

- Survey Area
- PLSS Survey Township
- PLSS Section
- Survey Results**
- Sahara Mustard (*Brassica tournefortii*)
- Sahara Mustard (*Brassica tournefortii*)

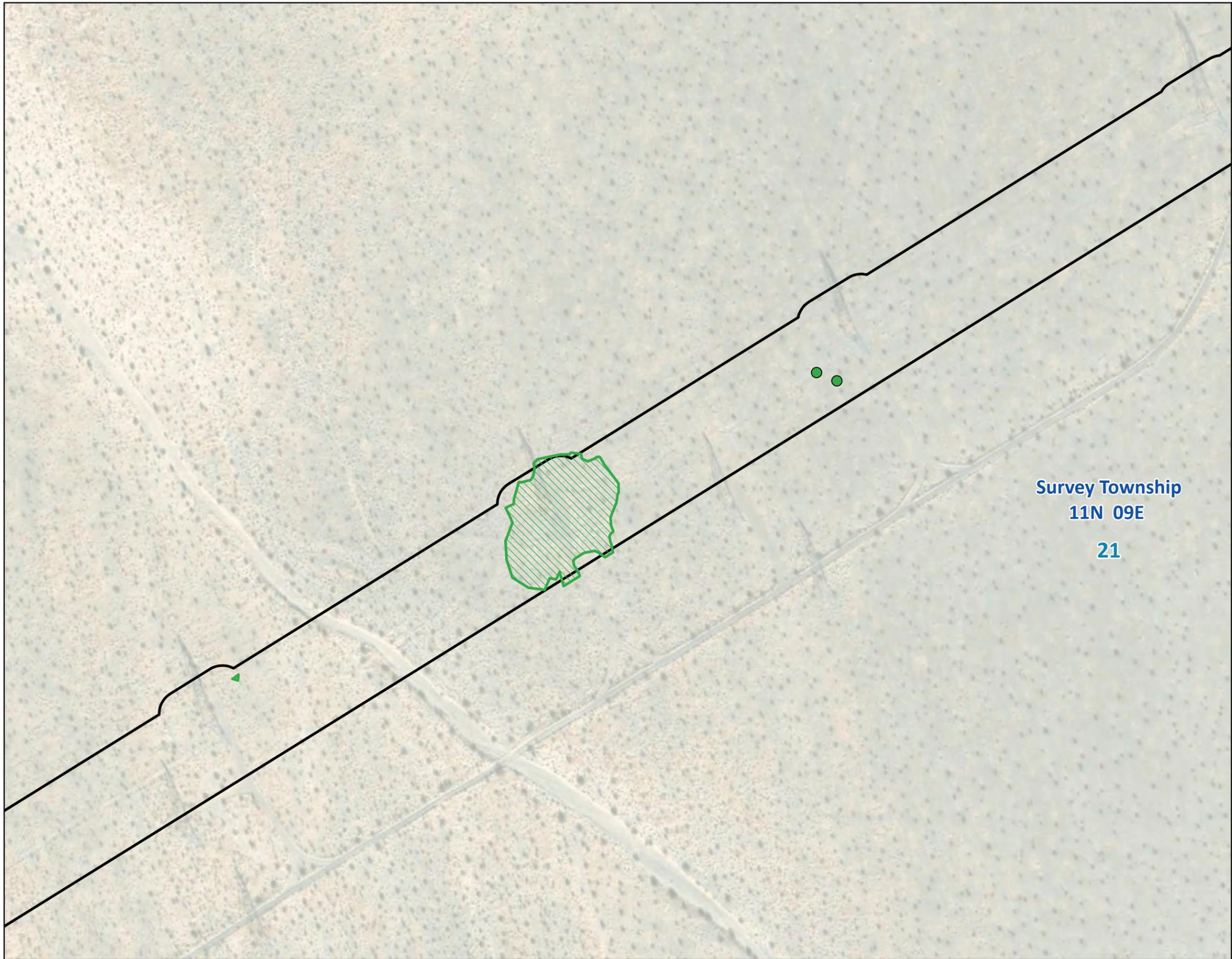
Survey Township
11N 09E

20 21



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 Noxious Weed Inventory Results
 LUGO-VICTORVILLE 500 KV TRANSMISSION LINE
 REMEDIAL ACTION SCHEME PROJECT
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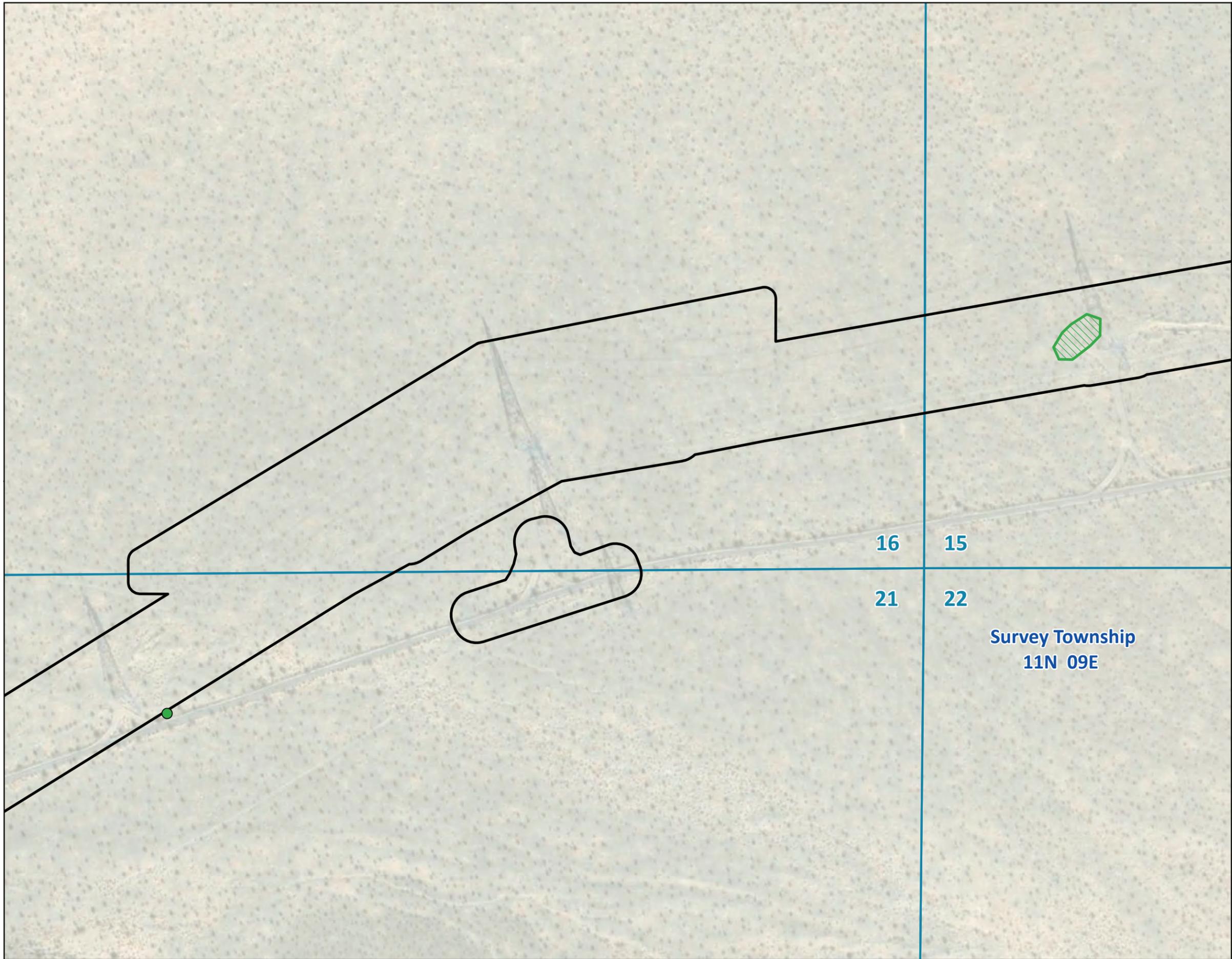
-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Sahara Mustard (*Brassica tournefortii*)
-  Sahara Mustard (*Brassica tournefortii*)

Survey Township
11N 09E
21



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-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Sahara Mustard (*Brassica tournefortii*)
-  Sahara Mustard (*Brassica tournefortii*)



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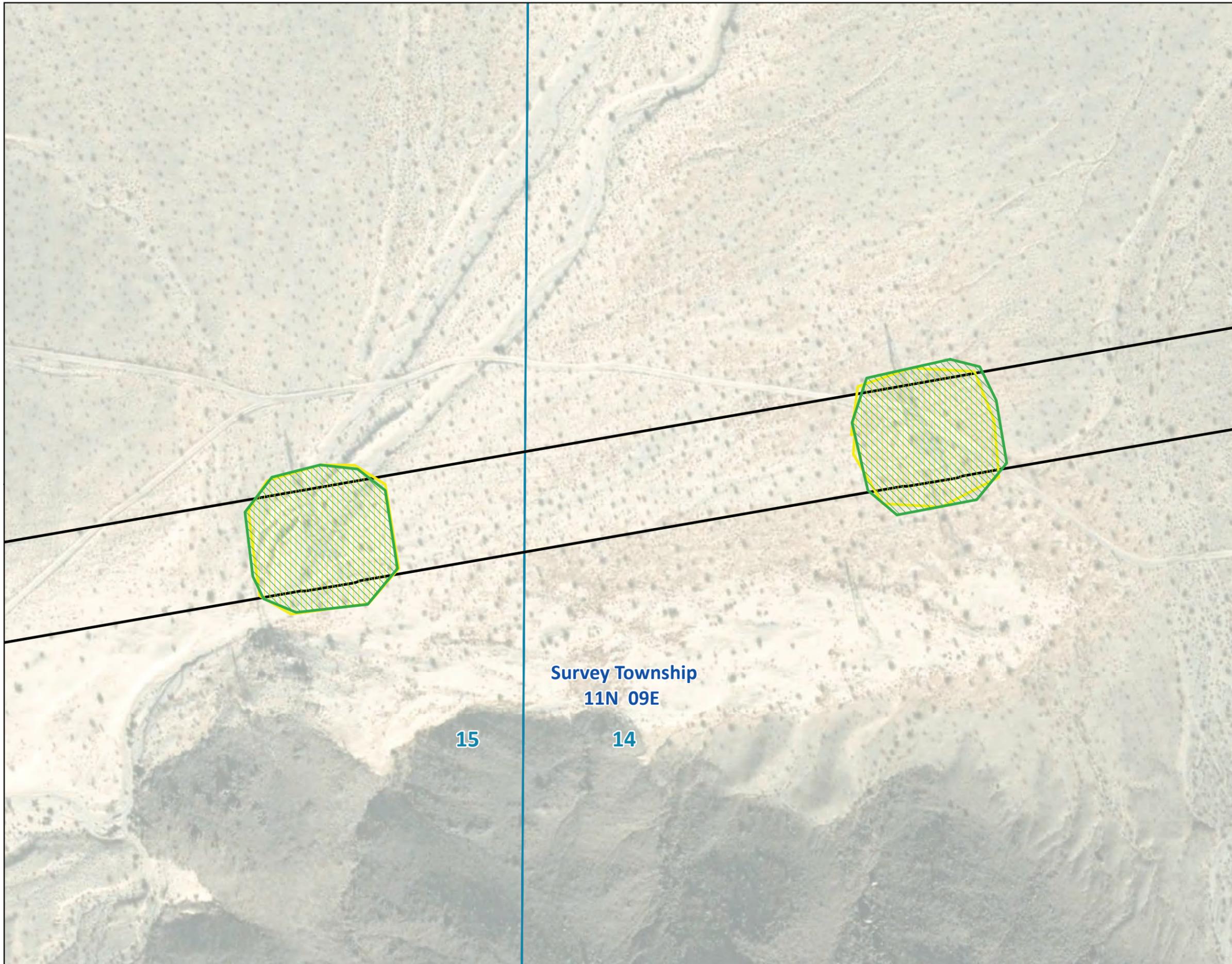
-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Sahara Mustard (*Brassica tournefortii*)
-  Sahara Mustard (*Brassica tournefortii*)

