the USFWS as candidate or proposed species, and 3) state-listed endangered and threatened species. Table 5 describes the special status species with the potential to occur in Bernalillo and Valencia Counties, their habitat, and potential for occurrence in the survey area.

The potential for local species occurrence was based on 1) existing information on distribution and 2) qualitative comparisons of the habitat requirements of each species with vegetation communities, landscape features, and/or water quality conditions in the project area. Possible impacts to these species were evaluated based on reasonably foreseeable project-related activities and the local loss of habitat.

The potential for occurrence of a species was identified using the following categories:

- *Known to occur*—the species was documented in the proposed survey area either during or prior to the biological surveys by a reliable observer.
- *May occur*—the proposed survey area is within the species' currently known range, and vegetation communities, soils, water quality conditions, etc., resemble those known to be used by the species.

- *Unlikely to occur*—the proposed survey area is within the species' currently known range, but vegetation communities, soils, water quality conditions, etc., do not resemble those known to be used by the species, or the proposed survey area is clearly outside the species' currently known range.

There are 20 special status species listed for Bernalillo and Valencia Counties (Table 5). Based on their current distribution and habitat requirements, the following species have the potential to occur in the project area: Baird's sparrow (*Ammodramus bairdii*), Sprague's pipit (*Anthus spragueii*), and bald eagle. There is no USFWS designated species critical habitat within or immediately adjacent to the survey area (USFWS 2015b, 2015c).

Table 5. Special Status Species for Bernalillo and Valencia Counties, New Mexico

Common Name (Species Name)	Status ¹	Range or Habitat Requirements	Potential for Occurrence in Survey Area
Birds			
Baird's sparrow (<i>Ammodramus bairdii</i>)	NM State T	This species is a winter resident in New Mexico. It has been found on Otero Mesa and in the Animas Valley and may occur in other areas of suitable winter habitat, particularly in the southeast portion of the state. Generally prefers dense, extensive grasslands with few shrubs. Avoids heavily grazed areas.	May occur in the survey area due to presence of dry grassland habitat, however, the survey area is outside the sparrow's typical winter range.
Bald eagle (<i>Haliaeetus leucocephalus alascanus</i>)	NM State T	Occurs in New Mexico year-round. Breeding is restricted to a few areas mainly in the northern part of the state along or near lakes. In migration and during winter months the species is found chiefly along or near rivers and streams and in grasslands associated with large prairie dog colonies. Typically perches in trees.	May occur, wintering habitat is present nearby along the Rio Grande.
Bell's vireo (<i>Vireo bellii</i>)	NM State T	In New Mexico, Bell's vireo occurs in the southern third of the state during the breeding season. In New Mexico this species characteristically occurs in dense shrubland or woodland along lowland stream courses, with willows (<i>Salix</i> sp.), mesquite (<i>Prosopis</i> sp.), and seepwillows (<i>Baccharis glutinosa</i>). Its distribution during breeding is typically limited to riparian habitats.	Unlikely to occur in the survey area due to lack of dense vegetation and water.
Broad-billed hummingbird (<i>Cynanthus latirostris magicus</i>)	NM State T	Occurs in riparian habitat or dense mesquite. Occurs in Guadalupe Canyon in Hidalgo County, and rarely found in the Peloncillo Mountains.	Unlikely to occur in the survey area due to the lack of riparian forest and dense mesquite.
Brown pelican (<i>Pelecanus occidentalis carolinensis</i>)	NM State E	Occurs usually in marine habitats and feeds almost exclusively on fish. Associated with water.	Unlikely to occur in the survey area due to lack of perennial water bodies.
Common ground-dove (<i>Columbina passerina pallescens</i>)	NM State E	Associated with shrubby riparian habitat or riparian woodland edges. Also occurs in desert scrub dominated by mesquite and pricklypear. Feeds exclusively on the ground, in sparsely vegetated areas.	Unlikely to occur in the survey area due to lack of riparian habitat.
Common black-hawk (<i>Buteogallus anthracinus</i>)	NM State T	Occurs in New Mexico almost exclusively during the breeding season and in migration. Breeding populations known chiefly from the Gila River valley in the southwestern portion of the state and from along the Mimbres River and the Rio Hondo watershed. Strongly tied to cottonwood (<i>Populus</i> sp.) gallery forests.	Unlikely to occur in the survey area due to lack of riparian forest.
Gray vireo (<i>Vireo vicinior</i>)	NM State T	Strongly associated with piñon-juniper and scrub oak habitats. Distributed mainly across the western two-thirds of the state. Prefers gently sloped canyons, rock outcrops, ridge tops, and moderate scrub cover.	Unlikely to occur in the survey area due to lack of piñon-juniper and scrub oak habitats.
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	USFWS T w/ CH	Occupies mountainous areas and deep canyons incised within flat plateaus. Habitat consists typically of mixed-conifer, ponderosa pine (<i>Pinus ponderosa</i>), or ponderosa pine/Gambel oak (<i>Quercus gambelii</i>) forest. Prefers mesic, shaded environments such as canyon bottoms and mountainous riparian areas.	Unlikely to occur in the survey area due to lack of mixed-conifer, ponderosa pine, and ponderosa pine/Gambel oak forest.
Neotropic cormorant (<i>Phalacrocorax brasilianus</i>)	NM State T	Associated with wetlands. Key requirements include areas of deep water for diving and elevated perches in trees, shrubs, and other structures for nesting, roosting, and drying plumage after feeding.	Unlikely to occur in the survey area due to lack of wetlands.

