PZ-PA-011-25

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

PROCEDURE AND APPLICATION FOR A PROPOSED NON-MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning pre-application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors. Time frame is approximately 10 to 15 weeks from application acceptance by the Planning Department.

D. Public hearing, (approximately 4 to 8 weeks after Planning Commission hearing), before the Board of Supervisors.

PROCEDURE FOR A PROPOSED MAJOR COMPREHENSIVE PLAN AMENDMENT

A. Attend a Concept Review (Zoning Pre-Application (Z-PA)) meeting with the Planning Department and affected County agencies.

B. File an application and all required supporting documentation for a Comprehensive Plan Amendment. Please use the attached application forms.

C. Public meeting with the Citizens Advisory Committee.

D. Public hearing before the Planning Commission with Commission recommendation to the Board of Supervisors.

E. Public hearing before the Board of Supervisors.

*Public hearing schedule will be made available in June.

FEE SCHEDULE FOR MAJOR AND NON-MAJOR AMENDMENTS

A. Major Comprehensive Plan Amendment: $5,091.00

B. Non-major Comprehensive Plan Amendment:

a. 0-499 mailouts: $4,478.00
b. 500 or more mailouts: $4,824.00
c. With accompanying zone change: $3,354.00

COMMUNITY DEVELOPMENT
Planning Division

85 N. Florence St., PO Box 2973, Florence, AZ 85132 T 520-866-6442 FREE 888-431-1311 F 520-866-6530
www.pinalcountyaz.gov

Leo Lew
County Manager

PINAL COUNTY
WIDE OPEN OPPORTUNITY

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT IN AN UNINCORPORATED AREA OF PINAL COUNTY, ARIZONA
(All Applications Must Be Typed or Written in Ink)

Comprehensive Plan Amendment unincorporated & Property Information:
(Feel free to include answers and to these questions in a Supplementary Narrative, when doing so write see narrative on the space provided)

1. The legal description of the property: Please see legal description included with this application.

2. Parcel Number(s): Please see narrative for complete list of APNs. Total Acreage: 3374.51 AC

3. Current Land Use Designation: Moderate Low Density Residential (MLDR), Very Low Density Residential & Major Open Space

4. Requested Land Use Designation: Employment, General Public Facilities/Services & Major Open Space

5. Date of Concept Review: 05/13/2025 Concept Review Number: Z-PA-047-25

6. Why is this Comprehensive Plan Amendment being requested? (You must provide a summary of the anticipated development on this page, if not provided, the application cannot be processed.):

The developer is seeking to develop an industrial employment facility (La Osa Employment Center) comprised of data centers and natural gas energy generation facilities. The project site is currently designated for medium low and very low density residential development with preserved major open space on a few parcels. The developer proposes changing the land use for the residential parcels to Employment while preserving those designated as Major Open Space to preserve riparian areas and sensitive habitat.

7. Discuss any recent changes in the area that would support your application.

See narrative

8. Explain why the proposed amendment is needed and necessary at this time.

The property owners are seeking to develop an industrial employment facility, featuring a data center, battery storage, and energy production. In order to support this request, a Comprehensive Plan amendment is needed to change the land use from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space to Employment, General Public Facility/Service and Major Open Space. After the approval of the Major CPA, a rezone for applicable parcels from GR (General Residential) to CI-2 (Industrial) Will be requested. Industrial Use Permits may also be requested for the energy generation parcels.

INV#: AMT: DATE: CASE: Xref:

PINAL COUNTY COMPREHENSIVE PLAN AMENDMENT APPLICATION

IN ADDITION TO THIS APPLICATION, YOU WILL NEED TO SUBMIT:

- ☐ A. **Certified Boundary Survey,** including legal descriptions of the proposed designations
- ☐ B. Location map which identifies the property and its relationship to Pinal Countyenvirons.
- ☐ C. Map showing the topography of the property.
- ☐ D. Site map which specifically identifies the property including parcels under separate ownership.
- ☐ E. Property owner(s) authorization for the Comprehensive Plan Amendment.
- ☐ F. Other information as may be determined necessary by the Planning staff or other information the applicant feels is pertinent to this request.
- ☐ G. Non-refundable filing fee as shown on the cover page.
- ☐ H. Narrative in PDF format.
- ☐ I. Neighborhood meeting report

Your application must be submitted digitally via the online submittal portal site at https://citizenaccess.pinalcountyaz.gov/CitizenAccess/Default.aspx

Please call or email the Planning Division for more information.

I certify the information included in this application is accurate, to the best of my knowledge. I have read the application and I have included the information, as requested. I understand if the information submitted is incomplete, this application cannot be processed.

Vermaland, LLC	2375 E Camelback Rd, Ste 600, Phoenix, AZ 85016	602-274-0700
Name of Landowner (Applicant)	Address	Phone Number

Ken Verma (Ken Verma) kverma@vermaland-com robclang@vermaland.com

Signature of Landowner (Applicant) E-Mail Address

Josh Hannon	1130 N Alma School Road, Ste 120, Mesa, AZ 85201	480-503-2250
Name of Agent	Address	Phone Number

josh.hannon@epsgroupinc.com

Signature of Agent E-Mail Address

The Agent has the authority to act on behalf of the landowner. The Agent will be the contact person for Planning staff and must be present at all hearings. Please use the attached Agency Authorization form, if applicable

AGENCY AUTHORIZATION

(To be completed by landowners of subject property when landowners do not represent themselves. Instructions for completing required information are in bold and brackets below lines. If applicant is a company, corporation, partnership, joint venture, trustee, etc., please use the corporate signature block and have the notary fill in the notarization section for corporations not individuals and cannot be submitted digitally)

TO: Pinal County Planning & Development Services
P.O. Box 2973
Florence, AZ 85132

Verma La Osa Ranch I-10/Sasco 3700 LLC & Verma La Osa Ranch I-10/Sasco Rd Casa Grande 3677 Acres LLC
[Insert Name -- If a Corporation, Partnership or Association, Include State of Incorporation]

hereinafter referred to as "Owner," is/are the owner(s) of +/-3,374 acres located at along La Osa Ranch Road, roughly between Baumgartner Road and the Continental Avenue alignment, and further identified
[Insert Address of Property]

as assessor parcel number (please see attached list) and legally described as follows:
[Insert Parcel Number]

[Legal Description is attached hereto as Exhibit A]

Said property is hereinafter referred to as the "Property."

Owner hereby appoints EPS Group, Inc.
[Insert Agent's Name. If the Agent Is a Company, Insert Company Name Only]

hereinafter referred to as "Agent," to act on Owner's behalf in relation to the Property in obtaining approvals from Pinal County for any necessary amendment to Pinal County's Comprehensive Plan; zone changes; planned area development overlay districts; platting of the subject property; special use permit or industrial use permit; and to file applications and make the necessary submittals for such approvals.

Owner consents and agrees to be bound by all stipulations agreed to by this Agent in connection with any of above-referenced processes.

[Individual PROPERTY OWNER signature block and acknowledgment. DO NOT SIGN HERE IF SIGNING AS AN OFFICER OF A CORPORATION ON THE NEXT PAGE.]

_____	_____
[Signature]	***[Signature]***
_____	_____
[Address]	***[Address]***
Dated: _____	Dated: _____

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, _____ by _____.
[Insert Name of Signor(s)]

My commission expires _____

_____	_____
Printed Name of Notary	Signature of Notary Public

Corporate PROPERTY OWNER signature block and acknowledgment the appropriate corporate officer or trustee signs this signature block NOT the block on the previous page.

Vermaland, LLC
[Insert Company or Trustee's Name]

By: Kuldip Manager
[Signature of Authorized Officer or Trustee]

Its: Manager
[Insert Title]

Dated: 5/29/2025

STATE OF Arizona)
) ss.
COUNTY OF Maricopa)

The foregoing instrument was acknowledged before me, this 29 day of May, 2025, by Kuldip Verma, Manager of Vermaland, LLC, an Arizona Limited Liability Company

[Insert Signor's Name] *[Insert Title]* *[Insert Name of Company or Trust]* *[Insert State of Incorporation, if applicable]*

and who being authorized to do so, executed the foregoing instrument on behalf of said entity for the purposes stated therein.

My commission expires: 7/29/2028

Notary Public

ALTERNATE: Use the following acknowledgment only when a second company is signing on behalf of the owner:

STATE OF _____)
) ss.
COUNTY OF _____)

JENNIFER SULTZABERGER
Notary Public - State of Arizona
MARICOPA COUNTY
Commission # 670907
Expires July 29, 2028

On this _____ day of _____, _____, before me, the undersigned, personally appeared

_____ Who acknowledged himself/herself to be
[Insert Signor's Name]

_____ of _____
[Title of Office Held] *[Second Company]*

As _____ for _____, and who being
[i.e, member, manager, etc.] *[Owner's Name]*

Authorized to do so, executed the foregoing instrument on behalf of said entities for the purposes stated therein.

My commission expires: _____

_____ _____
Printed Name of Notary Signature of Notary

La Osa Employment Center

Major Comprehensive Plan Amendment Narrative Case

No. _____

1st Submittal: May 29,2025

Developer:
Vermaland, LLC
Rob Clang
2375 E Camelback Rd, Ste 600
Phoenix, AZ 85016

Land Owners:
Verma La Osa Ranch I-10/Sasco 3700 LLC
Contact: Vermaland LLC
2375 E Camelback Rd, Ste 600
Phoenix, AZ 85016

Verma La Osa Ranch I-10/Sasco Rd Casa Grande 3677 Acres LLC
Contact: Vermaland LLC
2375 E Camelback Rd, Ste 600
Phoenix, AZ 85016

Civil Engineer and Planner:
EPS Group Inc.
Dan “Ox” Auxier
1130 N. Alma School Rd, Ste 120
Mesa, AZ 85201

TABLE OF CONTENTS

LIST OF EXHIBITS

A. Introduction

On behalf of Vermaland LLC (the "Applicant"), this application is a request for a major comprehensive plan amendment for approximately +/- 3,374 acres located roughly along La Osa Ranch Road between the Baumgartner Road and Continental Avenue road alignments within Pinal County, Arizona. The site is identified as a Pinal County Assessor Parcel Numbers (APNs): 409-11-0040; -0050; -006C; -002E; -002F; -002G; -002H; -003D; -013C; -015C; -015E; -0160; -018A; -0190; 409-14-002D; -002F; -004A; -005A; -005E; 409-24-001C; 409-25-001E; -001D; -001C; -002F; -002G; -003G; -003E; 409-26-0010; -002A; -002B; -0240; -0220; -0250; -0260; -0270; -0490; -0480; 409-30-0020; 409-31-0010; and -0330 (the "Property"). See **Exhibit A, Existing Comprehensive Plan Map**.

