

GENERAL BIOLOGICAL RESOURCES ASSESSMENT

APN 0483-165-33

**SAN BERNARDINO COUNTY,
CALIFORNIA**

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Table of Contents

| Section | Page |
|--|-------------|
| 1.0 Introduction and Summary | 1 |
| 2.0 Existing Conditions | 2 |
| 3.0 Methodologies | 3 |
| 4.0 Literature Search | 5 |
| 5.0 Results | 6 |
| 5.1 General Biological Resources | 6 |
| 5.2 Federal and State Listed Species | 6 |
| 5.3 Wildlife Species of Concern and Special Status Plants | 7 |
| 5.4 Jurisdictional Waters and Riparian Habitat | 7 |
| 5.5 Protected Plants | 8 |
| 6.0 Impacts and Mitigation Measures | 9 |
| 6.1 General Biological Resources | 9 |
| 6.2 Federal and State Listed Species and Species of Special Concern | 9 |
| 7.0 Conclusions and Recommendations | 10 |
| 8.0 Bibliography | 11 |
| Certification | 13 |
| Appendix A – Tables and Figures | |

1.0 INTRODUCTION AND SUMMARY

Comprehensive biological surveys were conducted on March 7, 2018 on a 6-acre parcel (gross) located at the southwest corner of Rock Springs Road and Deep Creek Road in the unincorporated area of San Bernardino County south of Apple Valley, California (Township 4 North, Range 3 West, Section 19) (Appendix A: Figures 1, 2 and 3). As part of the environmental process, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed. Following the data review, surveys were performed on the site on March 7, 2018 during which the biological resources on the property and in the surrounding areas were documented by biologists from RCA Associates, Inc. (Randall Arnold, Parker Smith, and Blake Curran). As part of the surveys, the property site and the adjoining lands were evaluated for the presence of native habitats which could potentially support populations of sensitive wildlife species. Focused surveys were also conducted for the desert tortoise and burrowing owl, and a habitat assessment was also performed for the Mohave ground squirrel. The property was also evaluated for the presence of sensitive habitats including wetlands, vernal pools, riparian habitats, and jurisdictional areas.

Based on data from USFWS, CDFW, and a search of the California Natural Diversity Database (CNDDDB, 2018) for the Apple Valley South USGS Quadrangle, there are four sensitive wildlife species and three special status plant that have been documented in the region within the general vicinity of the project site. These sensitive species include desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), Mohave ground squirrel (*Spermophilus mohavensis*), Le Conte's thrasher (*Toxostoma lecontei*), Pinyon rockress (*Boechea dispar*), San Bernardino Mountains Dudleya (*Dudleya abramsii ssp. affinis*), and Booth's evening primrose (*Eremothera boothii ssp. boothii*). Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980).

2.0 EXISTING CONDITIONS

The property is approximately 6-acres in size (gross) and is located on the southwest corner of Rock Springs Road and Deep Creek Road in the unincorporated area of San Bernardino County south of Apple Valley, California (T4N, R3W, Section 19) (Appendix A: Figures 1, 2, and 3). The site is mostly cleared and supports a highly disturbed desert scrub community with a limited number of plant species on the site (Figure 3).

The plants observed included Sahara mustard (*Brassica tournefortii*), brome grasses (*Bromus sp.*), schismus (*Schismus barbatus*), and Russian thistle (*Salsola tragus*). (Appendix A: Figure 3). The property is bordered on the north by Rock Springs Road and to the south by single family dwellings. Vacant land borders the site to the east and west and supports similar plant communities. **No desert tortoises, burrowing owls, or Mohave ground squirrels were observed on the site during the field investigations, nor were any sensitive habitats identified.**

3.0 METHODOLOGIES

Comprehensive biological surveys were conducted on March 7, 2018 during which biologists from RCA Associates, Inc. initially walked meandering transects throughout the site to collect data on the plant and animal communities. Following completion of the initial reconnaissance survey, focused surveys were conducted for the burrowing owl and desert tortoise, and a habitat assessment was also performed for the Mohave ground squirrel. The applicable methodologies are summarized below.

Surveys were performed on the site and in the surrounding area from about 1200 to about 1330 hours. Weather conditions during the March 7, 2018 survey consisted of winds 5-10 mph, temperatures in the mid-60's (AM) (°F) with 25 percent cloud cover. All plants and animals detected during the field investigations were recorded and are provided in Tables 1 & 2 along with other species that have been documented in the area (Appendix A).