Common Name (Species Name)	Status ¹	Range or Habitat Requirements	Potential for Occurrence in Survey Area
Northern aplomado falcon (<i>Falco femoralis septentrionalis</i>)	USFWS ENEP NM State E	Associated with semi-desert grasslands with scattered yuccas, mesquite, and cacti. Naturally occurring populations are essentially restricted to the southern tier of New Mexico.	Unlikely to occur. The survey area is outside the species' occupied range.
Peregrine falcon (<i>Falco peregrinus</i> ; <i>F. p. tundrus</i>)	NM State T	Found in New Mexico year-round. All nests in New Mexico are found on cliffs. In migration and during winter months New Mexico's peregrine falcons are typically associated with water and large wetlands.	Unlikely to occur in survey area due to the lack of water, large wetlands, and cliffs.
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	USFWS E w/ CH NM State E	In New Mexico, this species is known to breed only along the Gila River and Rio Grande. Associated with moist riparian areas throughout the year. Breeding habitat requirements vary by region. In migration, may be associated with willows along ditches, cottonwood woodlands, and saltcedar (<i>Tamarix</i> sp.) stands.	Unlikely to occur in the survey area due to lack of riparian habitat.
Sprague's pipit (<i>Anthus spraguei</i>)	USFWS C	Occurs in New Mexico only as a sporadic winter resident. Its distribution in the state is not well known, but includes the lower Pecos River valley, Otero Mesa, and the Animas Valley. Species as a whole prefers dry, open grasslands.	May occur. The survey area does harbor some grassland habitat, however, it is outside the species' typical winter range.
White-eared hummingbird (<i>Hylocharis leucotis</i>)	NM State T	Irregular summer visitor to extreme southeastern Arizona, rare in New Mexico and Texas. Found in mountain woodlands in the southwestern corner of the state in the Animas and Peloncillo (less regularly) Mountains. Extremely rare and irregular elsewhere in western New Mexico.	Unlikely occur. The survey area is far outside the known distribution of the species.
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	USFWS T w/ proposed CH	Breeds and migrates through in riparian habitat and associated drainages, springs, developed wells, and earthen ponds supporting mesic vegetation, deciduous woodlands with cottonwoods and willows, dense understory foliage is important for nest site selection. Nests in willow, mesquite, cottonwood, and hackberry (<i>Celtis</i> sp.), forages in similar riparian woodlands.	Unlikely to occur in the survey area. The survey area does not contain required riparian habitat vegetation of deciduous woodlands with cottonwoods and willows.
Plants			
Pecos sunflower (<i>Helianthus paradoxus</i>)	USFWS T w/ CH	A wetland plant that can be found on wet, alkaline soils at spring seeps, wet meadows, stream courses, and pond margins. The species has seven populations in west-central New Mexico and Trans-Pecos Texas, all of which are dependent on wetlands from natural groundwater deposits (USFWS 2005).	Unlikely to occur due to lack of wetland habitat in the survey area.
Mammals			
New Mexico meadow jumping mouse (<i>Zapus hudsonius luteus</i>)	USFWS E w/ proposed CH NM State E	The New Mexico meadow jumping mouse is endemic to New Mexico, Arizona, and a small area of southern Colorado (Hafner et al. 1981:501–502, BISON-M 2015). The mouse appears to only utilize two riparian community types: 1) persistent emergent herbaceous wetlands (i.e., beaked sedge [<i>Carex rostrata</i>] and reed canarygrass [<i>Phalaris arundinacea</i>] alliances) and 2) scrub-shrub wetlands (i.e., riparian areas along perennial streams that are composed of willows and alders) (Frey 2005:53).	Unlikely to occur in the survey area due to lack of suitable riparian habitat.