Survey Township
11N 09E
15
22



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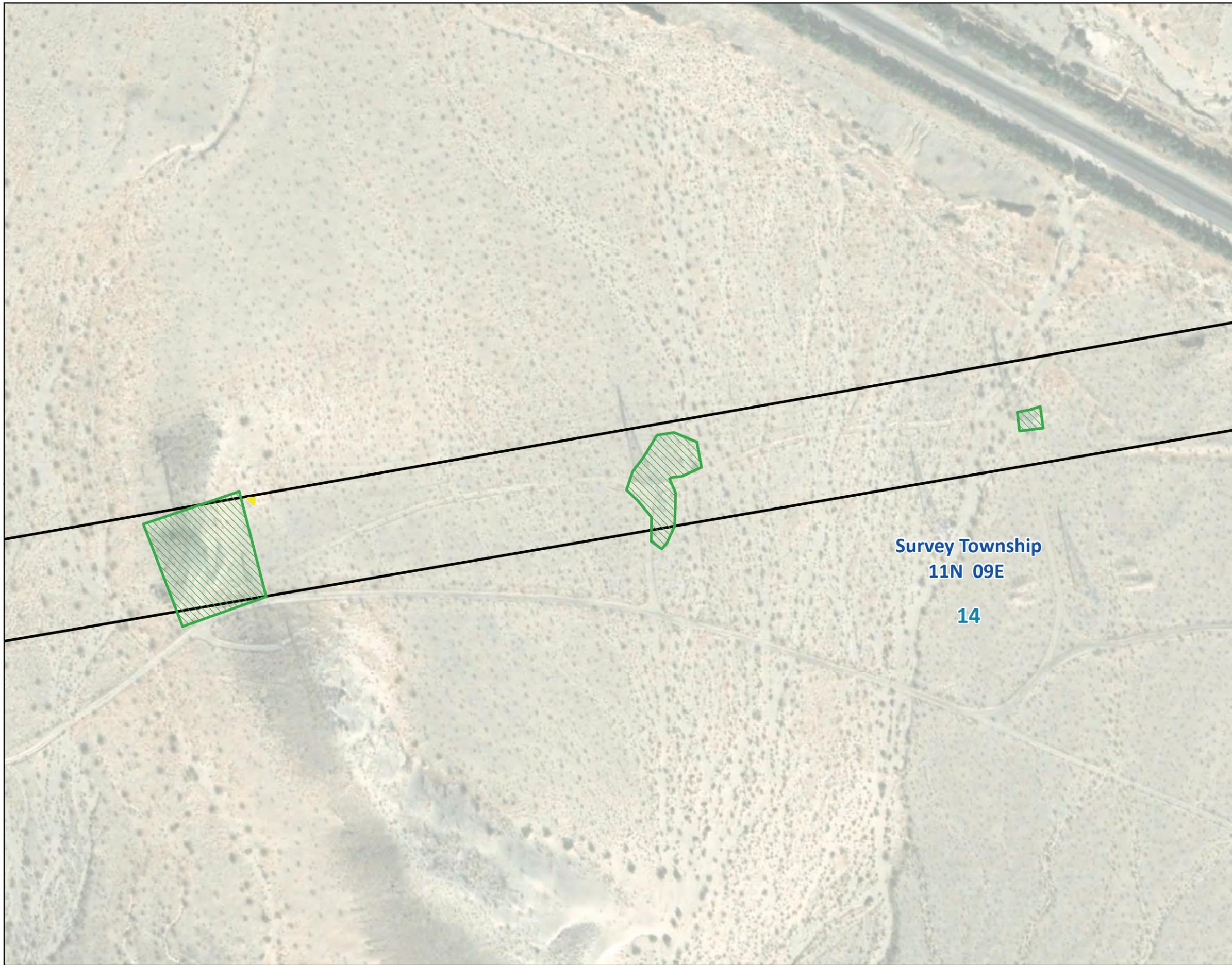


-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Russian Thistle (*Salsola* sp.)
-  Sahara Mustard (*Brassica tournefortii*)



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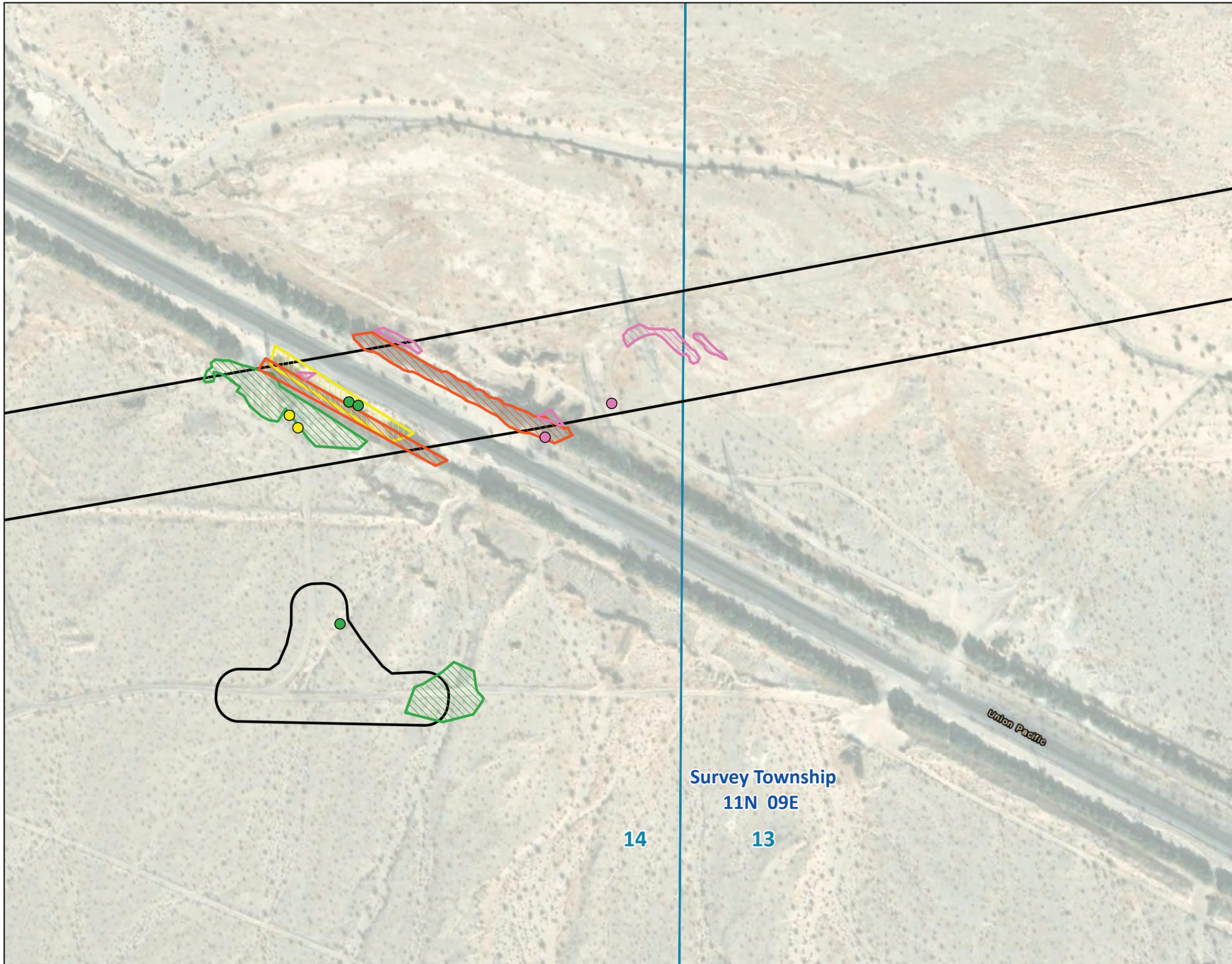


-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Russian Thistle (*Salsola* sp.)
-  Sahara Mustard (*Brassica tournefortii*)



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- Survey Area
- PLSS Survey Township
- PLSS Section
- Survey Results**
- London Rocket (*Sisymbrium irio*)
- Russian Thistle (*Salsola* sp.)
- Sahara Mustard (*Brassica tournefortii*)
- Athel Tamarisk (*Tamarix aphylla*)
- London Rocket (*Sisymbrium irio*)
- Russian Thistle (*Salsola* sp.)
- Sahara Mustard (*Brassica tournefortii*)