The request will modify the existing comprehensive plan designation from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space Use to Employment, General Public Facilities/Services and Major Open Space.

B. Location and Site Conditions

The Property is located entirely within unincorporated Pinal County and along Greene Canal – Santa Cruz Was. The parcels are also within the Extended Planning Boundary for the City of Eloy. The Property is approximately 3,374 acres and is currently undeveloped. In addition, a notable portion of the Property is within a major Zone A floodplain area, also known as Greene Wash watershed. The proposed land use designation is appropriate adjacent to this floodplain area, as other uses such as residential and commercial may not be viable.

The Property is bordered to the north by the Greene Wash. To the west, south, and east includes undeveloped and/or agricultural land that is zoned General Rural (GR).

C. Comprehensive Plan and Zoning

The Property has a Comprehensive Plan land use designation of Moderate Low Density Residential, Very Low Density Residential and Major Open Space. **See Exhibit A, Existing Comprehensive Plan Map.** The Property is zoned GR. **See Exhibit B, Existing Zoning Map.**

D. Request

Vermaland requests to amend the existing comprehensive plan designation from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space to Employment, General Public Facilities/Services, and Major Open Space (no changes are proposed for existing

Major Open Space). See **Exhibit C, Proposed Comprehensive Plan Map**. This amendment will allow uses that are more viable on the Property given the significant floodplain on much of the site. The Moderate Low and Very Low Density Residential encourages residential uses. However, the floodplain would impede these uses from occurring due to the real risk of flooding. Therefore, Employment uses would be more appropriate where it can be mitigated adjacent to the floodplain area. In addition, located nearby east of the Property there is an existing land use designation of Employment. This would be a continuation of that existing land use designation. The intent of the General Public Facilities/Services is to provide energy generation to support the proposed employment.

The Employment designation as noted in the Pinal County Comprehensive Plan "as areas that can support a variety of employment-generating business activities such as industrial, office, business park, and warehousing and distribution."

E. Project Overview

The comprehensive plan amendment will encompass approximately 3,374 acres. The nature of this use allows a viable use of the land without worrying about the negative impacts of a floodplain that would otherwise exist if building structures were built. Approximately 1,910 acres are designated to become Employment, 480 acres are designated to become General Public Facilities/Services, and the existing Major Open Space parcels, approximately 983 acres, will remain Major Open Space.

I. Relationship to Immediate Surroundings

The proposed development will have a positive impact on the surrounding area. This development activates underutilized parcels with an appropriate. Data centers, battery storage, and gas energy generation facilities are an appropriate use in otherwise difficult to access parcels, especially adjacent to a significant floodplain area. In addition, there is no development surrounding the Property and it will be appropriately screened for any future development that occurs around the site. The Property has not been developed since the historic mining operations, and this development will promote growth in this area.

II. Site Circulation and Traffic Impact

A Traffic Impact Analysis (TIA) will be provided due to the scale of the proposed development and anticipated traffic construction. The TIA will analyze the effect on the connectivity of the potentially impact areas. The project TIA will be submitted to the County Engineer at the time of the Tentative Plat of Site Plan submittal for review and approval.

The proposed development consists of sections of E. Baumgartner Road. It is identified as a Regionally Significant Route (Principal Arterial) per the "Regionally Significant Routes for Safety and Mobility, Final Report". All half-street right-of-way (ROW) will be a minimum of 75 feet. Additionally, the 75-foot right-of-way and any right-of-way outlined by Engineering dedication will be free and unencumbered through the Warranty Deed.

The site area is located within the Arizona Department of Transportation (ADOT) and Pinal County preferred alignments for the future Interstate-11 Freeway. Therefore, it will have a full street right-of-way width of 400 feet. Additional right-of-way dedication will be provided for this location per ADOT guidelines. The traffic report will be provided to ADOT for information.

Sasco Road is identified as a Minor Arterial per the Red Rock Small Area Transportation Study thus an important roadway connection for future developments. Sasco Road will have a 55-foot right-of-way along the development's frontage and a 110-foot right-of-way where the road passes through the property.

The proposed development TIA will identify all required infrastructure improvements such as deceleration lanes and turn lanes. Additional right-of-way will be provided for all identified infrastructure improvements. All roadway and infrastructure improvements follow the project TIA to mitigate impacts on the surrounding roadways and are completed at the developer's costs. All roadway and infrastructure improvements will follow the current Pinal County Subdivision Standards or as approved by the County Engineer. The TIA will follow current Pinal County TIA Guidelines and Procedures and will be approved before approval of the Tentative Plat.

Road improvements for the proposed development include paved, all-weather, 28-foot wide public access to and from the development. A minimum of two permanent access points will be provided for the ingress and egress from the development to existing public roads. All access improvements approval by the County Engineer will be a condition of approval of the plat by the board.

All right-of-way dedication will be free and unencumbered. All roadway sections, alignments, access locations, and access movements shown in the rezoning application will be approved by the Pinal County Engineer. Drainage, irrigation canals, and ditches in project-dedicated ROW will be undergrounded before dedication. Any potential offsite improvements required to be completed by the project will follow the TIA or Drainage Report and be accompanied by an offsite improvement plan for submittal.

III. Drainage Statement

The drainage pattern for the project site flows from the northwest to the southeast. A portion

of the project is within a Zone A Floodplain. Any improvements within the floodplain will determine the requirement of a Floodplain Use Permit or CLOMR/LOMR. If improvements are required, requirements such as structure elevation and floodproofing will be imposed on the project.

The Area Drainage Master Plan for Pinal County indicates the property is subject to offsite flows. The offsite flow is estimated to be approximately 10,000 cfs of the Casa Grande-Eloy Watershed of the Greene Wash. The offsite flow will be analyzed to determine the impact on the proposed development plan. Analysis of the offsite flow determines the need for required accommodation to collect, convey, and discharge the offsite runoff through the development or additional requirements. The offsite flow analysis will be reviewed as part of the hydrologic analysis for the proposed project. Per the Floodplain Ordinance, the storage or processing of materials injurious to human, animal, or plant life, if released due to damage from flooding, is prohibited in regulatory floodplain and erosion hazard zones. The project will provide a Grading and Drainage Plan with the Site Plan Review (SPR) formal submittal. The Grading and Drainage Plan will follow the Pinal County Drainage Ordinance and Drainage Manual, and a copy will be provided within the project Drainage Report. The property owner maintains retention areas and the common retention area will be maintained by property management. The project Drainage Report will be submitted for review and approval with the SPR formal submittal. On-site drainage analysis will follow the Pinal County Drainage Ordinance and Drainage Manual.

IV. Utility and Public Services

The proposed development is within Pinal County Electrical District 5 within APS Service Territory. Sewer utility service is not required for the site.

F. Comprehensive Plan Amendment Criteria

Pinal County understands that its Comprehensive Plan is "intended to be a dynamic document that must be periodically updated in response to changing regional needs." Nevertheless, proposed amendments must still be consistent with the Plans goals, policies, and objectives. To that end, Pinal County provides a Compliance Checklist, which is attached here as **Exhibit E** and discussed in detail below.

PART ONE: Consistency with Pinal County's Vision Components

1. Is the proposal consistent with the Sense of Community vision component?

This proposed industrial use is located in a rural area, away from any existing or emerging urban centers, and will seek to preserve the rural character and promote compatibility with the surrounding area through the site design process.

2. *Is the proposal consistent with the Mobility and Connectivity vision component?*

Access to this site will be provided by Baumgartner Road to the north, Sasco Road to the south, and La Osa Ranch Road, which bisects the property. In addition, the project is within the ADOT and Pinal County preferred alignment for Interstate 11 Freeway/Expressway with a 400' right-of-way designation. Newly constructed roadways would be internal to the project site and developed in accordance with state or local building requirements as needed.

3. *Is the proposal consistent with the Economic Sustainability vision component?*

Development of this project will provide construction, high-tech, and environmentally friendly employment opportunities in information technology and energy production throughout the life of the operation. Investing in cleaner natural gas energy generation promotes local economic opportunity rather than reliance on distant energy sources.

4. Is the proposal consistent with the Open Spaces and Places vision component?

A riparian habitat transects the project area and is considered to be of critical environmental importance and will be protected during development. In addition, the project will provide open spaces throughout the development and in accordance with Pinal County standards. Parcels designated by the Comprehensive Plan as Major Open Space will remain undeveloped to minimize ecological disturbance.

5. Is the proposal consistent with the Environmental Stewardship vision component?

The applicant will consider the potential environmental impacts in the project plans and is committed to minimizing impacts to the human, natural, and cultural environments resulting from the proposed development. The project will comply with any and all applicable federal, state, and local laws, regulations, and guidelines, as required.

6. *Is the proposal consistent with the Healthy, Happy Residents vision component?*

The applicant is committed to paying its reasonable share of the costs of new infrastructure, services and other public improvements that may be required for the project. The project would generate revenues and contribute to the tax base for Pinal County, and would allow for the use of clean, safe, affordable, and efficient energy.

7. Is the proposal consistent with the Quality Educational Opportunities vision component?

The proposal will have little impact on access to educational opportunities at any level, but can provide employment and other workforce learning opportunities with the Employment designation.

PART TWO: Consistency with the Plan's Key Concepts illustrated on Land Use, Economic, and Circulation Graphics

1. Consistency with the Land Use Designation shown on the graphics

The proposal requires a Major Comprehensive Plan Amendment to change the land use designation of the Property from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space to Employment, General Public Facilities/Services and Major Open Space.