Common Name (Species Name)	Status ¹	Range or Habitat Requirements	Potential for Occurrence in Survey Area
Spotted bat (<i>Euderma maculatum</i>)	NM State T	In New Mexico, spotted bats have been taken in areas near cliffs, including piñon-juniper woodlands and from streams or water holes within ponderosa pine or mixed coniferous forest. The spotted bat is usually captured around a water source including desert pools or cattle tanks. It also may use rivers or desert washes as travel corridors.	A stock tank is present adjacent to the survey area. Species may forage in the vicinity, however, no cliffs, piñon-juniper woodlands, and ponderosa pine or mixed coniferous forests are present in the survey area.
Fish			
Rio Grande silvery minnow (<i>Hybognathus amarus</i>)	USFWS E w/ CH NM State E	The Rio Grande silvery minnow is an endemic species of the Rio Grande drainage, ranging from New Mexico to Tamaulipas, Mexico. It occupies a variety of habitats in low-gradient, perennial waters with shifting sand or silty bottoms.	Unlikely to occur, the survey area is outside the species' known range. Also, no perennial waterways exist within the survey area.

¹Federal (USFWS) status definitions

E = Endangered. Any species considered by the USFWS as being in danger of extinction throughout all or a significant portion of its range. The ESA specifically prohibits the take of a species listed as endangered. Take is defined by the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct.

T = Threatened. Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The ESA specifically prohibits the take (see definition above) of a species listed as threatened.

C = Candidate. Any species (taxon) for which the USFWS has sufficient information to propose that it be added to the list of endangered and threatened species, but the listing action has been precluded by other, higher priority listing activities.

ENEP = Experimental, Non-essential Population. Any reintroduced population established outside the species' current range, but within its historical distribution. For purposes of Section 7 consultation, experimental, non-essential populations are treated as proposed species (species proposed in the Federal Register for listing under Section 4 of the ESA), except on national wildlife refuges and national parks, where they are treated instead as threatened.

w/ CH = with Critical Habitat. Critical habitat corresponds to specific areas within the geographical area occupied by the species at the time of listing or historically with physical or biological features essential to the species' conservation and requiring special management considerations or protection.

NM State status definitions

E = Endangered. Any species that is considered by the State of New Mexico (NMDGF for wildlife, Forestry and Resources Conservation Division for plants) as being in jeopardy of extinction or extirpation from the state.

T = Threatened. Any species that, in the view of the State of New Mexico, is likely to become endangered within the foreseeable future throughout all or a significant portion of its range in New Mexico.

Except where otherwise noted, range or habitat information for wildlife species is taken from the BISON-M website (BISON-M 2015), the USFWS IPaC system (USFWS 2015b), EMNRD (2015), New Mexico Partners in Flight (2015), New Mexico Rare Plant Technical Council (1999) and Cartron (2010).

Sprague's Pipit (*Anthus spragueii*)

Sprague's pipit is federally listed as a candidate species as a result of range contraction and population decline since the late nineteenth century. The species is migratory, breeding on the Great Plains but wintering farther south, in Arizona, New Mexico, Texas, Oklahoma, Arkansas, Mississippi, Louisiana, and northern Mexico. It leaves its breeding grounds anywhere from September through November and will arrive on wintering grounds over the same period. A small wintering population is known to occur in grasslands of southern New Mexico (New Mexico Partners in Flight 2015a).