Survey Township
11N 09E

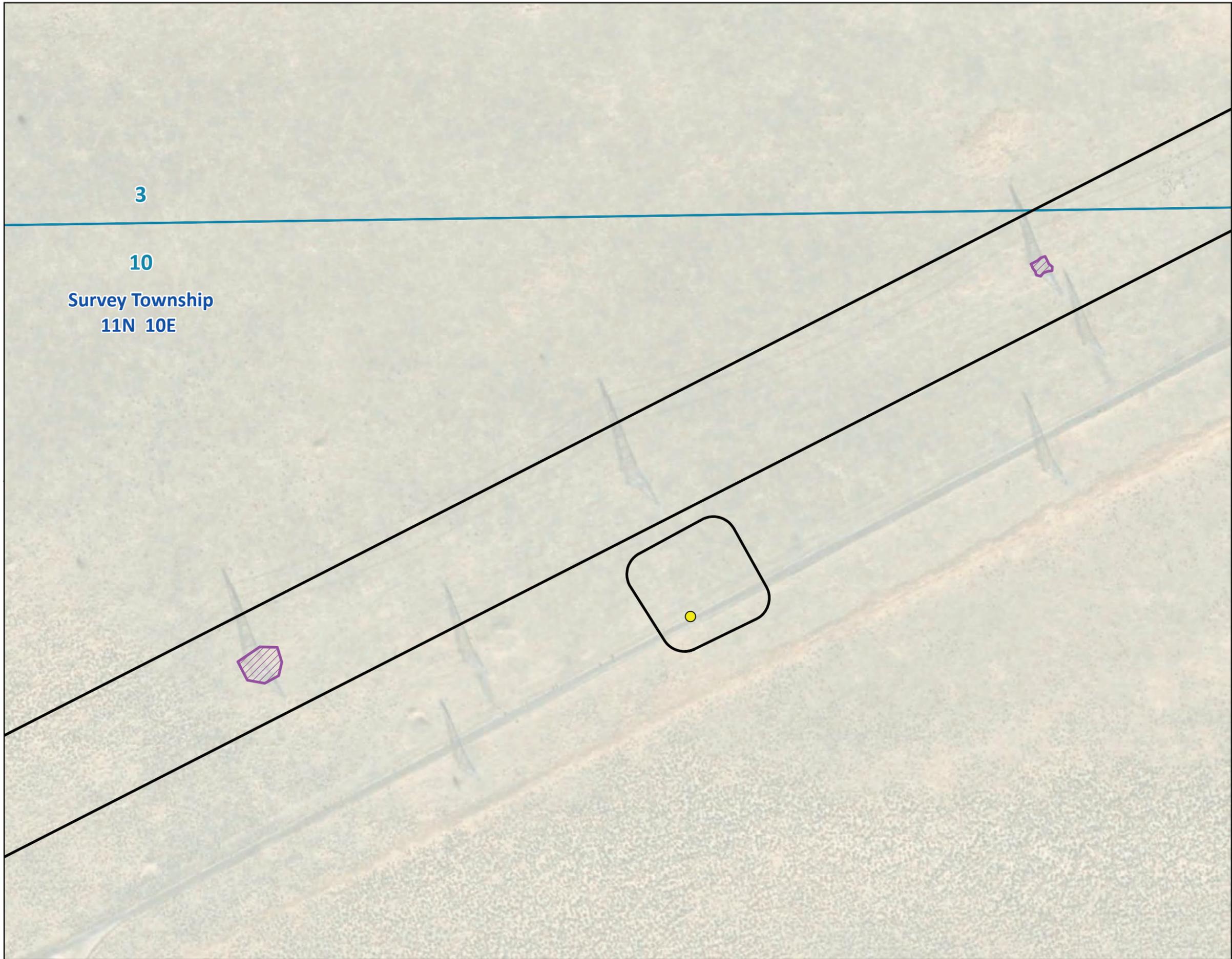
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Union Pacific

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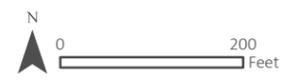


-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Russian Thistle (*Salsola* sp.)
-  Redstem Filaree (*Erodium cicutarium*)

3
10
Survey Township
11N 10E



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-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Sahara Mustard (*Brassica tournefortii*)

Survey Township
12N 11E

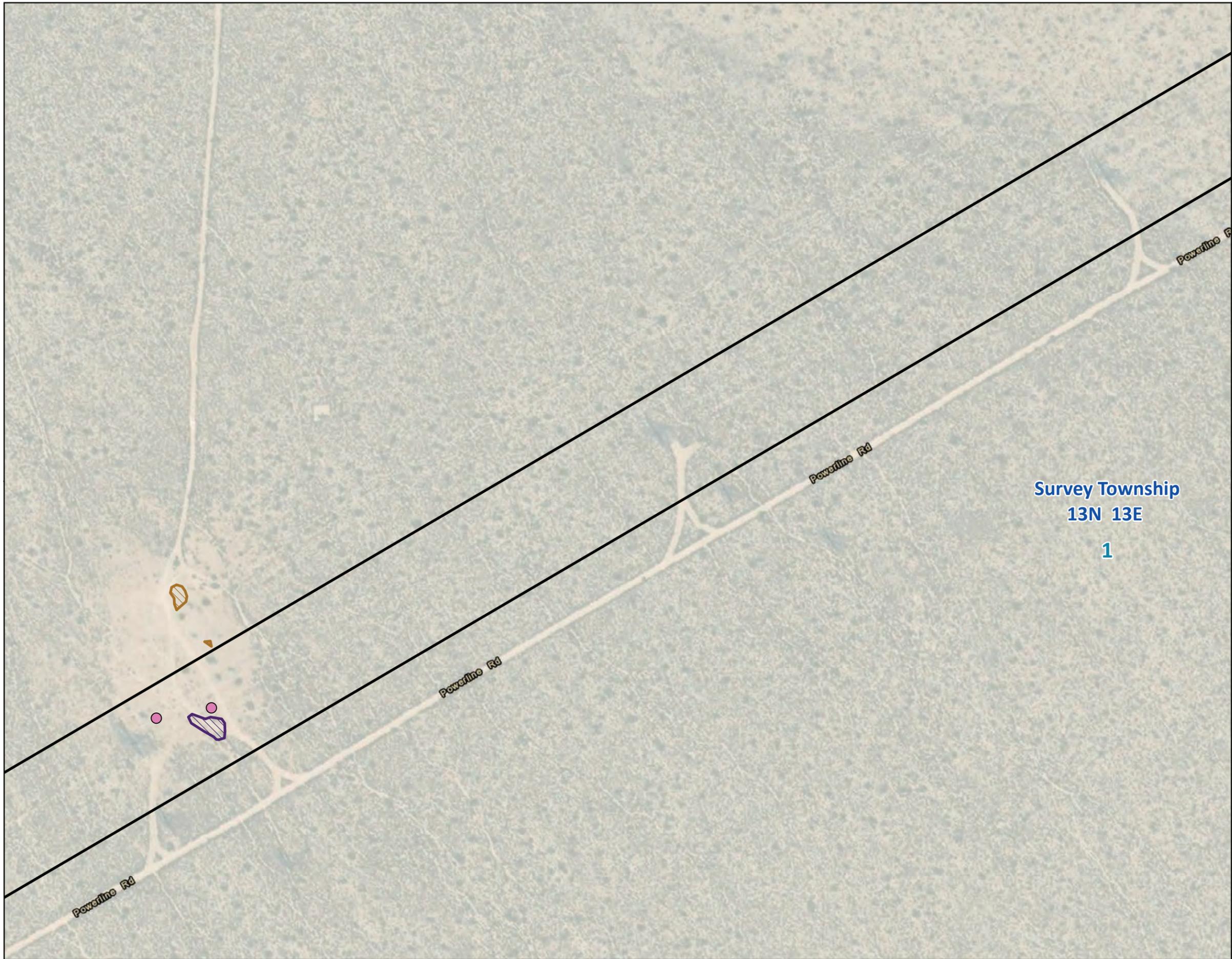
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22



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- Survey Area
- PLSS Survey Township
- PLSS Section
- Survey Results**
- London Rocket (*Sisymbrium irio*)
- Hare Barley (*Hordeum murinum*)
- Perennial Peppergrass (*Lepidium latifolium*)



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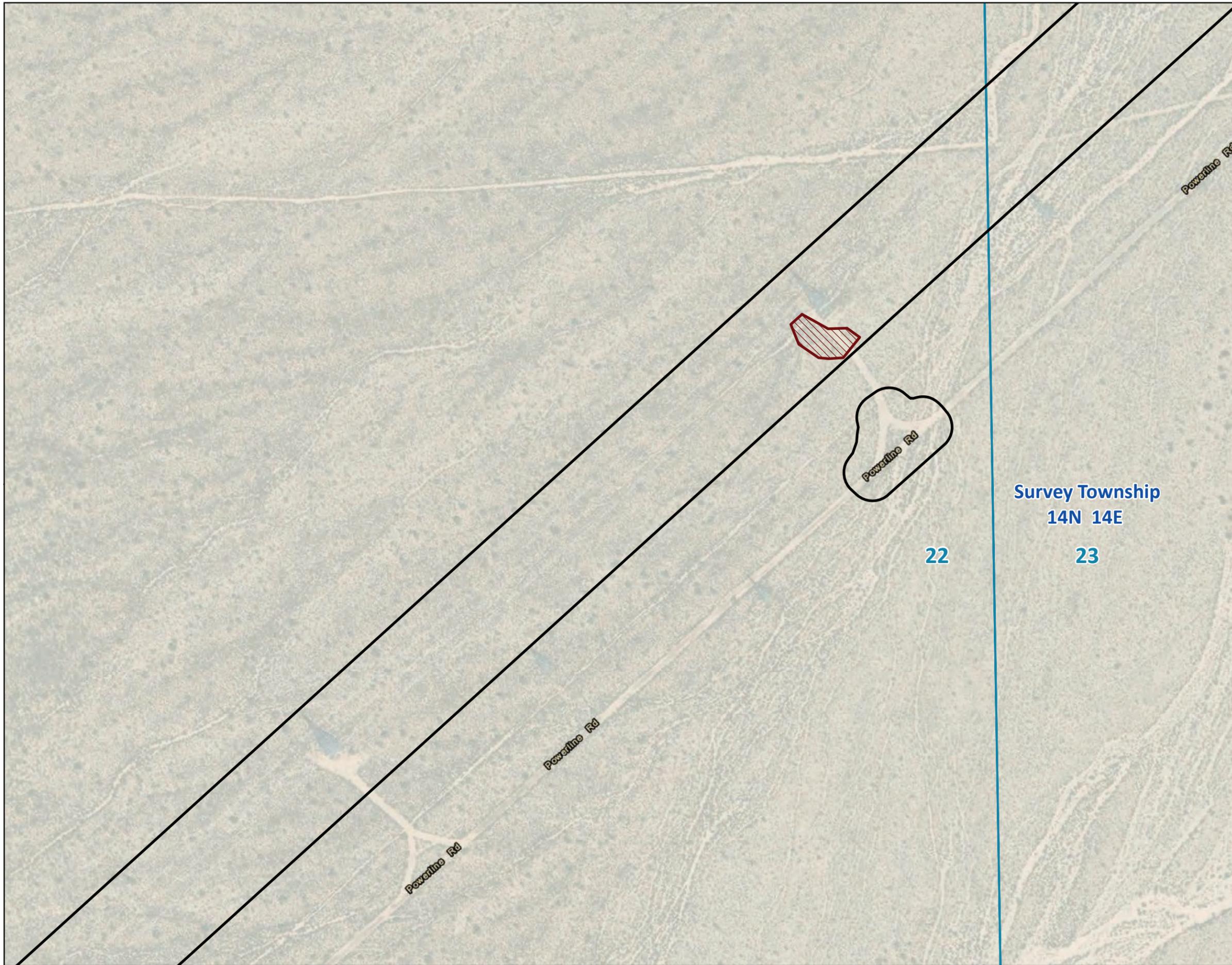