2. Consistency with the Mixed Use Activity Center Concept

The proposal is not currently within a mixed use activity center.

3. Consistency with the Planning Guidelines described in the Land Use element

The proposal requires a Major Comprehensive Plan Amendment to change the land use designation of the Property from Moderate Low Density Residential, Very Low Density Residential and Major Open Space to Employment, General Public Facilities/Services, and Major Open Space .

4. Quality Employment Opportunities County-Wide

The Comprehensive Plan does not indicate any particular economic development in the project site area. The proposed development will add jobs to the County in the information technology and energy generation sectors in alignment with the County's economic growth and environmental stewardship goals.

5. Viable Agriculture, Equestrian and Rural Lifestyle

The proposed development does not threaten any existing agriculture. The amendment would cluster industrial development into areas that best support the proposed industrial uses, thus limiting dispersed impacts to open space, agriculture or sprawl.

6. System of Connected Trails and Preservation of Open Space

The proposed development will preserve the adopted County trail corridor along the Santa Cruz River and Greene Wash and proposed limited changes to the flood plain area.

7. Natural and Cultural Resource Conservation

The applicant will consider potential environmental impacts of the project and will mitigate impacts to the natural and cultural environment by minimizing ground disturbance, where possible. Development of the project will comply with all applicable federal, state, and local environmental laws, regulations, and guidelines, as required.

8. Water Resources, Public Facilities/Services, and Infrastructure Support

This development will provide the necessary infrastructure to support the proposed uses in accordance with Pinal County standards.

G. Summary

This application requests a major comprehensive plan amendment for approximately +/- 3,374 acres located along La Osa Ranch Road between Baumgartner Road and Sasco Road within Pinal County, Arizona. The request will modify the existing comprehensive plan designation from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space Use to Employment, General Public Facilities/Services and Major Open Space.

The proposed development is a logical fit for the location due to several factors. The property is currently undeveloped and situated within a major Zone A floodplain area, known as Greene Wash watershed. The proposed land use designation is appropriate adjacent to this floodplain area, as other uses such as residential and commercial may not be viable. The property is bordered to the north by Greene Wash and to the west, south, and east by undeveloped and/or agricultural land zoned General Rural (GR). The employment designation will allow for uses that

are more viable on the property given the significant floodplain on much of the site. The Employment designation supports a variety of employment-generating business activities such as industrial, office, business park, and warehousing and distribution.

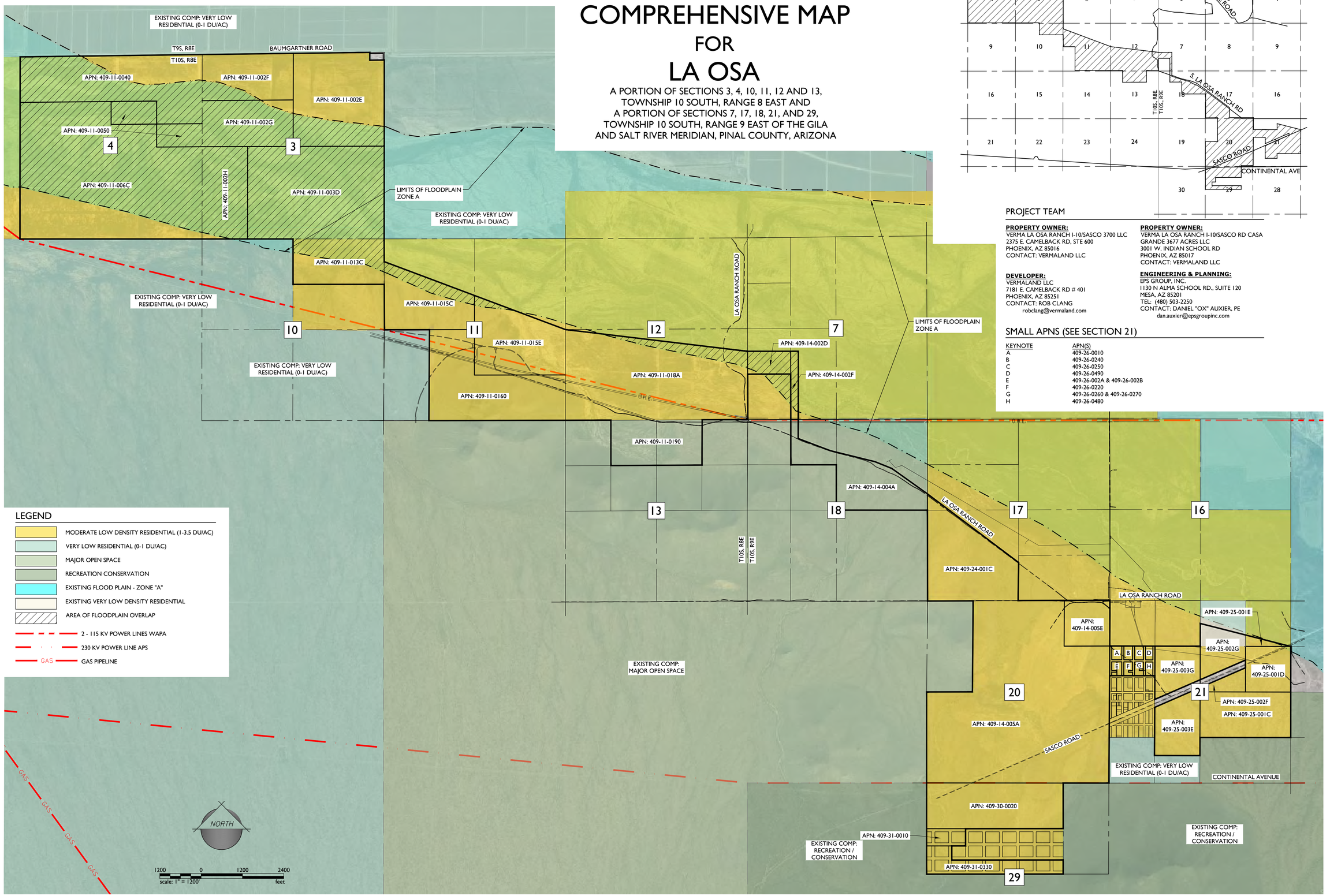
The benefits to Pinal County include the activation of underutilized parcels with appropriate uses such as data centers, battery storage, and gas energy generation facilities. This development will promote growth in the area and provide construction, high-tech, and environmentally friendly employment opportunities in information technology and energy production. The project will also preserve the adopted county trail corridor along the Santa Cruz River and Greene Wash and propose limited changes to the floodplain area. Additionally, the project will comply with all applicable federal, state, and local environmental laws, regulations, and guidelines.

In conclusion, the re-designation of the property from Moderate Low Density Residential, Very Low Density Residential, and Major Open Space to Employment, General Public Facilities, and Major Open Space offers a more pragmatic and sustainable approach to land use, considering the site's unique environmental constraints. The applicant is committed to working with Pinal County to make this amendment achievable and beneficial to everyone involved.

Exhibit A

EXISTING COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA



LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- EXISTING VERY LOW DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN OVERLAP
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS GAS PIPELINE

VICINITY MAP

PROJECT TEAM

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E. CAMELBACK RD, STE 600
PHOENIX, AZ 85016
CONTACT: VERMALAND LLC

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO RD CASA GRANDE 3677 ACRES LLC
3001 W. INDIAN SCHOOL RD
PHOENIX, AZ 85017
CONTACT: VERMALAND LLC

DEVELOPER:
VERMALAND LLC
7181 E. CAMELBACK RD # 401
PHOENIX, AZ 85251
CONTACT: ROB CLANG
robclang@vermaland.com

ENGINEERING & PLANNING:
EPS GROUP, INC.
1130 N ALMA SCHOOL RD., SUITE 120
MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com
EPS GROUP

Project:
La Osa
Pinal County, Arizona

Existing Cmprehensive Map

Revisions:
SEPTEMBER 17, 2024 - 1ST SUBMITTAL

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Designer: STAFF
Drawn by: STAFF