Desert Tortoise: The site was surveyed for desert tortoises, and as required by the CDFW and USFWS survey protocol, 10 meter parallel belt transects were walked in a north-south direction until the entire property had been checked for tortoises and/or tortoise sign (burrows, tracks, scats, etc.). Surveys in the zone of influence (ZOI) were also conducted in the surrounding areas where possible. All transects were walked at a pace that allowed careful observations along the transect routes and in the immediate vicinity. Field notes were recorded regarding native plant assemblages, wildlife sign, and human affects in order to determine the presence or absence of suitable tortoise foraging habitat.

Burrowing Owl: A habitat assessment was conducted for the burrowing owl in conjunction with the general biological surveys to determine if the site supports suitable habitat for the species. Following completion of the habitat assessment, it was determined that the site does support suitable habitat for the owl; therefore, a focused survey was performed for burrowing owls. As part of the burrow survey, transects were walked throughout the site during which any suitable burrows were evaluated for owls and owl sign. Burrowing owls typically utilized burrows which have been excavated by other animals (squirrels, coyotes, foxes, dogs, etc.) since owls cannot dig their own burrows. CDFW protocol also requires surveys be conducted in the surrounding area out to a distance of about 500 feet; therefore, surveys were performed beyond the boundaries of the site in the immediate surrounding area.

Mohave Ground Squirrel: A habitat assessment was performed for the Mohave ground squirrel as per CDFW protocol including an analysis of the on-site habitat, evaluation of local populations, and assessment of connectivity with habitats in the surrounding area which might support populations of the Mohave ground squirrel.

4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDDB, 2018) was performed. Based on this review, it was determined that four sensitive wildlife species and one special status plant species have been documented within approximately five miles of the property. The following table provides data on each species.

Table 4-1: Federal and State Listed Species and State Species of Special Concern.

T = Threatened; E = Endangered; SSC = Species of special concern; CNDDDB = California Natural Diversity Data Base
CNPS = California Native Plant Society

| Name | Listing Status | Habitat Requirements | Presence/Absence |
|---|---|---|--|
| Desert tortoise (<i>Gopherus agassizii</i>) | Fed: T State: T | Desert scrub | Site is located within the known distribution of the species. No suitable habitat observed on site. No tortoises observed on site. |
| Burrowing owl (<i>Athene cunicularia</i>) | Fed: None State: SSC | Grasslands and desert habitats | Owls not observed on the site and no occupiable burrows identified on site. |
| Mohave ground squirrel (<i>Spermophilus mohavensis</i>) | Fed: None State: T | Desert scrub | Site does not support suitable habitat for the species due to past disturbance. Species not expected to inhabit the site. |
| Le Conte's thrasher (<i>Toxostoma lecontei</i>) | Fed: None State: SSC | Desert wash Mojavean desert scrub Sonoran desert scrub | Site does not support suitable habitat for the species due to past disturbance. Species not expected to inhabit the site. |
| Pinyon rockress (<i>Boechera dispar</i>) | Fed: None State: None CNPS: List 2B.3 | Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands | Site does not support suitable habitat for the species due to past disturbance. Species not expected to inhabit the site. |
| San Bernardino Mountains Dudleya (<i>Dudleya abramsii</i> ssp. <i>affinis</i>) | Fed: None State: None CNPS: List 1B.2 | Limestone Pavement plain Pinon & juniper woodlands Upper montane coniferous forest | Site does not support suitable habitat for the species due to past disturbance. Species not expected to inhabit the site. |
| Booth's evening primrose (<i>Eremothera boothii</i> ssp. <i>boothii</i>) | Fed: None State: None CNPS: List 2B.3 | Joshua tree woodland Pinon & juniper woodlands | Site does not support suitable habitat for the species due to past disturbance. Species not expected to inhabit the site. |

5.0 RESULTS

5.1 General Biological Resources

The site was previously cleared of most native vegetation and currently supports a ruderal desert community (Figures 3). A limited number of plants were observed including Russian thistle (*Salsola tragus*), Sahara mustard (*Brassica tournefortii*), schismus (*Schismus barbatus*), and brome grasses (*Bromus* sp.). Table 1 (Appendix A) provides a list of all species observed. As previously stated, the areas to the east and west support similar vegetation.

No wildlife were observed directly on the site during the March, 7, 2018 surveys except for a few ravens (*Corvus corax*). However, a few small mammal burrows were noted indicating the possible presence of Merriam's kangaroo rats (*Dipodomys merriami*) and/or antelope ground squirrels (*Ammospermophilus leucurus*), which are common in the area. Table 2 (Appendix A) provides a list of all species observed on the site and/or in the surrounding region during the surveys. No distinct wildlife corridors were identified on the site or in the surrounding area.