-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Cheatgrass (*Bromus tectorum*)



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 Invasive Plant and
 Noxious Weed Inventory Results
 LUGO-VICTORVILLE 500 KV TRANSMISSION LINE
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 2022 NOXIOUS WEED SURVEY REPORT



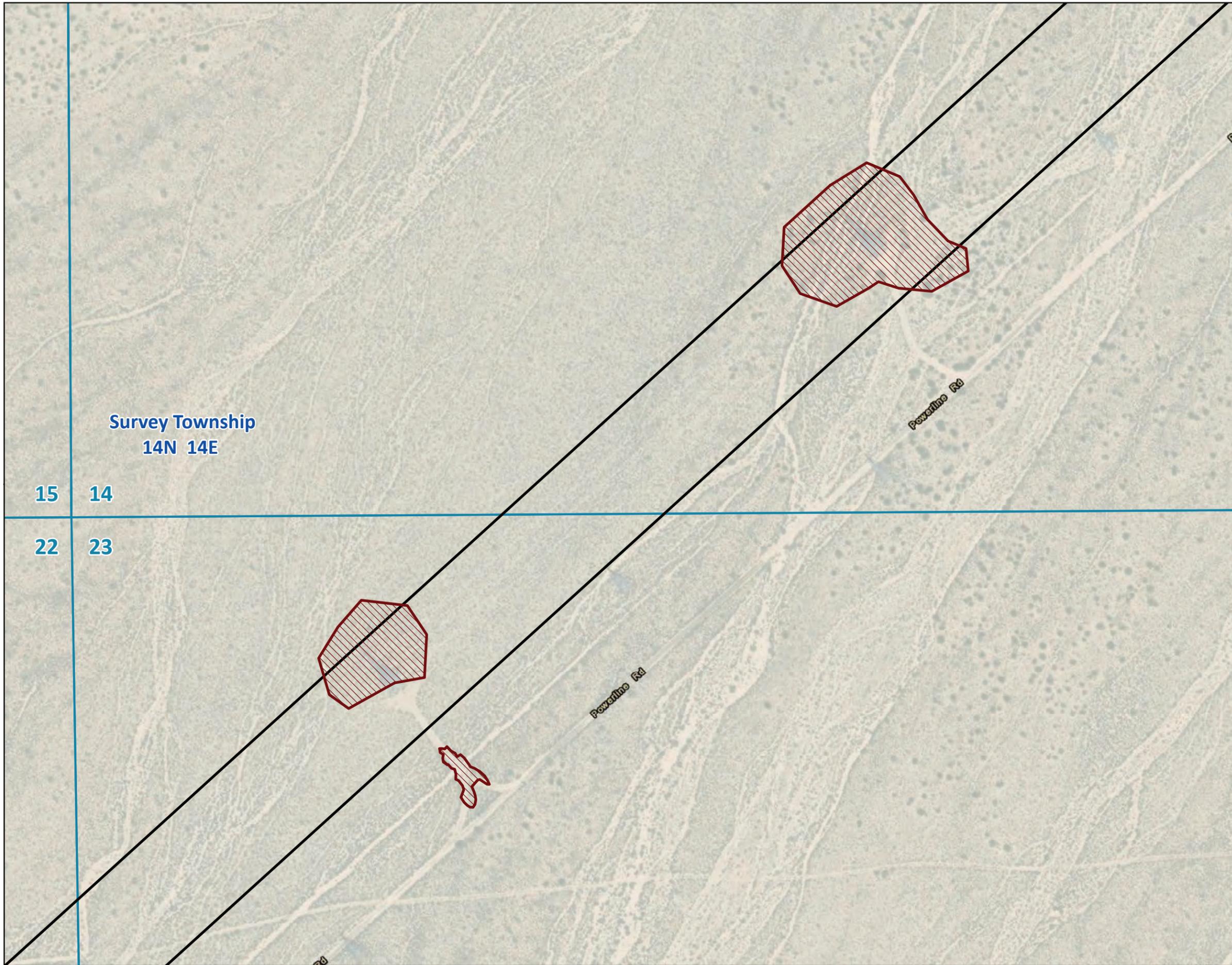


-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Cheatgrass (*Bromus tectorum*)



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 Invasive Plant and
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-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Cheatgrass (*Bromus tectorum*)

Survey Township
14N 14E

15 14

22 23

Powerline Rd

Powerline Rd



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 Invasive Plant and
 Noxious Weed Inventory Results
 LUGO-VICTORVILLE 500 KV TRANSMISSION LINE
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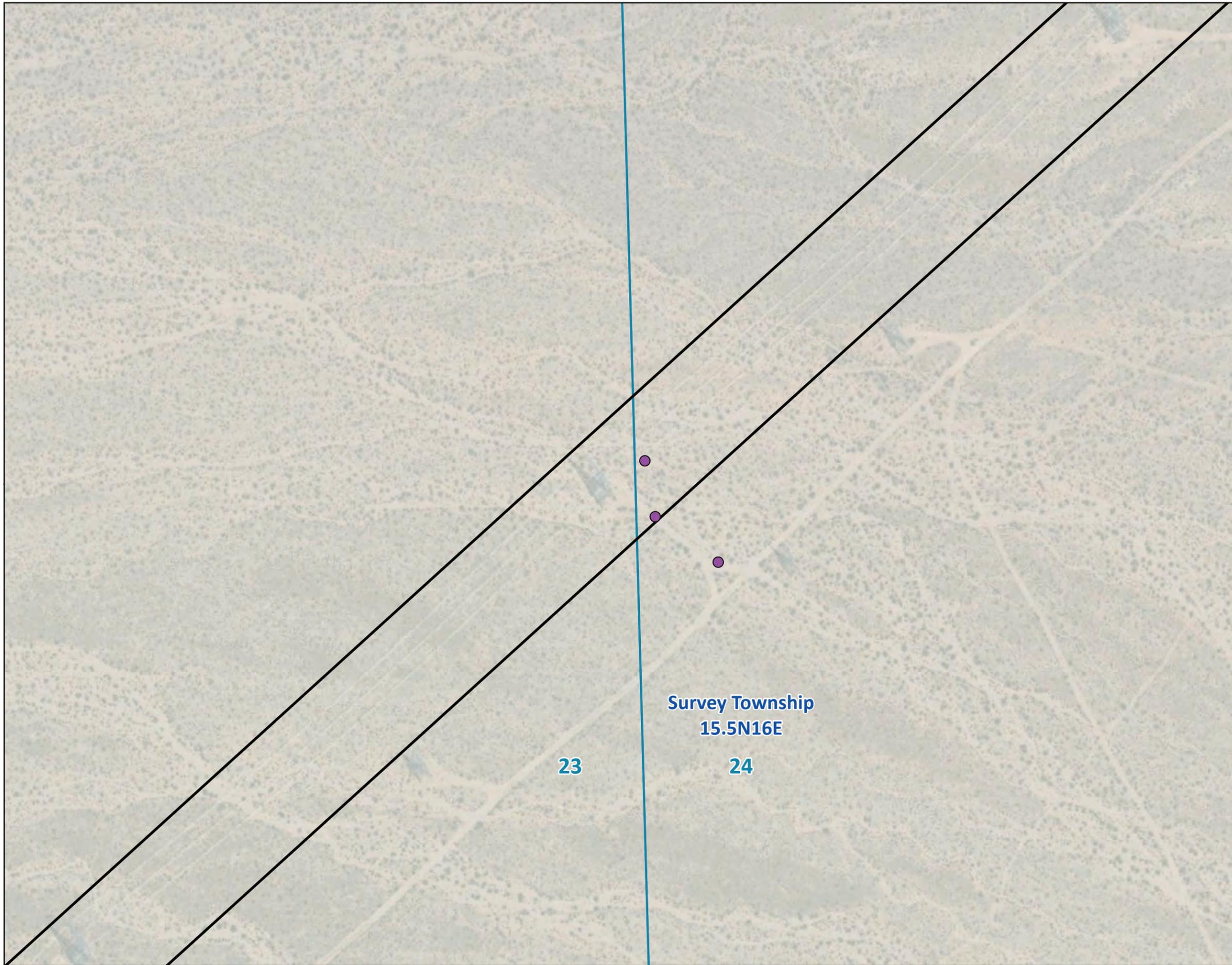


-  Survey Area
-  PLSS Survey Township
-  PLSS Section
- Survey Results**
-  Cheatgrass (*Bromus tectorum*)



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 Invasive Plant and
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-  Survey Area
 -  PLSS Survey Township
 -  PLSS Section
- Survey Results**
-  Redstem Filaree (*Erodium cicutarium*)

Survey Township
15.5N16E

23

24



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-  Survey Area
- Survey Results**
-  Russian Thistle (*Salsola* sp.)



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 Invasive Plant and
 Noxious Weed Inventory Results
 LUGO-VICTORVILLE 500 KV TRANSMISSION LINE
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Appendix B

Representative Photos



Photo 1: Sahara mustard (*Brassica tournefortii*). April 2022. Segment 1.



Photo 2: Red brome (*Bromus madritensis* subsp. *rubens*). April 2022. Segment 1.



Photo 3: Cheatgrass (*Bromus tectorum*). April 2022. Segment 1.



Photo 4: Bermuda grass (*Cynodon dactylon*). April 2022. Segment 1.



Photo 5: Redstem filaree (*Erodium cicutarium*). April 2022. Segment 1.



Photo 6: Hare barley (*Hordeum murinum*). April 2022. Segment 1.



Photo 7: Salsola species (likely *Salsola paulesenii*). April 2022. Segment 2.



Photo 8: Salsola species (likely *Salsola tragus*). April 2022. Segment 1.



Photo 9: Common mediterranean grass (*Schismus barbatus*). April 2022. Segment 2.



Photo 10: London rocket (*Sisymbrium irio*). April 2022. Segment 1.



Photo 11: Athel tamarisk (*Tamarix aphylla*). April 2022. Segment 1.



Photo 12: Branched saltcedar (*Tamarix ramosissima*). April 2022. Segment 1.