Preliminary
Not For
Construction
Or
Recording

Job No.
24-0542

EXCP

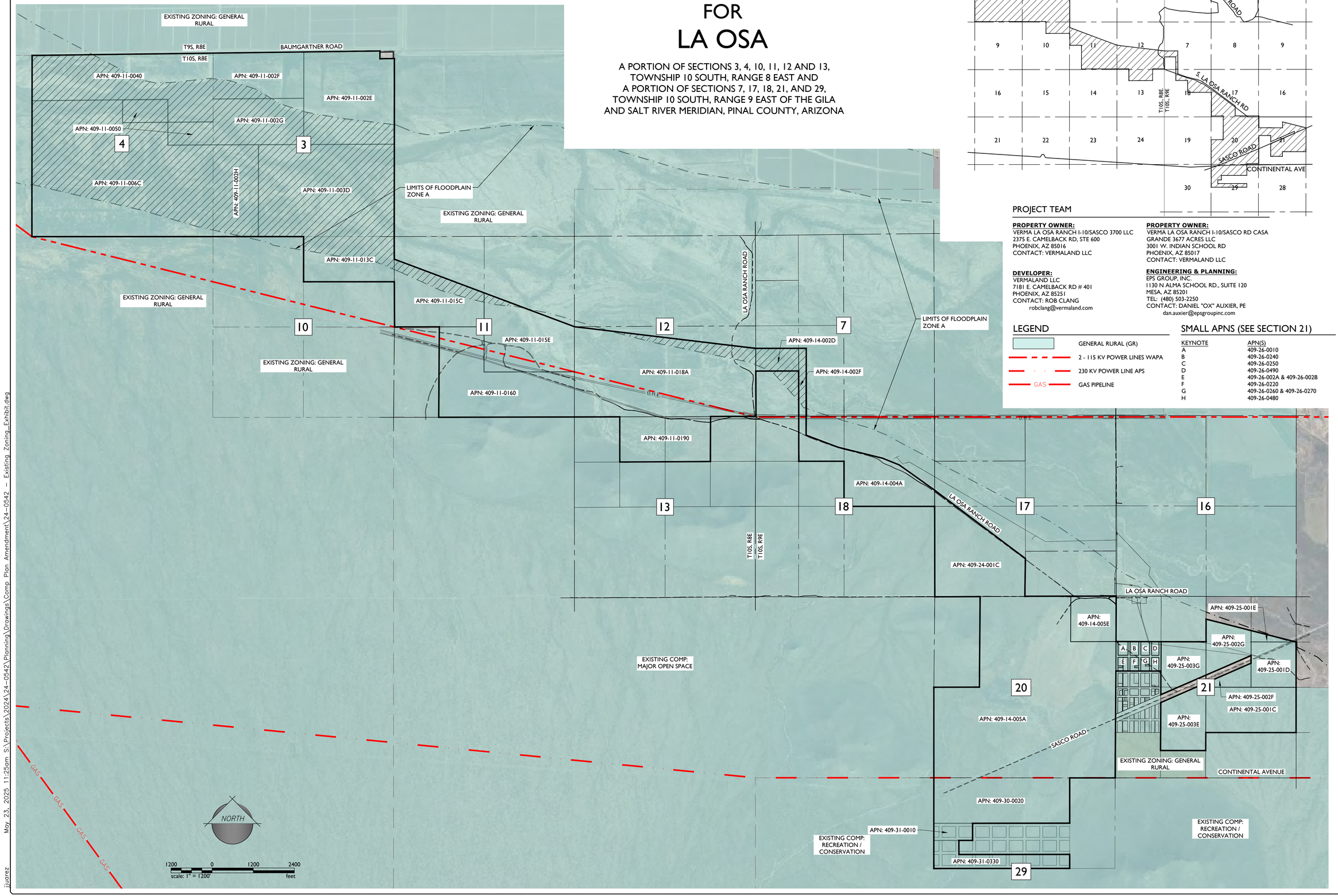
Sheet No.
1
of 1

24-0542
May 30, 2025 10:53am S:\Projects\2024\24-0542\Planning\Drawings\Comp Plan Amendment\24-0542 - Existing Comp_Exhibit.dwg
jjuarez

Exhibit B

EXISTING ZONING MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA



VICINITY MAP

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PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E. CAMELBACK RD, STE 600
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TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

LEGEND

- GENERAL RURAL (GR)
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS — GAS PIPELINE

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com

EPS GROUP

La Osa
Pinal County, Arizona

Existing Zoning Map

Project:

Revisions:

MAY XXX, 2025 - 1ST SUBMITTAL

Call at least two full working days before you begin excavation.
ARIZONA811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Designer: STAFF
Drawn by: STAFF

Preliminary
Not For
Construction
Or
Recording

Job No.
24-0542

EXZN01

Sheet No.
1
of 1

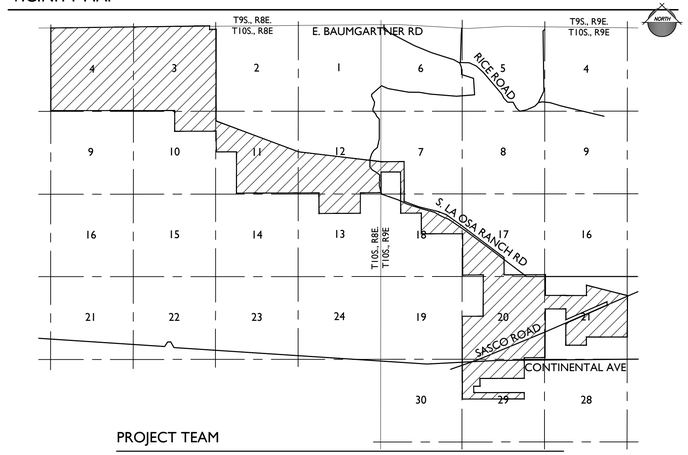
24-0542 May 23, 2025 11:25am S:\Projects\2024\24-0542\Planning\Drawings\Comp Plan Amendment\24-0542 - Existing Zoning_Exhibit.dwg jjuarez

Exhibit C

PROPOSED COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA

VICINITY MAP



PROJECT TEAM

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E. CAMELBACK RD, STE 600
PHOENIX, AZ 85016
CONTACT: VERMALAND LLC

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO RD CASA GRANDE 3677 ACRES LLC
3001 W. INDIAN SCHOOL RD
PHOENIX, AZ 85017
CONTACT: VERMALAND LLC

DEVELOPER:
VERMALAND LLC
7181 E. CAMELBACK RD # 401
PHOENIX, AZ 85251
CONTACT: ROB CLANG
robclang@vermaland.com

ENGINEERING & PLANNING:
EPS GROUP, INC.
1130 N ALMA SCHOOL RD., SUITE 120
MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- EXISTING VERY LOW DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN OVERLAP
- GENERAL PUBLIC FACILITIES / SERVICES
- EMPLOYMENT
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS GAS PIPELINE

NORTH

1200 0 1200 2400
scale: 1" = 1200' feet

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com
EPS GROUP

Project: La Osa
Pinal County, Arizona

Proposed Comprehensive Map

Revisions:
MAY 29, 2025 - 1ST SUBMITTAL

Call at least two full working days before you begin excavation.
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Recording

Job No.
24-0542
PROPOSED

Sheet No.
1
of 1

24-0542
May 30, 2025 10:53am S:\Projects\2024\24-0542\Planning\Drawings\Comp Plan Amendment\24-0542 - Proposed Comp_Exhibit.dwg
jjuarez

Exhibit D

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:
La Osa Comp Plan

Project Type:
Development Within Municipalities (Urban Growth), Commercial/industrial (mall) and associated infrastructure, New construction or expansion

Project ID:
HGIS-25146

User Project Number:
24-0542

Project Description:
24-0542 La Osa Comp Plan Report

Contact Person:
Kristen Javier

Organization:
EPS Group Inc.

On Behalf Of:
CONSULTING

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

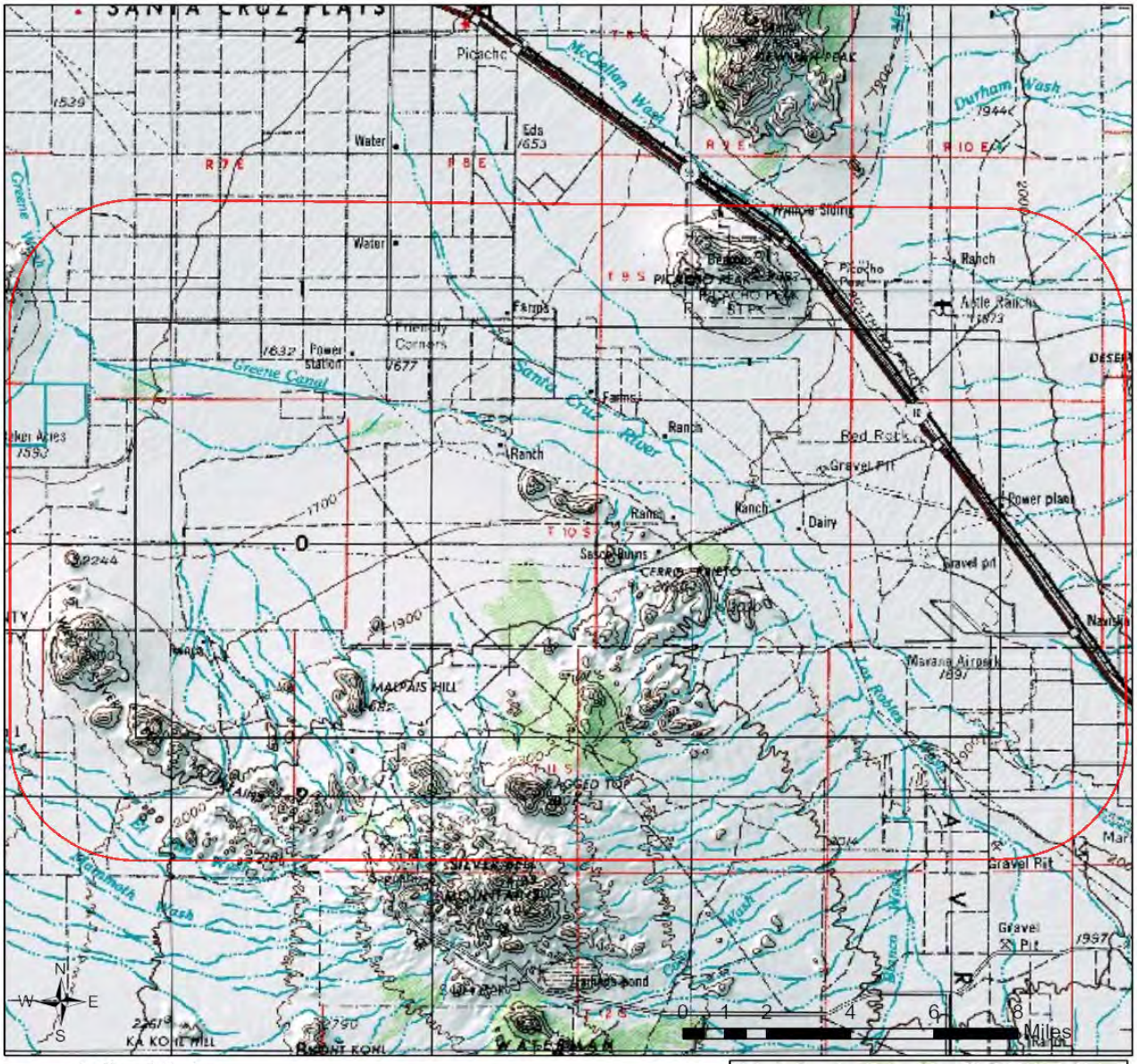
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