5.2 Federal and State Listed Species

Mohave Ground Squirrel: Mohave ground squirrel populations have been documented in the surrounding area with the most recent observation approximately 5 miles northwest of the site. (CNDDDB, 2017). There are no recent observations of the species in the immediate area surrounding the site (CNDDDB, 2017); furthermore, based on the results of the habitat assessment, the site does not support suitable habitat for the species nor is the species expected to inhabit the site. This conclusion is based on the following criteria:

1. Absence of native vegetation throughout the site due to past clearing activities;
2. No connectivity with suitable habitat in the surrounding area; and
3. Absence of documented observations in the immediate area.

Desert Tortoise: Desert tortoises have been documented in the region however, there are no documented observations of the tortoise in the area immediately surrounding the site, and no tortoises or tortoise sign were observed on the site during the protocol surveys.

5.3 Wildlife Species of Special Concern and Special Status Plants

Burrowing Owl: There are numerous owl colonies that have been observed in the region (CNDDDB, 2018). In addition, there are numerous other documented owl colonies within about five miles of the site. However, no burrows were detected on the site that were of sufficient size to be suitable for owls; furthermore, no owls or owl sign (whitewash, castings, etc.) were observed during the field investigations. Based on the results of the field surveys and the absence of suitable burrows for owls, the species is not expected to inhabit the property in the near future.

5.4 Jurisdictional Waters and Riparian Habitat

No riparian vegetation (e.g., cottonwoods, willows, etc.) exist on the site or in the adjacent habitats.

5.5 Protected Plants

No protected plants were observed on site or in the immediate surrounding area.

6.0 Impacts and Mitigation Measures

6.1 General Biological Resources

Future development of the site will impact the general biological resources present on the site, and most of the vegetation will likely be removed during construction activities. Wildlife on the site is somewhat limited and future activities will generate minimal impacts on wildlife species known to occur in the area. Species with limited mobility (i.e., small mammals and reptiles) will experience some increases in mortality during the construction phase; although, more mobile species (i.e., birds, large mammals) will be displaced into adjacent areas and will experience negligible impacts. Loss of about 6-acres of ruderal desert vegetation will not have a significant impact on the overall biological resources in the region.

6.2 Federal and State Listed and Species of Special Concern

The site does not support suitable habitat for the Mohave ground squirrel; furthermore, the site is not expected to support populations of the species in the future based on the absence of native vegetation. In addition, the species is expected to be absent from the adjacent areas since these areas also support limited native vegetation. The site supports marginal habitat for the desert tortoise; furthermore, no tortoises or tortoise sign (burrows, scat, etc.) were observed during the protocol surveys conducted as part of the field investigation.

As noted in Section 5.3, no occupiable owl burrows were observed on the property, and no owls or owl sign were observed during the March 2018 surveys. As per CDFW protocol, the survey results are valid for only 30 days; therefore, CDFW may require a 30-day pre-construction survey be performed prior to any clearing/grading activities to determine if owls have moved on to the site since the March 7, 2018 surveys.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Future development activities will result in the removal of approximately 6-acres of ruderal desert scrub vegetation, and development of the site is not expected to have a significant cumulative impact on the general biological resources in the region. In addition, development of the site is not expected to have an impact on State or Federal listed wildlife species, including the desert tortoise or Mohave ground squirrel, nor will any special status wildlife species be impacted. If any special status species are observed on the property during future development activities, CDFW and USFWS (as applicable) should be contacted to discuss specific mitigation measures which may be required for the individual species. CDFW and USFWS are the only agencies which can grant authorization for the “take” of any special status species.

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CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: 03/19/2018 Signed: *Randy Arnold*
Report Author

Field Work Performed By: Randall Arnold
Senior Biologist

Appendix A
Tables and Figures

Table 1 - Plants observed on the site and known to occur in the immediate surrounding area.

| Common Name | Scientific Name | Location |
|------------------------|------------------------------|--------------------|
| Erodium | <i>Erodium texanum</i> | On-site & Off-site |
| Schismus | <i>Schismus barbatus</i> | “ |
| Brome grass | <i>Bromus ps.</i> | “ |
| Yellow-green matchweed | <i>Gutierrezia sarothrae</i> | “ |
| Russian thistle | <i>Salsola tragus</i> | “ |
| Sahara mustard | <i>Brassica tournefortii</i> | “ |