Sprague's pipit prefers well-drained areas of open grassland with native grasses of intermediate height and thickness with moderate litter depths. Although Sprague's pipits appear to tolerate disturbed grasslands, they are strongly tied to native prairie (land that has never been plowed) throughout their life cycle and are rarely observed in croplands or on land in the Conservation Reserve Program (i.e., projects aimed at converting marginal farmland back to grassland) (USFWS 2013). The species may also occur in alkaline meadows and in wet meadows adjacent to alkali and freshwater lakes.

This species could occur in the survey area during winter, but would not be expected to breed in the vicinity of the existing transmission line. No individuals of this species were detected during the 2015 field surveys. Impacts to Sprague's pipit present in the survey area would be possible in the form of maintenance-related noise disturbance, but such impacts would only be temporary and would not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Baird's Sparrow (*Ammodramus bairdii*)

Baird's sparrow is a threatened species in the state of New Mexico. The species' breeding distribution is from Saskatchewan and Manitoba south to Montana and Minnesota. It primarily winters on grasslands of northern Mexico, although its winter range extends into small portions of southwest Texas, southeast Arizona, and southern New Mexico (NMDGF 1994; National Audubon Society 2014). Baird's sparrows migrate in the eastern plains and southern lowlands of New Mexico and are considered rare to uncommon (NMDGF 1994).

The preferred habitat of Baird's sparrow is expansive, dense grasslands with little shrub cover. It avoids areas that have been grazed heavily. It breeds in short grass prairies (National Audubon Society 2014). In New Mexico it has been found in a wide variety of habitats ranging from desert grasslands in the south to prairies in the northeast and mountain meadows in the San Juan and Sangre de Cristo Mountains.

The probability of Baird's sparrow presence in the survey area is low. Impacts to the species would be possible in the form of maintenance-related noise disturbance, but such impacts would only be temporary and would not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Bald Eagle (*Haliaeetus leucocephalus alascanus*)

Bald eagle is a threatened species in the state of New Mexico. Although the largest breeding concentrations are in Alaska and Canada, bald eagles use suitable aquatic habitat throughout most of the continental United State. Breeding in the Southwest is limited, but has increased in recent years (New Mexico Partners in Flight 2015b).

In New Mexico, the species is relatively common in the winter and during migration, along watercourses and reservoirs (Buehler 2000; Parmeter et al. 2002). Bald eagles occur locally in the summer at several locations throughout the state, adjacent to bodies of water. Breeding habitat generally consists of mature

or old-growth forest with some habitat edge, relatively close to suitable foraging areas. Distance of territories to water varies within and among populations, depending on the type and quality of foraging opportunities (Buehler 2000). Where possible, bald eagles select habitat away from areas of human disturbance and development (Anthony and Isaacs 1989; Wood et al. 1989). Bald eagles typically nest in large trees, often ponderosa pine or cottonwood, with exposed branches strong enough to support the large nest. The same nest tree may be reused for many years. Nest construction may begin as early as February, and a single brood is raised throughout the summer. Foraging areas have tall, easily accessible trees for perching. Most perch trees used are live trees, although dead trees are preferred if available (Stalmaster 1987).

Bald eagles winter along the Rio Grande, located 5 miles east of the existing transmission line. Bald eagles could potentially forage in the survey area or perch on the existing transmission towers. The survey area lacks large water bodies, has few trees, and lacks abundant prey species. No prairie dog colonies occur within the survey area. Potential impacts to the species would be possible in the form of maintenance-related noise disturbance, but such impacts would only be temporary and would not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.

Conclusion

Based on survey results and lack of suitable habitat, EPEC's continued operation and maintenance of a 115-kV transmission line on Isleta Pueblo lands is not anticipated to negatively affect federal or state special status plant or wildlife species or their habitats. State and federal special status plant and wildlife species were not present at the time of the survey.

In general, no major or long-term effects on migratory birds are anticipated from EPEC's continued operation and maintenance of a 115-kV transmission line on Isleta Pueblo lands. Incidental displacement of migratory birds is possible on a local scale during maintenance-related activities due to temporary elevations in ambient noise levels. However, many birds occurring locally would move into similar abundant habitat adjacent to the right-of-way.