La Osa Comp Plan

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 132,903.74

Lat/Long (DD): 32.5421 / -111.4776

County(s): Pima; Pinal

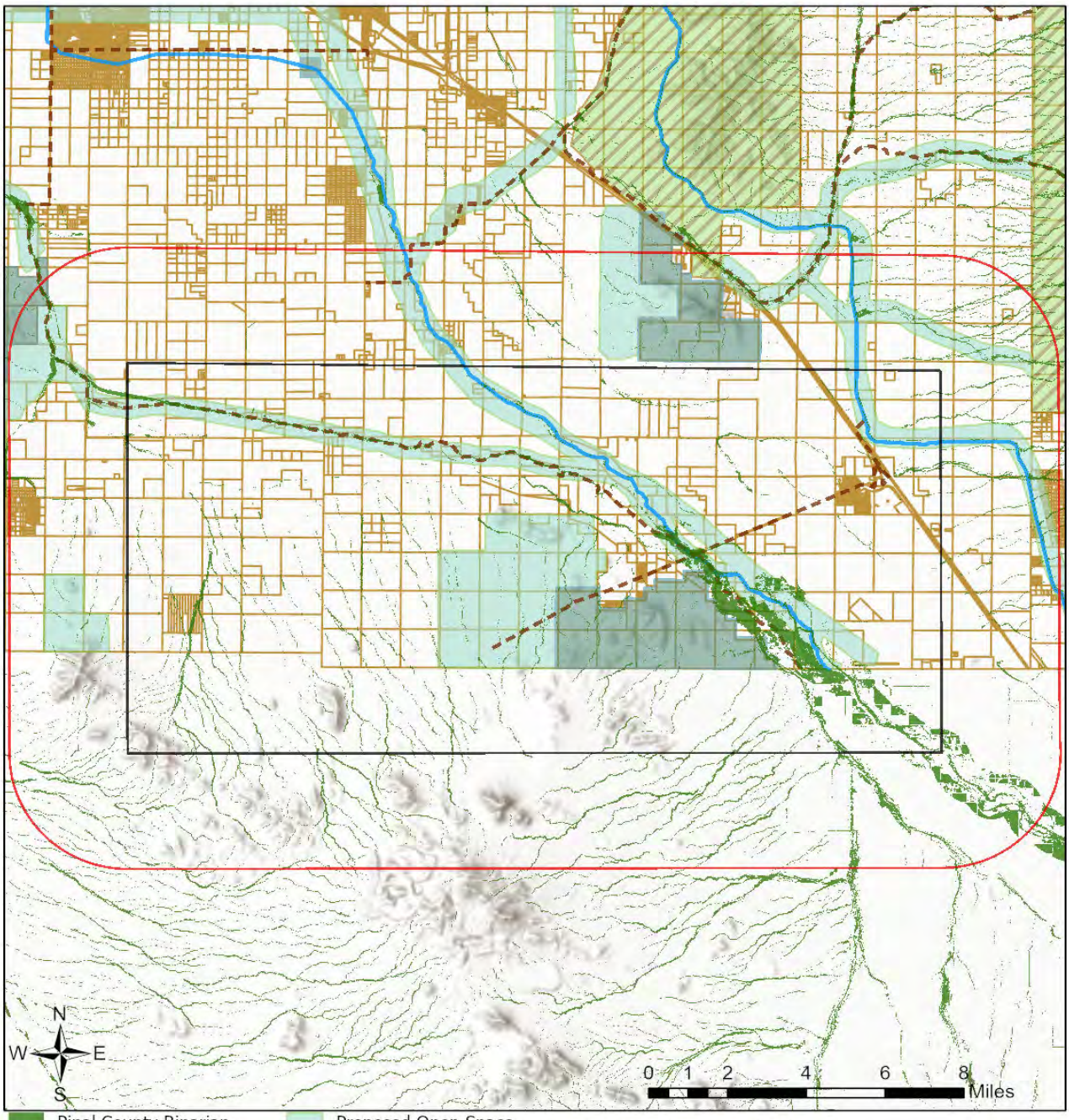
AGFD Region(s): Tucson

Township/Range(s): T10S, R10E; T10S, R7E; T10S, R8E +

USGS Quad(s): FRIENDLY CORNERS; GAP TANK +

La Osa Comp Plan

Web Map As Submitted By User



- Pinal County Riparian
- Existing/Planned Multi-Use Trail Corr
- Proposed Multi-Use Trail Corridor
- Adopted County Trail Corridor
- Planned/Existing OHV Trail
- Proposed OHV Trail
- Proposed Open Space
- Existing/Planned Open Space
- Existing/Planned/ Proposed Regional Park
- Restricted Use Open Space
- Buffered Project Boundary
- Project Boundary

Project Size (acres): 132,903.74

Lat/Long (DD): 32.5421 / -111.4776

County(s): Pima; Pinal

AGFD Region(s): Tucson

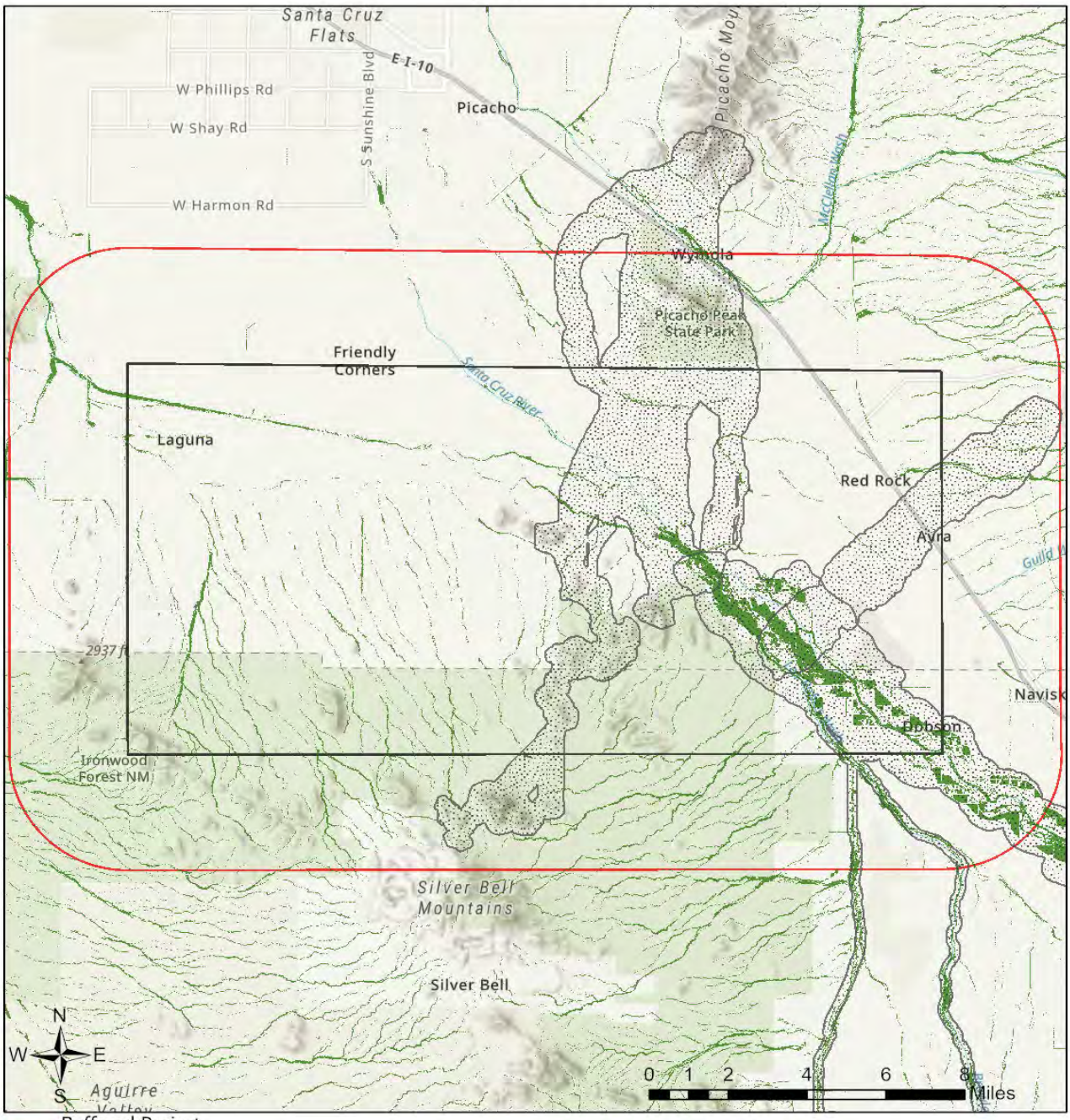
Township/Range(s): T10S, R10E; T10S, R7E; T10S, R8E +