Appendix D-15

Special-Status Plants and Wildlife Potential to Occur Tables

Special-status Plant Species Evaluated for Potential to Occur in LVRAS Biological Study Area

Scientific Name Common Name	Status	Habitat and Distribution	Bloom Period	Occurrence Probability
<i>Ageratina herbacea</i> desert ageratina	CRPR: 2B.3	A perennial herb found on rocky soils in pinyon and juniper woodland. Elevations between 5,000 and 7,200 feet.	July - October	Does Not Occur. Suitable habitat is not present in the study area. No recent recollections in the area. Occurrence recorded in CNDDDB from 1974 approximately 1.4 mile from the study area.
<i>Aloysia wrightii</i> Wright's beebrush	CRPR: 4.3	A perennial evergreen shrub that occurs on rocky, often carbonate, soils in Joshua tree woodland and pinyon and juniper woodland habitats. Elevations between 2,950 and 5,250 feet.	April - October	Occurs. Collected on the alignment in 2010 (CCH) just south of Nipton Rd and approximately 1,400 feet from the study area. Observed in Segment 2 near feature M150-T1.
<i>Amaranthus watsonii</i> Watson's amaranth	CRPR: 4.3	An annual herb that occurs in Mojavean desert scrub and Sonoran desert scrub habitats. Elevations between 65 and 5,600 feet.	April - September	Unlikely. Species' preferred habitat is present in the study area in creosote bush communities. Species recorded in Consortium of California Herbaria (CCH) (1958) 2.5 miles west of the Segment 1 project alignment. Unlikely to occur due to age and distance of records.
<i>Androstephium breviflorum</i> Small-flowered androstephium	CRPR: 2B.2	Occurs in the vicinity of Pisgah Crater, Cronese Valley, Rice Valley, and at scattered sites along the California/Nevada border. A perennial bulbiferous herb found in desert dunes and on bajadas in Mojavean desert scrub habitat. Elevations between 300 and 5,250 feet.	March - April	Occurs. Several recent collections were made from within 100 feet of the project survey area near Pisgah Substation and northeastward in Segment 2 along Powerline Road towards the Cady Mountains. Collected in 2008 at Dunn, two miles southwest of the proposed material yard along Highway 15 on Afton Road (CCH). Plant observed at reference site but absent in project survey area during 2017 botanical surveys. However, species observed during 2020 weed surveys and during overlapping non-project surveys.
<i>Astragalus bernardinus</i> San Bernardino milk-vetch	CRPR: 1B.2 BLM: S	Occurs on the desert slope of the San Bernardino Mountains, the Little San Bernardino Mountains, and in the eastern Mojave National Preserve, especially in the vicinity of Cima. A perennial herb found on granitic or carbonate soils in Joshua tree woodland and pinyon-juniper woodland habitats. Elevations between 2,950 and 6,550 feet.	April - June	Occurs. Suitable habitat occurs within the Segment 2 project alignment and has been observed near feature M124-T4.
<i>Astragalus cimae</i> var.	CRPR: 1B.2	Occurs in Mid Hills and the New York	April - May	Does not occur. Species restricted to habitat not found

Scientific Name Common Name	Status	Habitat and Distribution	Bloom Period	Occurrence Probability
<i>cimae</i> Cima milk-vetch		Mountains in the eastern Mojave National Preserve. Perennial herb that occurs on clay soils in Great Basin scrub, Joshua tree woodland, and pinyon and juniper woodland habitats. Elevations between 2,900 and 6,050 feet.		along project alignment. The type locality, given as "Cima," is likely an imprecise attribution. The species is probably absent from Joshua tree woodland within the project boundaries near Cima, as numerous records suggest the species is locally restricted to the desert mountain ranges south of the project boundary.
<i>Astragalus lentiginosus</i> var. <i>borreganus</i> Borrego milk-vetch	CRPR: 4.3	An annual herb that occurs in sandy soils of Mojavean desert scrub and Sonoran desert scrub. Elevations between 100 and 2,950 feet.	February - May	Unlikely. Suitable habitat in Devil's Playground in vicinity of Old Dad Mountain and Cima Dome. Recorded by CCH over 25 years ago 1.9 miles from Segment 2 alignment east of Pisgah Rd.
<i>Berberis fremontii</i> Fremont barberry	CRPR: 2B.3	Occurs in the New York Mountains, Mid Hills, and Granite Mountains, and the desert slope of the San Bernardino Mountains. A perennial evergreen shrub found on rocky and sometimes granitic soils in Joshua tree woodland and pinyon and juniper woodland habitats. Elevations between 3,750 and 5,650 feet.	March - May	Unlikely. Some suitable habitat is present in the study area. Recorded in CNDDDB approximately 1.5 miles southeast of the Segment 2 alignment in 2002. Unlikely to occur based on distance of record.
<i>Blepharidachne kingii</i> King's eyelash grass	CRPR: 2B.3	A perennial herb found usually on carbonate soils in Great Basin scrub. Elevations between 3,500 to 7,000 feet.	May	Does not occur. Species restricted to habitat not found along project alignment. CCH collection at the Pisgah Crater lava flow in 1966 approximately 2.5 miles south of the Segment 1 alignment.
<i>Bouteloua eriopoda</i> black grama	CRPR: 4.2	A perennial stoloniferous herb found in Joshua tree woodland and pinyon and juniper woodland. Elevations between 2,950 and 6,250 feet.	May - August	Likely. Suitable habitat present in study area. Recent CCH records of collections near the California/Nevada border approximately 50 feet south of the Segment 2 alignment.
<i>Bouteloua trifida</i> Three-awned grama	CRPR: 2B.3	Occurs in mountain ranges of the eastern Mojave Desert. A perennial grass found on carbonate, rocky soils in Mojavean desert scrub. Elevations between 2,300 to 6,550 feet.	(April) May - September	Unlikely. Some suitable habitat present; nearest recent collection (2016) located in the Ivanpah Mountains approximately five miles northwest of the Segment 2 alignment. Unlikely to occur based on distance of record.
<i>Castela emoryi</i> Emory's crucifixion-thorn	CRPR: 2B.2	Gravelly soils in Mojavean desert scrub, Sonoran desert scrub, and sometimes alkalai playas and desert washes. Elevations between 300 and 2,400 feet.	(April) June – July (September-October)	Occurs. Observed in the study area at Tower M88-T2 and at eight additional locations along the southwestern portion of the Segment 2 ROW between the Cady and Bristol Mountains in 2017.

Scientific Name Common Name	Status	Habitat and Distribution	Bloom Period	Occurrence Probability
<i>Coryphantha alversonii</i> foxtail cactus	CRPR: 4.3	A perennial stem succulent found on sandy or rocky soil, usually granitic, in Mojavean desert scrub and Sonoran desert scrub. Elevations between 250 and 5,000 feet.	April - June	Unlikely. Suitable habitat present. CNPS record near the junction of Segment 1 and 2 from 1974. CNDDDB occurrence documented in 1981 approximately three miles south of the Segment 2 alignment. Unlikely to occur based on age of records.
<i>Coryphantha vivipara</i> var. <i>rosea</i> viviparous foxtail cactus	CRPR: 2B.2	Perennial stem succulent found on carbonate soils in Mojavean desert scrub and pinyon and juniper woodland. Elevations between 100 and 6,000 feet.	May - June	Occurs. Multiple individuals observed in Segment 2 survey area during 2021 botanical surveys. Undated CNDDDB occurrence from Cima approximately 1.5 miles south of the alignment; occurrences from 2003 and 2009 within five miles.
<i>Cryptantha clokeyi</i> Clokey's cryptantha	CRPR: 1B.2	An annual herb that occurs in Mojavean desert scrub habitat. Elevations between 2,400 and 4,500 feet.	April	Absent. Species' preferred habitat is found on-site within creosote bush communities. Plant observed at reference site but absent in project survey area during 2017 botanical surveys.
<i>Cymopterus multinervatus</i> Purple-nerve cymopterus	CRPR: 2B.2	Sandy or gravelly soils in Mojavean desert scrub and pinyon and juniper woodland at Elevations between 2,600 and 5,900 feet.	March - April	Occurs. Observed during in Segment 2 survey area during 2017 botanical surveys on sandy-decomposed limestone soil near Tower M124-T3.
<i>Diplacus mohavensis</i> Mojave monkeyflower	CRPR: 1B.2 BLM: S	An annual herb that occurs on sandy or gravelly soils, often in washes, in Joshua tree woodland and Mojavean desert scrub habitats. Elevations between 2,000 and 4,000 feet.	April - June	Unlikely. Species' preferred habitat is present in the study area in creosote bush communities. Species recorded in CNDDDB (1998 and 2010) 1.3 and 2.0 miles south of project alignment. Unlikely to occur based on distance of records.
<i>Eremothera boothii</i> ssp. <i>boothii</i> Booth's evening-primrose	CRPR: 2B.3	Occurrences scattered throughout the Mojave Desert. An annual herb found on sandy flats, steep loose slopes, and low volcanic slopes in Joshua tree woodland and pinyon and juniper woodland habitats. Elevations between 2,650 and 7,900 feet.	April - September	Unlikely. Suitable volcanic soils are located south of and outside the study area in the Marl Mountains. Collected recently several times in the Cima Cinder Cone Lava Beds less than four miles northwest of the Segment 2 alignment.
<i>Eriastrum harwoodii</i> Harwood's eriastrum	CRPR: 1B.2 BLM: S	Occurs widely in the Eastern Mojave Desert. An annual herb found in desert dune habitat. Elevations between 400 and 3,000 feet.	March - June	Occurs. Multiple individuals observed in the Segment 2 survey area in Devil's Playground during 2021 surveys. Collected at Crucero Hill about four miles northwest of the project boundary in 2008 (CCH).
<i>Erioneuron pilosum</i> Hairy erioneuron	CRPR: 2B.3	Occurs in the desert mountain ranges of the Eastern Mojave. A perennial grass found on rocky and sometimes carbonate slopes and ridges in pinyon	(April) May - June	Does not occur. Suitable habitat not present. Recorded only from desert mountain ranges of the Eastern Mojave.

Scientific Name Common Name	Status	Habitat and Distribution	Bloom Period	Occurrence Probability
		and juniper woodland habitat. Elevations between 4,650 and 6,600 feet.		
<i>Euphorbia parryi</i> Parry's spurge	CRPR: 2B.3	An annual herb that occurs in desert dunes and sandy Mojavean desert scrub habitats. Elevations between 1,300 and 2,400 feet.	May - November	Unlikely. Suitable habitat present in the study area at locations with desert scrub. Collected in Devil's Playground (CCH) in 1980, two miles southeast of the Segment 2 alignment. Unlikely to occur based on age and distance of record.
<i>Funastrum utahense</i> Utah vine milkweed	CRPR: 4.2	A perennial herb found on sandy or gravelly soils in Mojavean desert scrub and Sonoran desert scrub habitats. Elevations between 300 and 4,700 feet.	(March) April – June (September-October)	Occurs. During project botanical surveys in 2017 and 2021 and non-project surveys in 2016, multiple individuals were identified immediately within the survey area near the Pisgah substation. Species' preferred habitat is present in the study area in creosote bush communities.
<i>Grusonia parishii</i> Matted cholla	CRPR: 2B.2	Sandy or rocky soils in Joshua tree woodland, Mojavean desert scrub, and Sonoran desert scrub. Elevations between 1,000 and 5,000 feet.	May – June (July)	Occurs. Observed along the Segment 2 alignment during surveys, about 3.6 miles southwest of Cima Road and along Nipton Road.
<i>Johnstonella costata</i> Ribbed cryptantha	CRPR: 4.3	An annual herb found in sandy habitats in desert dunes, Mojavean desert scrub, and Sonoran desert scrub. Elevations between 200 and 1,600 feet.	February - May	Occurs. Collected on sandy alkali east of Crucero, about two miles northwest of the Segment alignment, in 2011 (CCH). Similar habitat associated with Kelso Wash occurs along the Segment 2 alignment just north of the railroad tracks. Observed during surveys near feature M124-T3.
<i>Johnstonella holoptera</i> Winged cryptantha	CRPR: 4.3	Occurs widely in within the Desert Floristic Province of California. An annual herb found in Mojavean desert scrub and Sonoran desert scrub. Elevations between 300 and 5,500 feet.	March - April	Unlikely. Species' preferred habitat is present in the study area in creosote bush communities. Species recorded in CCH (1995) three miles east of Segment 1 alignment. Collected in the vicinity of Old Dad Mountain 2.2 miles from the Segment 2 alignment in 1993 and 1980. Unlikely to occur due to age and distance of historical records.
<i>Menodora scabra</i> var. <i>scabra</i> Rough menodora	CRPR: 2B.3	Occurs in the Castle, Mid Hills, and New York Mountain Ranges, and on Cerro Pinon. A perennial herb found on rocky or sandy soils in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats. Elevations between 3,900 and 5,900 feet.	May - June	Does not occur. Based on known distributions, material of <i>Menodora scabra</i> within the project boundaries would be expected to be attributable to var. <i>glabrescens</i> .