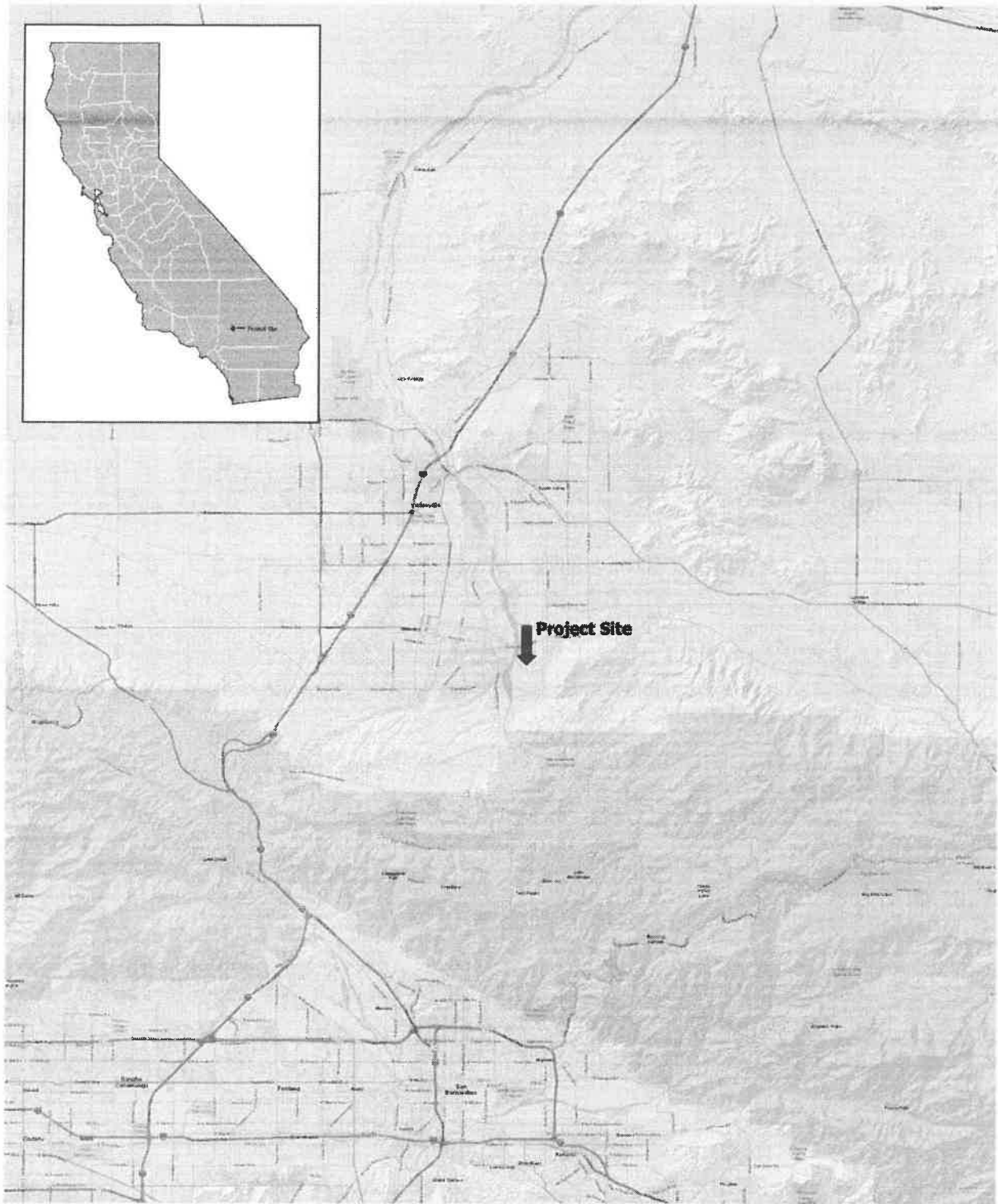
Table 2 - Wildlife observed on the site and those species expected to occur in surrounding area.

| Common Name | Scientific Name | Location |
|----------------------------|----------------------------------|--------------------------------------|
| Common raven | <i>Corvus corax</i> | On-site and in the surrounding area. |
| Sage sparrow | <i>Amphispiza belli</i> | Known to occur in area. |
| Song sparrow | <i>Melospiza melodia</i> | “ |
| Side-blotched lizard | <i>Uta stansburiana</i> | “ |
| Western whiptail lizard | <i>Cnemidophorus tigris</i> | “ |
| Desert spiny lizard | <i>Sceloporus magister</i> | “ |
| Morning dove | <i>Zenaida macroura</i> | “ |
| Gambel’s quail | <i>Callipepla gambelii</i> | “ |
| Antelope ground squirrel | <i>Ammospermophilus leucurus</i> | “ |
| California ground squirrel | <i>Spermophilus beecheyi</i> | “ |
| Jackrabbit | <i>Lepus Californicus</i> | “ |
| Coyotes | <i>Canis latrans</i> | “ |

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, Inc.