USGS Quad(s): FRIENDLY CORNERS; GAP TANK +

Esri, NASA, NGA, USGS

La Osa Comp Plan

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 132,903.74

Lat/Long (DD): 32.5421 / -111.4776

County(s): Pima; Pinal

AGFD Region(s): Tucson

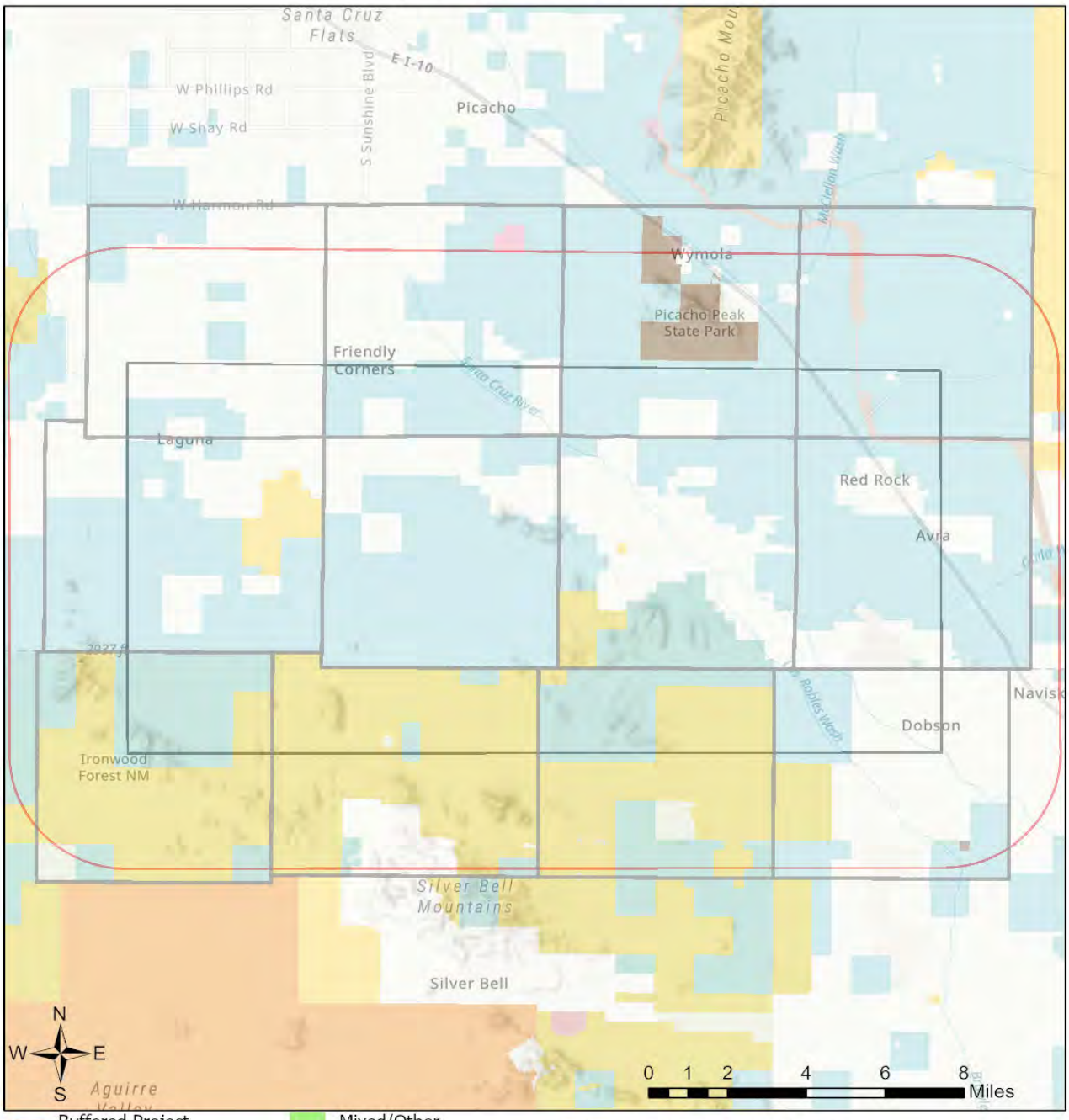
Township/Range(s): T10S, R10E; T10S, R7E; T10S, R8E +

USGS Quad(s): FRIENDLY CORNERS; GAP TANK +

Esri, NASA, NGA, USGS
CONANP, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

La Osa Comp Plan

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 132,903.74

Lat/Long (DD): 32.5421 / -111.4776

County(s): Pima; Pinal

AGFD Region(s): Tucson

Township/Range(s): T10S, R10E; T10S, R7E; T10S, R8E +

USGS Quad(s): FRIENDLY CORNERS; GAP TANK +

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Abutilon parishii	Pima Indian Mallow	SC	S	S	SR	
Agelaius phoeniceus	Red-winged Blackbird					2
Aphelocoma woodhouseii	Woodhouse's Scrub-Jay					2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Auriparus flaviceps	Verdin					2
Bat Colony						
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calamospiza melanocorys	Lark Bunting					2
Calypte costae	Costa's Hummingbird					2
Camptostoma imberbe	Northern Beardless-Tyrannulet		S			2
Campylorhynchus brunneicapillus	Cactus Wren					2
Cardinalis sinuatus	Pyrrhuloxia					2
Catharus guttatus	Hermit Thrush					2
Catharus ustulatus	Swainson's Thrush					2
Charadrius vociferus	Killdeer					2
Chilomeniscus cinctus	Banded Sandsnake					2
Circus hudsonius	Northern Harrier					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Coluber bilineatus	Sonoran Whipsnake					2
Columbina inca	Inca Dove					2
Contopus cooperi	Olive-sided Flycatcher					2
Contopus sordidulus	Western Wood-Pewee					2
Corvus cryptoleucus	Chihuahuan Raven					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Crotalus tigris	Tiger Rattlesnake					2
Crotaphytus nebrius	Sonoran Collared Lizard					2
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Danaus plexippus	Monarch	C, PT		S		
Dendrocygna autumnalis	Black-bellied Whistling-Duck					2
Echinocactus horizonthalonius var. nicholii	Nichol Turk's Head Cactus	LE		S	HS	
Echinocereus fasciculatus	Magenta-flower Hedgehog-cactus				SR	
Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		S		1
Empidonax wrightii	Gray Flycatcher					2
Eremophila alpestris	Horned Lark					2
Euphagus cyanocephalus	Brewer's Blackbird					2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Falco sparverius	American Kestrel					2
Geothlypis tolmiei	MacGillivray's Warbler					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Heloderma suspectum	Gila Monster					1
Icterus bullockii	Bullock's Oriole					2
Icterus cucullatus	Hooded Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Leptonycteris yerbabuenae	Lesser Long-nosed Bat			S		1
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC		S		1
Lepus alleni	Antelope Jackrabbit					2
Macrotus californicus	California Leaf-nosed Bat			S		2
Macrotus californicus	California Leaf-nosed Bat	SC		S		2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Melozone aberti	Abert's Towhee		S			2
Melozone fusca	Canyon Towhee					2
Micruroides euryxanthus	Sonoran Coralsnake					2
Myotis velifer	Cave Myotis			S		2
Myotis velifer	Cave Myotis	SC		S		2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Opuntia versicolor	Stag-horn Cholla				SR	
Oreoscoptes montanus	Sage Thrasher					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus amplus	Arizona Pocket Mouse					2
Peucaea carpalis	Rufous-winged Sparrow					2
Phrynosoma solare	Regal Horned Lizard					2
Phyllorhynchus browni	Saddled Leaf-nosed Snake					2
Pooecetes gramineus	Vesper Sparrow					2
Selasphorus platycercus	Broad-tailed Hummingbird					2
Setophaga nigrescens	Black-throated Gray Warbler					2
Sonorella simmonsi	Picacho Talussnail					2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2
Tumamoca macdougalii	Tumamoc Globeberry	SC	S	S	SR	
Vauquelinia californica ssp. sonorensis	Arizona Sonoran Rosewood			S		

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Blanco Wash	Pima County Wildlife Movement Area - Riparian/Wash					
Brawley Wash	Pima County Wildlife Movement Area - Riparian/Wash					
CAP Canal	Pima County Wildlife Crossing Area					
Coyote - Ironwood - Tucson Linkage Design	Wildlife Connectivity					
Greene Wash and Reservoir	Pinal County Wildlife Movement Area - Riparian/Wash					
Ironwood - Picacho Linkage Design	Wildlife Connectivity					
Ironwood National Monument	Conservation Opportunity Area					
Picacho Peak - Silverbell Mountains - Sawtooth Mountains	Pima County Wildlife Movement Area - Landscape					
Picacho Peak - Silverbell Mountains - Sawtooth Mountains	Pinal County Wildlife Movement Area - Landscape					
Riparian Area	Riparian Area					
Santa Cruz River	Pima County Wildlife Movement Area - Riparian/Wash					
Silver Bell/Waterman Mountains/Samaniego Hills Wildland Block	Pima County Wildlife Movement Area - Diffuse					
Tortolita Mountains - Picacho Peak	Pinal County Wildlife Movement Area - Landscape					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Ammodramus savannarum perpallidus	Western Grasshopper Sparrow					2
Ammospermophilus harrisii	Harris' Antelope Squirrel					2
Anaxyrus retiformis	Sonoran Green Toad			S		2
Anthus spragueii	Sprague's Pipit					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3
Asio otus	Long-eared Owl					2
Aspidoscelis sonorae	Sonoran Spotted Whiptail					2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aspidoscelis xanthonotus	Red-backed Whiptail		S			2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Auriparus flaviceps	Verdin					2
Botaurus lentiginosus	American Bittern					2
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Charadrius montanus	Mountain Plover					2
Chilomeniscus cinctus	Variable Sandsnake					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Colaptes chrysoides	Gilded Flicker			S		2
Coluber bilineatus	Sonoran Whipsnake					2
Columbina inca	Inca Dove					2
Corvus cryptoleucus	Chihuahuan Raven					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Crotalus tigris	Tiger Rattlesnake					2
Crotaphytus nebrius	Sonoran Collared Lizard					2
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Dendrocygna autumnalis	Black-bellied Whistling-Duck					2
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat			S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gastrophryne mazatlanensis	Sinoloan Narrow-mouthed Toad			S		2
Glaucidium brasilianum cactorum	Cactus Ferruginous Pygmy-owl	LT	S	S		1
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Heloderma suspectum	Gila Monster					1
Icterus bullockii	Bullock's Oriole					2
Icterus cucullatus	Hooded Oriole					2
Icterus parisorum	Scott's Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		2

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Lasiurus frantzii	Desert Red Bat		S			2
Lasiurus xanthinus	Western Yellow Bat		S			2
Leptonycteris yerbabuenae	Lesser Long-nosed Bat			S		1
Lepus alleni	Antelope Jackrabbit					2
Lichanura trivirgata	Three-Lined Boa					2
Macrotus californicus	California Leaf-nosed Bat			S		2
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Melozone aberti	Abert's Towhee		S			2
Micrathene whitneyi	Elf Owl					3
Micruroides euryxanthus	Sonoran Coralsnake					2
Myadestes townsendi	Townsend's Solitaire					2
Myotis velifer	Cave Myotis			S		2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Nyctinomops macrotis	Big Free-tailed Bat					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus amplus	Arizona Pocket Mouse					2
Peucaea carpalis	Rufous-winged Sparrow					2
Phrynosoma solare	Regal Horned Lizard					2
Phyllorhynchus browni	Saddled Leaf-nosed Snake					2
Pooecetes gramineus	Vesper Sparrow					2
Progne subis hesperia	Desert Purple Martin			S		2
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Sonorella simmonsi	Picacho Talussnail					2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2
Toxostoma lecontei	LeConte's Thrasher			S		2

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Odocoileus hemionus	Mule Deer					
Ovis canadensis mexicana	Mexicana Desert Bighorn Sheep					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Development Within Municipalities (Urban Growth), Commercial/industrial (mall) and associated infrastructure, New construction or expansion

Project Type Recommendations:
Evaluate potential impacts to wildlife and fish species due to changes in access to water, water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods). Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing the project to minimize impacts to spawning fish and other aquatic species. Wash, drain, and dry equipment to reduce the spread of exotic invasive species. AZGFD recommends early coordination with the Project Evaluation Program (PEP@azgfd.gov) for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

Project Location and/or Species Recommendations:
Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat linkage corridor***. The **Arizona Missing Linkages** represent ideal connections within or between intact blocks or core habitats. The blocks are currently disconnected or isolated and the linkages should be examined for improving permeability, or are currently intact and in need of preservation and/or enhancement. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/. Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44

Analysis indicates that your project is located in the vicinity of an identified **Conservation Opportunity Area (COA)**. While there are many areas in Arizona that present abundant conservation opportunities, COAs are specific areas on the landscape that the Department identified as having the greatest potential for conservation efforts. COAs were identified using species and habitat data, the presence of unique landscape features, and Departmental expertise. COAs range in size, scope, and focal species and/or habitats and are strictly a non-regulatory conservation tool for the public and our conservation partners to consider. For more information regarding this particular COA near your project area and the Department's suggestions for potential conservation efforts, please visit the COA profile at https://awcs.azgfd.com/conservation-opportunity-areas.