Scientific Name Common Name	Status	Habitat and Distribution	Bloom Period	Occurrence Probability
<i>Menodora spinescens</i> var. <i>mohavensis</i> Mojave mendora	CRPR: 1B.2 BLM: S	A perennial deciduous shrub that occurs on Andesite gravel, rocky hillsides, and canyons in Mojavean desert scrub habitat. Elevations between 2,250 and 6,550 feet.	April - May	Absent. Species' preferred habitat is present in the study area in shadscale scrub communities. Species recorded in CCH (2011) 5.8 miles south of the Segment 1 alignment. Plant observed at reference site but absent in project survey area during 2017 botanical surveys.
<i>Mentzelia puberula</i> Darlington's Blazing Star	CRPR: 2B.2	Widely distributed in the Eastern Mojave Desert. A perennial herb found in sandy crevices of cliffs or on rocky slopes in Mojavean desert scrub and Sonoran desert scrub habitats. Elevations between 300 to 4,200 feet.	March - May	Unlikely. One historical (1980) collection from Old Dad Mountain. Suitable habitat observed in Jackass Canyon near Old Dad Mountain during surveys. Fruiting specimens of <i>Mentzelia</i> attributable to the same species group (otherwise indeterminable) were observed along the alignment just south of Jackass Canyon.
<i>Mentzelia tridentata</i> Creamy blazing star	CRPR: 1B.3	An annual herb that occurs on rocky, gravelly, and sandy soils in Mojavean desert scrub habitat. Elevations between 2,300 and 3,900 feet.	March - May	Unlikely. Species' preferred habitat is present in the study area in creosote bush communities. Species recorded in CCH (2010) 1.5 miles west of the Segment 1 alignment. One CNDDDB occurrence documented within 500 feet west of project, but record indicates the location and date are inaccurate.
<i>Mirabilis coccinea</i> Red four o'clock	CRPR: 2B.3	Distributed throughout Fourth of July Canyon, Keystone Canyon and Bathtub Spring in New York Mountains. Also occurs in Castle Peak, Mid Hills, and Ivanpah Mountain Ranges. A perennial herb found in pinyon and juniper woodland habitat. Elevations between 3,500 to 5,900 feet.	May - July	Does not occur. The project is located too distant from the Ivanpah/New York Mountains where habitat is present.
<i>Muilla coronata</i> Crowned muilla	CRPR: 4.2	Widespread in the Mojave Desert. A perennial bulbiferous herb found in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats. Elevations between 2,200 to 6,400 feet.	March – April (May)	Unlikely. Suitable habitat is intermittent throughout the Segment 2 study area. Collected along I-15 at Dunn, two miles southeast of the proposed material yard on Afton Rd. Unlikely to occur based on distance of record.
<i>Munroa squarrosa</i> False buffalo-grass	CRPR: 2B.2	Occurs on toe slopes of desert ranges in the Eastern Mojave Desert. An annual grass found on gravelly or rocky soils in pinyon and juniper woodland habitat. Elevations between 4,900 and 5,900 feet.	October	Does not occur. Suitable habitat may occur near Cima and near the California/Nevada border. However, the nearest collection is from seven miles north of the Segment 2 alignment in the Ivanpah Mountains.

Scientific Name Common Name	Status	Habitat and Distribution	Bloom Period	Occurrence Probability
<i>Nama demissa</i> var. <i>covillei</i> Coville's purple mat	CRPR: 1B.3 BLM:S	An annual herb found on dry, sandy slopes in Mojavean desert scrub, often on roadsides. Elevations between 300 and 5,900 feet.	February - May	Unlikely. Suitable habitat is present in the study area. No recent recollections in the area. CNDDDB occurrence in the Ivanpah Valley from 1973 documented approximately 0.25 mile from the Segment 2 study area. Unlikely to occur due to age of record.
<i>Nemacaulis denudata</i> var. <i>gracilis</i> Slender cottonheads	CRPR: 2B.2	Occurs in coastal Southern California, Colorado Desert, and at scattered sites in the Eastern Mojave Desert. An annual herb found in coastal dunes, desert dunes, and Sonoran desert scrub habitats. Elevations between - 150 and 1,300 feet.	(March) April - May	Does not occur. Suitable habitat occurs in the Devil's Playground, but the nearest known occurrence was recorded in Old Dad Mountains in 1980.
<i>Opuntia curvispina</i> Curved-spine beavertail	CRPR: 2B.2	Occurs near the California/Nevada state line between Nipton, CA and Searchlight, NV. Reported for the vicinity of Cima in Mojave National Preserve. A perennial stem succulent found in chaparral, Mojavean desert scrub, and pinyon and juniper woodland habitats. Elevations between 3,300 and 4,600 feet. Species is a taxonomically recognized tetraploid hybrid resulting from <i>Opuntia chlorotica</i> and <i>Opuntia phaeacantha</i> .	April - June	Occurs. Suitable habitat is present in the study area, specifically Segment 2 near feature M130-T3.
<i>Pediomelum castoreum</i> Beaver dam breadroot	CRPR: 1B.2 BLM: S	A perennial herb that occurs in sandy washes and roadcuts in Joshua tree woodland and Mojavean desert scrub habitats. Elevations between 2,000 and 5,000 feet.	April - May	Unlikely. Species' preferred habitat is present in the study area in creosote bush communities. Species recorded in CNDDDB (1943) approximately 1,000 feet from Pisgah laydown yard and may have occurred in project alignment, but location is inaccurate. Unlikely to occur based on age and inaccuracy of historical records.
<i>Pellaea truncata</i> Spiny cliff-brake	CRPR: 2B.3	Occurs in the New York Mountains, Mid Hills Range and the Providence Mountains. A perennial rhizomatous herb occurring in crevices of granite or igneous rock in pinyon and juniper woodland habitat. Elevations between 3,900 and 7,100 feet.	April - June	Does not occur. Suitable habitat not present.
<i>Penstemon</i>	CRPR: 1B.1	Distributed mainly throughout the	March – May	Likely. Documented by CNDDDB approximately 0.4 mile

Scientific Name Common Name	Status	Habitat and Distribution	Bloom Period	Occurrence Probability
<i>albomarginatus</i> White-margined beardtongue	BLM: S	Lavic Lake volcanic field, Cady, Sleeping Beauty and Bullion Mountain Ranges. A perennial herb found in stabilized desert dunes and sandy Mojavean desert scrub. Elevations between 2,100 and 3,500 feet.	(June)	from the project Segment 1 survey area (2012) and within 500 feet of the Segment 2 survey area near I-40 and Pisgah. The species was not detected during the reference site visit. While surveys were conducted during the appropriate blooming season, the lack of observations at the reference population suggests that the species may be present in the study area but was not detectable during surveys.
<i>Penstemon pseudospectabilis</i> var. <i>pseudospectabilis</i> Desert beardtongue	CRPR: 2B.2	Occurs at scattered localities in the Eastern Mojave Desert. A perennial herb often found in sandy washes, and sometimes rocky sites in Mojavean desert scrub and Sonoran desert scrub habitats. Elevations between 250 and 6,300 feet.	January - May	Unlikely. Collected in 1980 and 1998 in the vicinity of Old Dad Mountain, where suitable habitat still exists near Jackass Canyon. Unlikely to occur based on age and distance of records.
<i>Penstemon utahensis</i> Utah beardtongue	CRPR: 2B.3	A perennial herb found on rocky soils in chenopod scrub, Great Basin scrub, Mojavean desert scrub, and pinyon and juniper woodland. Elevations between 3,500 and 8,200 feet.	April - May	Does not occur. No recent recollections in the area. CNDDDB occurrence from 1932 documented approximately two miles from the Segment 2 study area. Not expected to occur based on age of record.
<i>Phacelia coerulea</i> Sky-blue phacelia	CRPR: 2B.3	Occurs in mountain ranges of the Eastern Mojave Desert, and some adjacent valley. An annual herb found in open, sandy or rocky areas, generally in creosote bush scrub, sometimes also pinyon-juniper woodlands. Elevations between 4,600 and 6,500 feet.	April - May	Unlikely. Suitable habitat is present in the study area. Collected in creosote bush scrub one mile northwest of the Segment 2 alignment along Nipton Road in 2009 (CCH). Unlikely to occur based on distance of record.
<i>Phacelia parishii</i> Parish's phacelia	CRPR: 1B.1 BLM: S	An annual herb that occurs on clay or alkaline soils in Mojavean desert scrub and playas. Elevations between 1,800 and 4,000 feet.	April – May (June-July)	Unlikely. Species' preferred habitat is present in the study area in creosote bush communities. Species recorded in CCH (1992) two miles north of a Segment 1 material laydown yard. Unlikely to occur due to age and distance of record.
<i>Plagiobothrys parishii</i> Parish's popcornflower	CRPR: 1B.1 BLM: S	An annual herb that occurs on alkaline and mesic soils in Great Basin scrub and Joshua tree woodland habitats. Elevations between 2,500 and 4,600 feet.	March – June (November)	Does not occur. Species' preferred habitat is not present in the study area. Species recorded in CCH (2011) four miles south of the Segment 1 alignment. Not expected due to distance of historical record and lack of species' preferred habitat.