Figure 1

Regional Vicinity Map



Source: Google Imagery 2018, ESRI

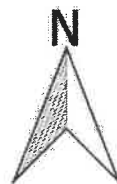
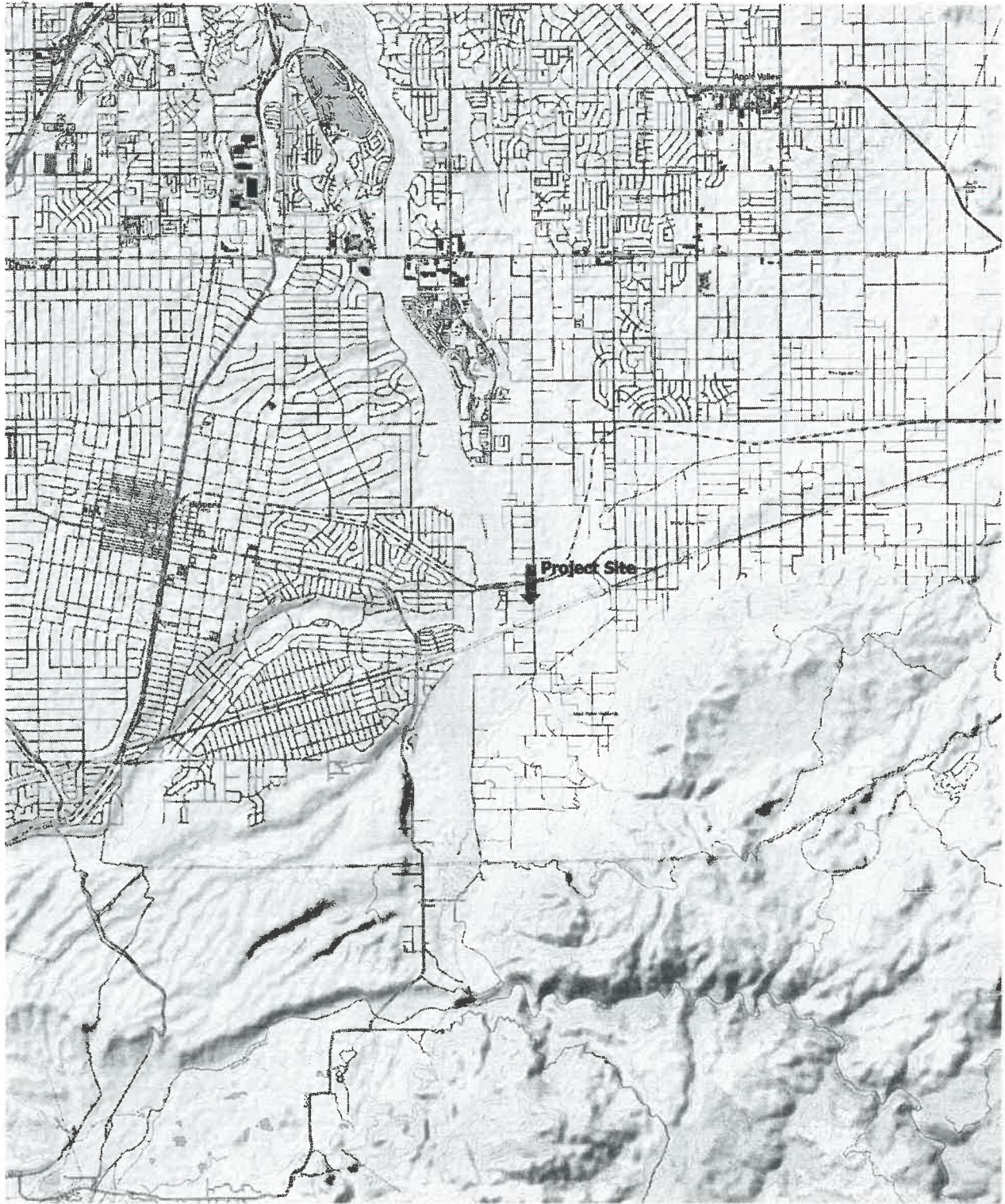


Figure 2

Local Topographic Map



Source: Google Imagery 2018



Figure 3

Local Vicinity Map



Source: Google Imagery 2018

25 0 25 50 75 100 m



Legend

..... Property Border