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-identifying-corridors/.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **Detailed Wildlife Connectivity Assessments** represent ideal connections within or between intact blocks or core habitats. The blocks are currently disconnected or isolated and the linkages should be examined for improving permeability, or are currently intact and in need of preservation and/or enhancement. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

HDMS records indicate that **Lesser Long-nosed Bats** have been documented within the vicinity of your project area. Please review the Lesser Long-nosed Bat Management Guidelines at: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FINALlecuyeHabitatGdln.pdf

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

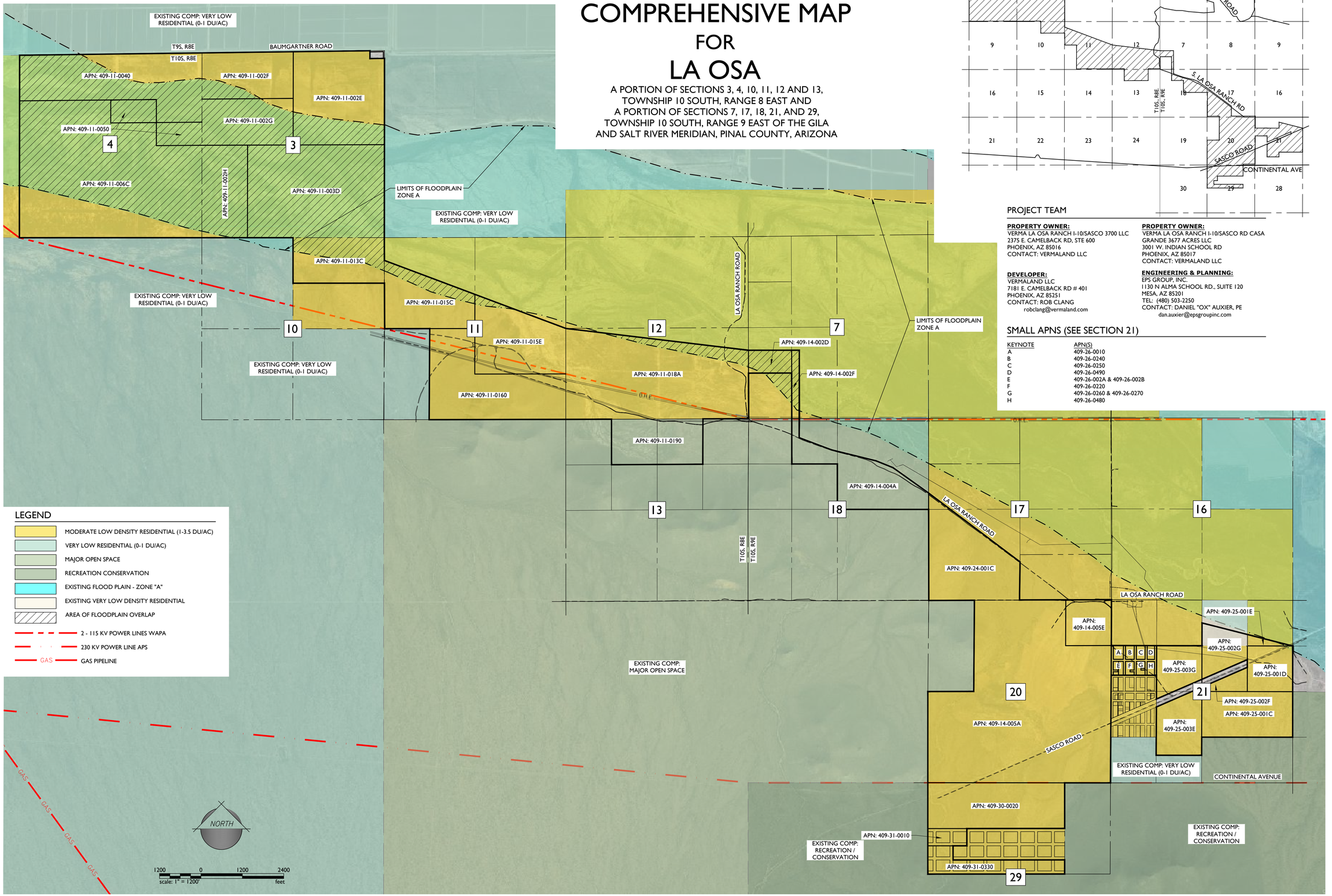
This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies *6.1.2.1* and *7.1.2.4*), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/. Further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Sonoran Desert Tortoise** have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2014%20Tortoise%20handling%20guidelines.pdf.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at https://www.azgfd.com/wildlife-conservation/conservation-and-endangered-species-programs/burrowing-owl-management/.

EXISTING COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA



LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- EXISTING VERY LOW DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN OVERLAP
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS — GAS PIPELINE

VICINITY MAP

PROJECT TEAM

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E. CAMELBACK RD, STE 600
PHOENIX, AZ 85016
CONTACT: VERMALAND LLC

PROPERTY OWNER:
VERMA LA OSA RANCH I-10/SASCO RD CASA GRANDE 3677 ACRES LLC
3001 W. INDIAN SCHOOL RD
PHOENIX, AZ 85017
CONTACT: VERMALAND LLC

DEVELOPER:
VERMALAND LLC
7181 E. CAMELBACK RD # 401
PHOENIX, AZ 85251
CONTACT: ROB CLANG
robclang@vermaland.com

ENGINEERING & PLANNING:
EPS GROUP, INC.
1130 N ALMA SCHOOL RD., SUITE 120
MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
A	409-26-0010
B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com
EPS GROUP

Project:
La Osa
Pinal County, Arizona

Existing Cmprehensive Map

Revisions:
SEPTEMBER 17, 2024 - 1ST SUBMITTAL

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Designer: STAFF
Drawn by: STAFF

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Construction
Or
Recording

Job No.
24-0542

EXCP

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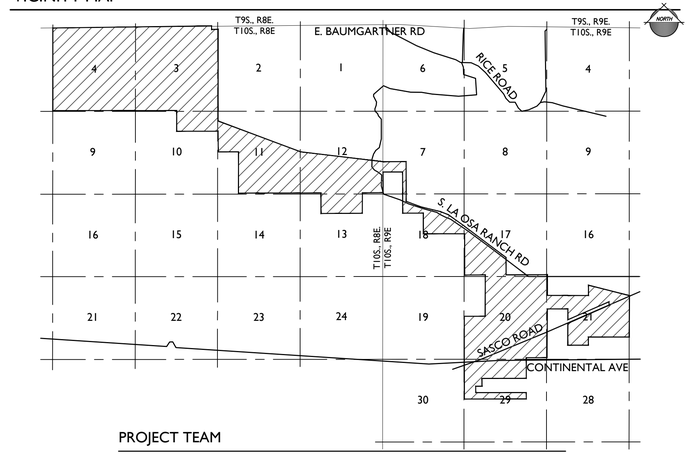
jjuarez

PROPOSED COMPREHENSIVE MAP
FOR
LA OSA

A PORTION OF SECTIONS 3, 4, 10, 11, 12 AND 13,
TOWNSHIP 10 SOUTH, RANGE 8 EAST AND
A PORTION OF SECTIONS 7, 17, 18, 21, AND 29,
TOWNSHIP 10 SOUTH, RANGE 9 EAST OF THE GILA
AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA

VICINITY MAP



EXISTING COMP: VERY LOW RESIDENTIAL (0-1 DU/AC)

T9S, R8E
T10S, R8E

BAUMGARTNER ROAD

APN: 409-11-0040
APN: 409-11-002F
APN: 409-11-002E
APN: 409-11-002G
APN: 409-11-0050
APN: 409-11-006C
APN: 409-11-002H
APN: 409-11-003D
APN: 409-11-013C
APN: 409-11-015C
APN: 409-11-015E
APN: 409-11-0160
APN: 409-11-018A
APN: 409-11-0190
APN: 409-14-002D
APN: 409-14-002F
APN: 409-14-004A
APN: 409-24-001C
APN: 409-14-005E
APN: 409-14-005A
APN: 409-25-001E
APN: 409-25-002G
APN: 409-25-003G
APN: 409-25-001D
APN: 409-25-002F
APN: 409-25-001C
APN: 409-25-003E
APN: 409-30-0020
APN: 409-31-0010
APN: 409-31-0330

3 4 10 11 12 7 13 18 17 16 20 21 29

LIMITS OF FLOODPLAIN ZONE A

EXISTING COMP: VERY LOW RESIDENTIAL (0-1 DU/AC)

EXISTING COMP: VERY LOW RESIDENTIAL (0-1 DU/AC)

EXISTING COMP: VERY LOW RESIDENTIAL (0-1 DU/AC)