Scientific Name Common Name	Status	Habitat and Distribution	Bloom Period	Occurrence Probability
<i>Portulaca halimoides</i> Desert portulaca	CRPR: 4.2	Occurs in the Eastern Mojave Desert. An annual herb found on sandy soils in Joshua tree woodland habitat. 3 Elevations between 300 and 3,900 feet.	September	Likely. Collected in 2011 approximately 1,000 feet from the Segment 2 survey area in creosote bush scrub one mile west of Ivanpah Road (CCH). Extensive suitable habitat is present in the eastern portion of the Segment 2 study area.
<i>Sibara deserti</i> Desert winged-rockcress	CRPR: 4.3	An annual herb found in Mojavean desert scrub. Elevations between 1,100 and 4,300 feet.	March - April	Unlikely. Suitable habitat is present in the study area. Collected in the wash adjacent to the proposed Segment 2 staging area on the north side of Rocky Ridge in 1993 (CCH). Collected on a rocky canyon wall at Sheep Spring in the Marl Mountains in 1966, 0.4 mile south of the Segment 2 alignment (CCH). Unlikely to occur based on age of records.
<i>Sphaeralcea rusbyi</i> var. <i>eremicola</i> Rusby's desert-mallow	CRPR: 1B.2 BLM: S	Occurs in Panamint, Clark, Ivanpah and Providence Mountain Ranges, Cima Dome in Mojave National Preserve, Lost Horse Valley in Joshua Tree National Park, and Mineral Hills near I-15. A perennial herb found in Joshua tree woodland and Mojavean desert scrub habitats. Elevations between 3,200 and 5,400 feet.	March - June	Occurs. Collected along the Segment 2 alignment at two locations south of Wildcat Butte and Cima Dome in 1998 (CCH). Recorded in CNDDDB (1998) in project study area along Powerline Road access route. Observed at reference site but absent in project survey area during 2017 botanical surveys. However, the species was observed along the alignment and in access roads between towers M108-T5 to M124-T2 during the 2020 weed surveys.
<i>Wislizenia refracta</i> ssp. <i>refracta</i> Jackass-clover	CRPR: 2B.2	Occurs between Barstow and Baker, Cima Cinder Cones, Joshua Tree National Park, and throughout the Twentynine Palms region. An annual herb found in desert dunes, Mojavean desert scrub, playas, and Sonoran desert scrub habitats. Elevations between 2,000 and 2,600 feet.	April - November	Unlikely. Suitable habitat is present throughout the Segment 2 study area. Nearest recent collection is from just southwest of Midway on the north side of I-15, about six miles southeast of the proposed Segment 2 staging yard on Afton Rd. Unlikely due to distance of record.

Table Notes:

CCH: Consortium of California Herbaria

CNDDDB: California Natural Diversity Database

CNPS: California Native Plant Society

Status Definitions:

State: C = CESA Candidate

BLM: S = Sensitive

California Rare Plant Rank (CRPR):

Special-status species with the potential to occur within the Survey Area were evaluated based on SCE's Species Presence/Absence Determination flow-chart:

Occurs: the species and/or positive sign was observed on-site during site visit or field survey.

Absent: the species and/or positive sign was not observed on-site during focused survey(s) during the appropriate blooming/activity period (and, for plants, observed at a reference population).

Likely: all site features indicate this species is very likely present and should be expected.

1B = plants rare, threatened or endangered in California and elsewhere

2B= plants rare, threatened, or endangered in California, but more common elsewhere

4= plants of limited distribution

.1= seriously threatened in California

.2= moderately threatened in California

.3= moderately threatened in California

Sources: CCH, 2020; CDFW 2020; CNPS 2020; EI, 2016, 2017a, 2017b; GANDA 2020;
NAC-527 2012

Unlikely: species could occur, but records of the species are not locally known.

Does Not Occur: species would not occur because the Project site is outside known or current geographic/elevation range, lacks habitat or suitable conditions, and/or there is reasonable certainty to assume absent based on historical records.

Special-status Wildlife Species Evaluated for Potential to Occur in the LVRAS Study Area

Scientific Name Common Name	Status	Habitat and Distribution	Probability of Occurrence
Invertebrates			
<i>Bombus crotchii</i> Crotch bumble bee	State Candidate Endangered	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> . Inhabits grassland and scrub areas, requiring a hotter and drier habitat than many other bumble bee species. This species nests underground, often in abandoned rodent dens.	Does not occur. Project is outside the known range of the species.
Fish			
<i>Siphateles bicolor mohavensis</i> Mohave tui chub	FE SE, FP DRECP Focus Species	Historically, the Mohave tui chub occurred throughout the Mojave River drainage. A small population persisted in isolated ponds near the terminus of the Mojave River at Soda Springs. Within the Mojave River, the Mohave tui chub was associated with deep pools and sloughs of the river and was not found very far into small tributaries. The species prefers aquatic habitats with mineralized and alkaline water, a depth of approximately four feet, some flow, and some aquatic plants.	Does not occur. No aquatic habitat present in study area.
Reptiles			
<i>Actinemys marmorata</i> Northern western pond turtle	BLMS	Found in ponds, lakes, rivers, streams, and irrigation ditches with abundant vegetation, usually in woodlands and grasslands. In streams, prefers pools to shallower areas. Logs, rocks, or exposed banks are required for basking.	Does not occur. Suitable habitat is not present in study area.
<i>Gopherus agassizii</i> Desert tortoise	FT ST State Candidate Endangered	Distributed throughout the Mojave Desert south along the Colorado River and along the east side of the Salton Basin. A desert species that needs firm ground to dig burrows or rocks to shelter among. Found in arid sandy or gravelly locations along riverbanks, washes, sandy dunes, alluvial fans, canyon bottoms, desert oases, rocky hillsides, creosote flats, and hillsides.	Occurs. No tortoises or sign observed during 2017 focused surveys, but burrows and carcasses have previously been identified and numerous CNDDDB records (2007-2010) are documented in the vicinity of the study area.

Scientific Name Common Name	Status	Habitat and Distribution	Probability of Occurrence
	DRECP Focus Species		
<i>Uma scoparia</i> Mojave fringe-toed lizard	BLMS DRECP Focus Species	Distributed in the Mojave Desert from the southern end of Death Valley south to the Colorado River around Blythe, and into extreme western Arizona. Inhabits sparsely vegetated arid areas with fine windblown sand including dunes, flats with sandy hummocks formed around the bases of vegetation, washes, and the banks of rivers.	Occurs. Not observed in during surveys but patches of suitable habitat were identified within the study area. Documented in CNDDDB (2008) approximately 0.75 mile north of the study area.
Birds			
<i>Agelaius tricolor</i> Tricolored blackbird (nesting colony)	ST BLMS DRECP Focus Species	Breeds locally west of the Cascade Range, Sierra Nevada, and southeastern deserts from Humboldt and Shasta counties south to extreme southwest San Bernardino County, western Riverside County, and western and southern San Diego County. Primarily nests in freshwater marshes dominated by cattails (<i>Typha</i> spp.) or bulrushes (<i>Schoenoplectus</i> spp.). Small breeding colonies in southern California often occur at private and public lakes, reservoirs, and parks surrounded by urban and agricultural development. Often forages in agricultural fields.	Likely. Not identified during surveys. Two potentially extant nesting colony records (CNDDDB 2014) are located within one mile of the study area: <ul style="list-style-type: none"> ▪ NW corner of Elkhorn Street and Spyrock Avenue in cattail marsh in pond, less than 500 feet north of alignment; and ▪ NE corner of Minneola Road and Swansea Street in cattail marsh in pond, two-thirds of a mile north of alignment.
<i>Aquila chrysaetos</i> Golden eagle (nesting and wintering)	FP, WL BLMS DRECP Focus Species	Found throughout western North America. Occurs primarily in mountainous canyon lands, rimrock terrain of open desert, and grassland areas. Usually nests on cliffs, but also nests in trees, on the ground, and in human-made structures. Typically forages in open habitats.	Likely. Golden eagles and active nests were observed during aerial surveys in 2021. Nearest known active nest is approximately 0.75 mile south of the alignment in the Newberry Mountains. Suitable foraging habitat is present throughout the study area.
<i>Athene cunicularia</i> Burrowing owl	BLMS DRECP Focus Species	An uncommon to locally common resident in California. Inhabits relatively flat and open areas such as grasslands, coastal dunes, and agricultural areas. Requires the presence of burrows for nesting and roosting activities.	Likely. Not observed during 2017 focused surveys, but historical records (20018, 2009) are located within two miles of the eastern and western ends of the study area. Suitable habitat and burrows have been identified throughout the study area.
<i>Colaptes chrysoides</i> Gilded flicker	SE BLMS	Native to desert areas surrounding the Gulf of California, including southeast California and both northern and southern Baja California. Its range largely coincides with the regional distribution of	Unlikely. Suitable habitat of Joshua tree woodland, and giant cacti are not present within the study area.

Scientific Name Common Name	Status	Habitat and Distribution	Probability of Occurrence
		giant cacti throughout the U.S., but in California they are primarily found in the lower Colorado River valley in desert riparian, desert wash, and Joshua tree woodland habitats. Nest site is a cavity in a giant cactus, tree, or post.	
<i>Toxostoma bendirei</i> Bendire's thrasher	BLMS DRECP Focus Species	Migratory; local spring/summer resident in flat areas of desert succulent shrub, Joshua tree habitats in Mojave Desert. Nests in cholla, yucca, paloverde, thorny shrub, or small tree, usually between six inches and 20 feet above ground.	Likely. Not identified during surveys, but suitable habitat is present in the study area.
Mammals			
<i>Antrozous pallidus</i> Pallid bat	BLMS DRECP Focus Species	Occurs throughout most of California. Occupies a wide variety of habitats, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting.	Unlikely. Limited suitable habitat is present within the study area and no CNDDDB records were found during the literature search.
<i>Ovis canadensis nelson</i> Desert bighorn sheep	FP BLMS DRECP Focus Species	In California, the desert bighorn sheep is found in the dry mountain ranges of the southeastern deserts.	Likely. Range includes mountains north of the Rodman Mountain Wilderness Area, south of Newberry Springs.
<i>Xerospermophilus mohavensis</i> Mojave ground squirrel	ST BLMS DRECP Focus Species	Found throughout northwestern Mojave Desert in San Bernardino, Los Angeles, Kern, and Inyo counties. Occurs in a variety of desert shrubland habitats. Most often found in creosote bush scrub, but also found in desert saltbush scrub, desert sink scrub, desert greasewood scrub, shadscale scrub, Joshua tree woodland, and Mojave mixed woody scrub. Mohave ground squirrels typically occupy areas with open vegetative cover and small bushes, and prefers deep, sandy to gravelly soils on flat to moderately sloping terrain.	Does not occur. Project is outside the historical range of the species.

Table Notes:

CNDDDB: California Natural Diversity Database

Special-status species with the potential to occur within the Survey Area were evaluated based on SCE's Species Presence/Absence Determination flow-chart:

Status Definitions:

FE = Federally Endangered

FT = Federally Threatened

SE = State (CA) Endangered

ST = State (CA) Threatened

FP = CDFW Fully Protected

WL = CDFW Watch List

BLM: S = BLM Sensitive

CPF = California Protected Furbearer

Sources: CCH 2021; CDFW 2021; CNPS 2021; eBird 2021; EI 2016, 2017a, 2017b;
GANDA 2020

Occurs: the species and/or positive sign was observed on-site during site visit or field survey.