A few nests of non-raptor bird species were identified during the biological survey (see Figure A.2 in Appendix A). If maintenance activities, including mechanical treatments of woody vegetation, cannot be avoided in the primary nesting season for migratory birds (March 1–August 31), migratory bird nest surveys would be performed up to 2 weeks prior to commencing with those activities. An avoidance buffer around each active nest would be implemented until the young have fledged, the size and timing of which may vary by species, but would be no less than 100 feet. This stipulation would not apply in the event of an emergency as per EPEC's Migratory Bird Special Purpose Utility Permit.

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APPENDIX A PROJECT MAPS

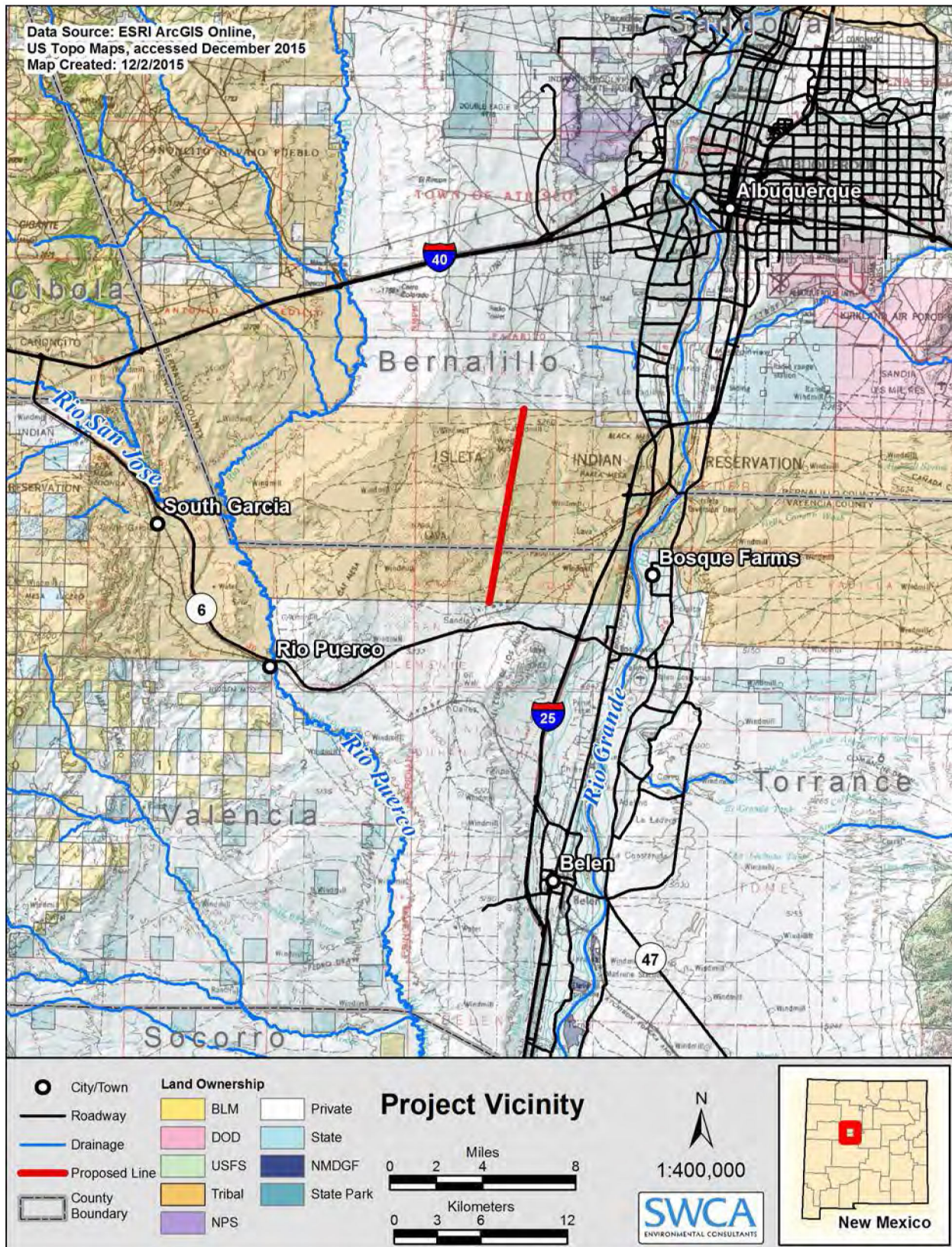


Figure A.1. Project vicinity map.