Absent: the species and/or positive sign was not observed on-site during focused survey(s) during the appropriate blooming/activity period (and, for plants, observed at a reference population).

Likely: all site features indicate this species is very likely present and should be expected.

Unlikely: species could occur, but records of the species are not locally known.

Does Not Occur: species would not occur because the Project site is outside known or current geographic/elevation range, lacks habitat or suitable conditions, and/or there is reasonable certainty to assume absent based on historical records.

Appendix D-16

IPaC Resource Report

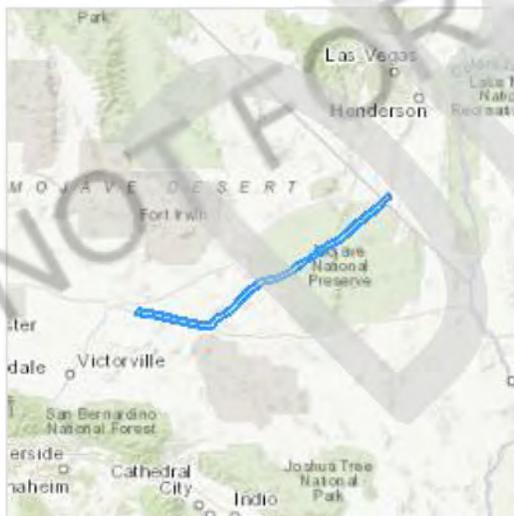
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

California and Nevada



Local offices

Southern Nevada Fish And Wildlife Office

- (702) 515-5230
- (702) 515-5231

4701 N. Torrey Pines Drive
Las Vegas, NV 89130-2301

Carlsbad Fish And Wildlife Office

- (760) 431-9440
- (760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

NOT FOR DRAFT CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
<p>California Condor <i>Gymnogyps californianus</i></p> <p>There is final critical habitat for this species. The location of the critical habitat is not available.</p> <p>https://ecos.fws.gov/ecp/species/8193</p>	Endangered
<p>Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. The location of the critical habitat is not available.</p> <p>https://ecos.fws.gov/ecp/species/6749</p>	Endangered
<p>Yellow-billed Cuckoo <i>Coccyzus americanus</i></p> <p>There is final critical habitat for this species. The location of the critical habitat is not available.</p> <p>https://ecos.fws.gov/ecp/species/3911</p>	Threatened
<p>Yuma Ridgway's Rail <i>Rallus obsoletus yumanensis</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species.</p> <p>https://ecos.fws.gov/ecp/species/3505</p>	Endangered

Reptiles

NAME	STATUS
<p>Desert Tortoise <i>Gopherus agassizii</i></p> <p>There is final critical habitat for this species. Your location overlaps the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/4481</p>	Threatened

Fishes

NAME	STATUS
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Mohave Tui Chub *Gila bicolor* ssp. *mohavensis* Endangered
 Wherever found
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/8466>

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Desert Tortoise <i>Gopherus agassizii</i> https://ecos.fws.gov/ecp/species/4481#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take->

[migratory-birds](#)

- Nationwide conservation measures for birds

<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

Breeds Oct 15 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

- Bendire's Thrasher** *Toxostoma bendirei* Breeds Mar 15 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9435>
- Black-chinned Sparrow** *Spizella atrogularis* Breeds Apr 15 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9447>
- Clark's Grebe** *Aechmophorus clarkii* Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
- Costa's Hummingbird** *Calypte costae* Breeds Jan 15 to Jun 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
<https://ecos.fws.gov/ecp/species/9470>
- Golden Eagle** *Aquila chrysaetos* Breeds Dec 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
<https://ecos.fws.gov/ecp/species/1680>
- Lawrence's Goldfinch** *Carduelis lawrencei* Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9464>
- Long-eared Owl** *asio otus* Breeds Mar 1 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/3631>
- Marbled Godwit** *Limosa fedoa* Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9481>

<p>Mountain Plover <i>Charadrius montanus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/3638</p>	Breeds elsewhere
<p>Pinyon Jay <i>Gymnorhinus cyanocephalus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9420</p>	Breeds Feb 15 to Jul 15
<p>Rufous-winged Sparrow <i>Aimophila carpalis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jun 15 to Sep 30
<p>Tricolored Blackbird <i>Agelaius tricolor</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/3910</p>	Breeds Mar 15 to Aug 10
<p>Willet <i>Tringa semipalmata</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds elsewhere

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence ()

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events

for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

- To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
- The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

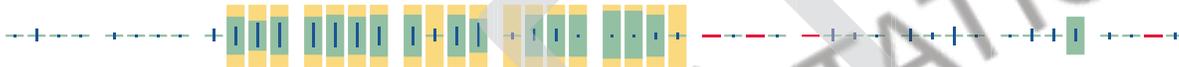
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald Eagle
 Non-BCC
 Vulnerable
 (This is not a
 Bird of
 Conservation
 Concern (BCC)
 in this area, but
 warrants
 attention
 because of the
 Eagle Act or for
 potential
 susceptibilities
 in offshore
 areas from
 certain types of
 development
 or activities.)



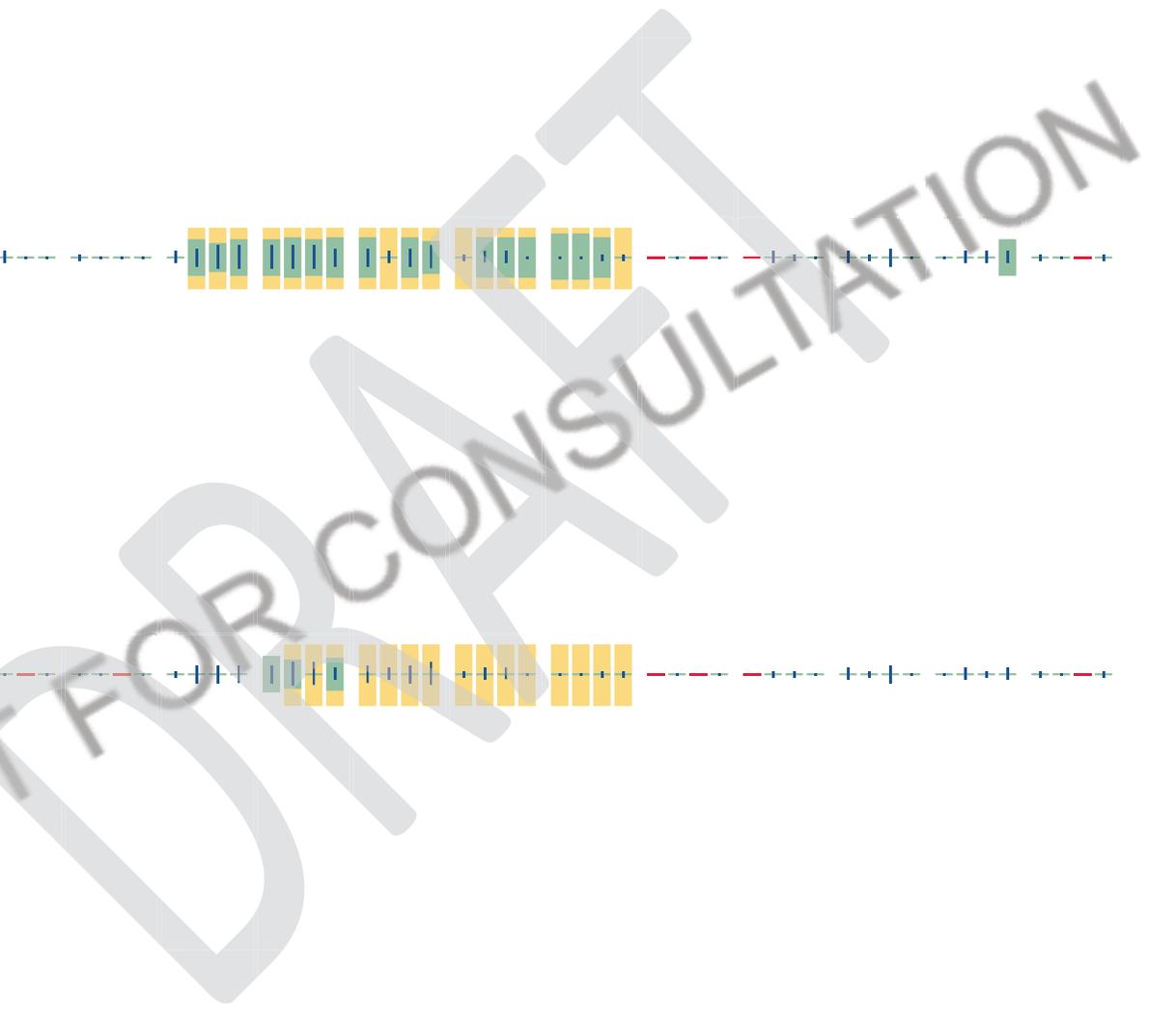
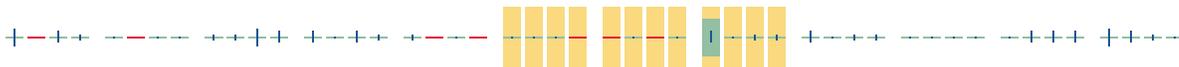
Bendire's
 Thrasher
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental
 USA and
 Alaska.)



Black-chinned
 Sparrow
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental
 USA and
 Alaska.)



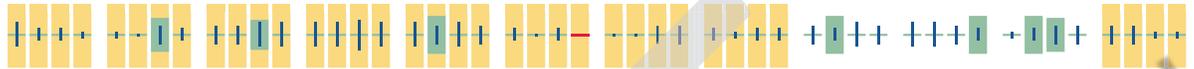
Clark's Grebe
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental
 USA and
 Alaska.)



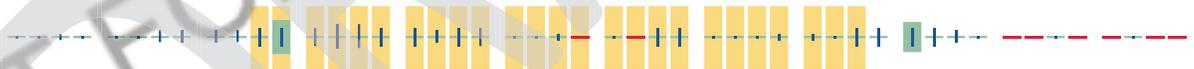
Costa's
Hummingbird
BCC - BCR (This
is a Bird of
Conservation
Concern (BCC)
only in
particular Bird
Conservation
Regions (BCRs)
in the
continental
USA)



Golden Eagle
Non-BCC
Vulnerable
(This is not a
Bird of
Conservation
Concern (BCC)
in this area, but
warrants
attention
because of the
Eagle Act or for
potential
susceptibilities
in offshore
areas from
certain types of
development
or activities.)



Lawrence's
Goldfinch
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)





NOT FOR CONSULTATION



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA](#)

[Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should

seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION
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