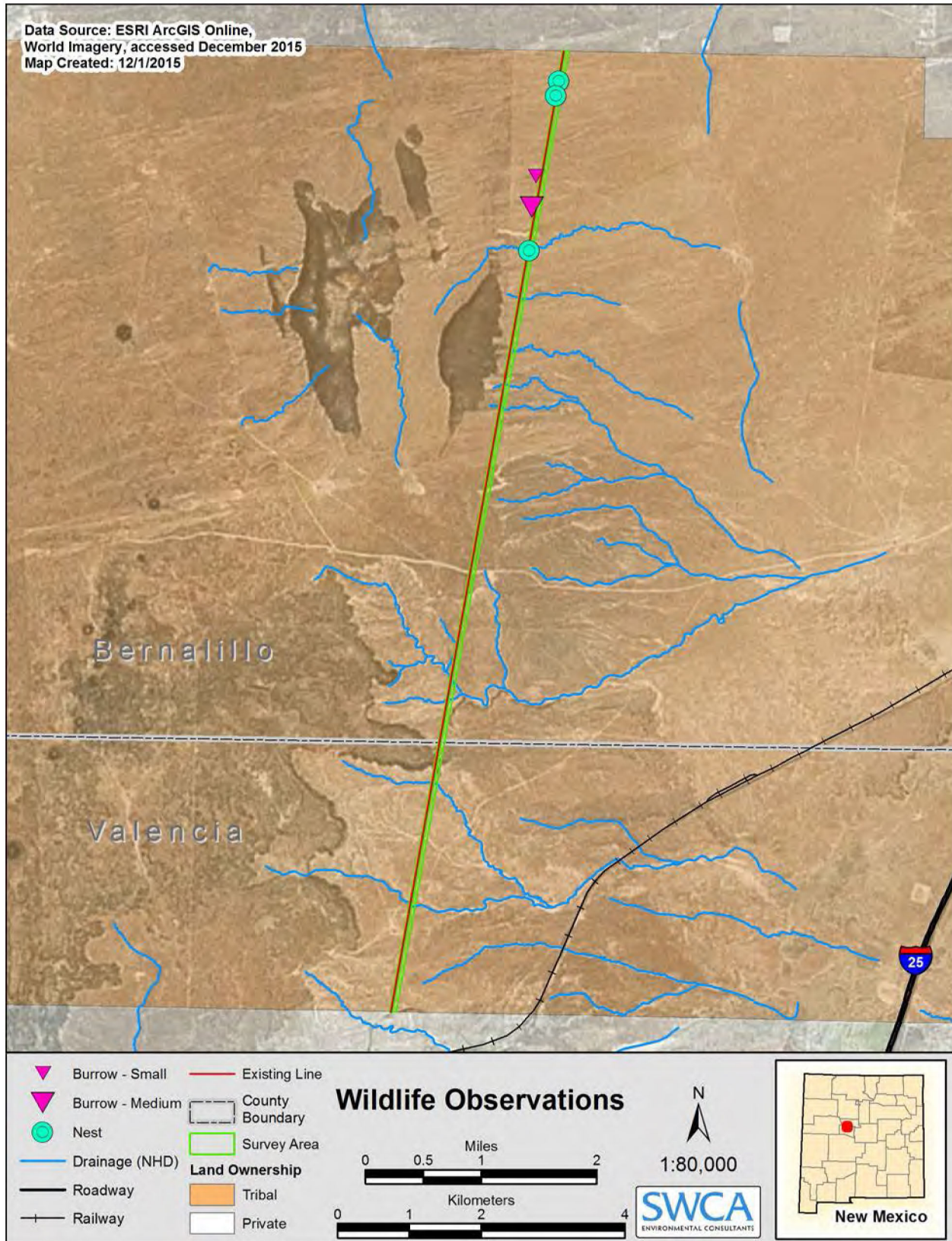


Figure A.2. Wildlife observations.