EXISTING COMP: MAJOR OPEN SPACE

EXISTING COMP: RECREATION / CONSERVATION

EXISTING COMP: RECREATION / CONSERVATION

LA OSA RANCH ROAD

LA OSA RANCH ROAD

LA OSA RANCH ROAD

SASCO ROAD

CONTINENTAL AVENUE

T10S, R8E
T10S, R9E

A B C D E F G H

GAS

GAS

GAS

GAS

LEGEND

- MODERATE LOW DENSITY RESIDENTIAL (1-3.5 DU/AC)
- VERY LOW RESIDENTIAL (0-1 DU/AC)
- MAJOR OPEN SPACE
- RECREATION CONSERVATION
- EXISTING FLOOD PLAIN - ZONE "A"
- EXISTING VERY LOW DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN OVERLAP
- GENERAL PUBLIC FACILITIES / SERVICES
- EMPLOYMENT
- 2 - 115 KV POWER LINES WAPA
- 230 KV POWER LINE APS
- GAS PIPELINE

NORTH

1200 0 1200 2400
scale: 1" = 1200' feet

PROJECT TEAM

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CONTACT: VERMALAND LLC

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CONTACT: VERMALAND LLC

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MESA, AZ 85201
TEL: (480) 503-2250
CONTACT: DANIEL "OX" AUXIER, PE
dan.auxier@epsgroupinc.com

SMALL APNS (SEE SECTION 21)

KEYNOTE	APN(S)
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B	409-26-0240
C	409-26-0250
D	409-26-0490
E	409-26-002A & 409-26-002B
F	409-26-0220
G	409-26-0260 & 409-26-0270
H	409-26-0480

1130 N Alma School Road
Suite 120
Mesa, AZ 85201
T:480.503.2250 | F:480.503.2258
www.epsgroupinc.com
EPS GROUP

Project:
La Osa
Pinal County, Arizona

Proposed Comprehensive Map

Revisions:
MAY 29, 2025 - 1ST SUBMITTAL

Call at least two full working days before you begin excavation.
ARIZONA811
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Designer: STAFF
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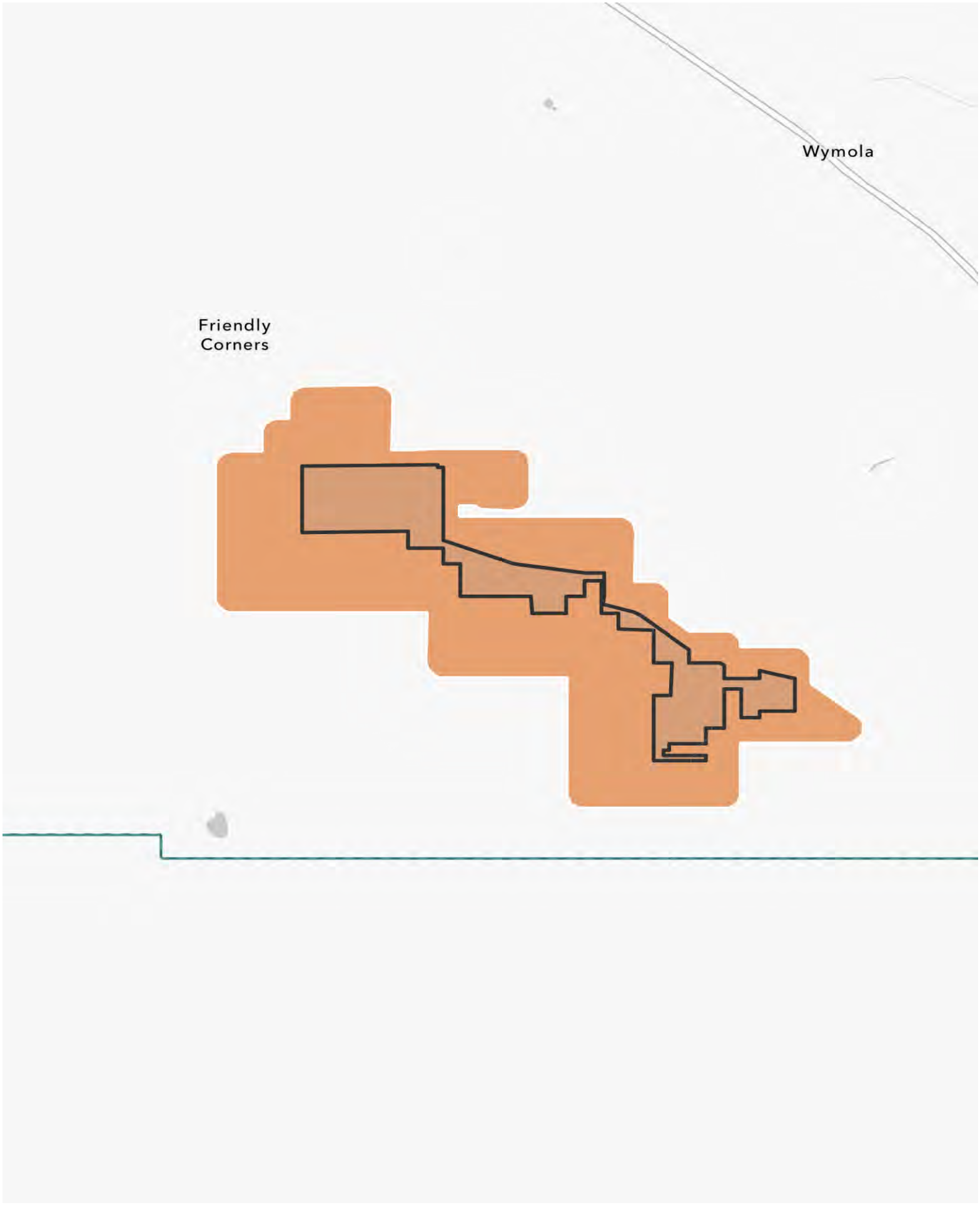
La Osa - 1,200' Buffer Map



VERMA LA OSA RANCH 1-10/SASCO
3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX, AZ 85016-6349

CHAVEZ TOMAS
12849 N OAKHURST LOOP
ORO VALLEY, AZ 85755-5000

VENNE CHRISTOPHER
1132 S ALTAMONT BLVD
SPOKANE, WA 99202-9920

WILT JANELLE C
3035 S SHIELA AVE
TUCSON, AZ 85735-8573

MAHLE ERNEST E
PO BOX 21239
WICKENBURG, AZ 85358-8535

MAYNEZ M ANTONIO VISENTE
4209 HAMPSHIRE LN
EL PASO, TX 79902-2133

HAASCO MEDIA LLC
8200 CANNON CT
LAGO VISTA, TX 78645-5481

PIONTKOWSKI KRISTIE C
2065 E CIRCLE RIDGE DR
SAINT GEORGE, UT 84790-8479

HAASCO MEDIA LLC
15715 WHITEWATER LN
HOUSTON, TX 77079-9254

OLMSTEAD PAUL (EST OF)
2865 E NANCE ST
MESA, AZ 85213-3164

BRIGGS JAMES E JR
5901 E MIRAMAR DR
TUCSON, AZ 85715-5300

AMARAL JOSEPH & JOAN
11670 TIMBERLAKE DR
SAN DIEGO, CA 92131-9213

WADINA GILBERT S & JUDY
3146 CHARLES MACDONALD DR
SARASOTA, FL 34240-0871

WHITE RONELLA T
PO BOX 1126
RED ROCK, AZ 85145-5100

JAMES LAURENCE P
917 N COLLEGE AVE
CLAREMONT, CA 91711-1392

STATE OF ARIZONA
1616 W ADAMS ST
PHOENIX, AZ 85007-7261

666ISMONEY LC
PO BOX 666
TUCSON, AZ 85702-2066

BROWN CAROL
2114 W GRANT RD 42
TUCSON, AZ 85745-8574

BROWN HARLEY
2114 W GRANT RD 42
TUCSON, AZ 85745-8574

ARIZONA BOARD OF REGENTS
PO BOX 210186
TUCSON, AZ 85721-1018

SASCO CEMETERY LLC
PO BOX 1009
RED ROCK, AZ 85145-5100

WOEHLECKE KARL A
PO BOX 1009
RED ROCK, AZ 85145-5100

WOEHLECKE KARL A & LISA F
PO BOX 1009
RED ROCK, AZ 85145-5100

CADMAN TONI
540 S OTIS ST
LAKEWOOD, CO 80226-6344

BENEDETTO ANTHONY & ERNESTINE
FAMILY TR
PO BOX 1027
RED ROCK, AZ 85145-5100

BENEDETTO ANTHONY
PO BOX 1027
RED ROCK, AZ 85145-5100

D&S LAND & CATTLE LLC
14901 N AGUIRRE RD
MARANA, AZ 85653-3910

ABA LLC
7240 N DREAMY DRAW DR UNIT 110
PHOENIX, AZ 85020-0526

SKYBRIDGE LENDING LLC
3412 N 62ND ST
SCOTTSDALE, AZ 85251-1543

ENGLAND DON A JR
1789 E HATFIELD RD
CASA GRANDE, AZ 85193-3961

NAP
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409310290
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310100
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409117020
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409310270
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

USA409004
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409310260
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310160
VENNE CHRISTOPHER
1132 S ALTAMONT BLVD
SPOKANE , WA 99202-9920

409147080
, -

409310230
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310200
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409147070
, -

409310240
CHAVEZ TOMAS
12849 N OAKHURST LOOP
ORO VALLEY , AZ 85755-5000

409310020
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310310
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310250
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310030
VARNEY & POTTER
MAIL RETURN
, -

409310320
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310060
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310040
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310330
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310050
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310070
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310300
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310120
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310080
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310280
VARNEY & POTTER
MAIL RETURN
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409310110
LA OSA LIVESTOCK COMPANY
MAIL RETURN
, -

409310130
LA OSA LIVESTOCK CO
MAIL RETURN
, -

409310140
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310150
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310170
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310180
KELLY JAMES P
MAIL RETURN
, -

409310190
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409310210
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
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PHOENIX , AZ 85016-6349

409310220
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409310010
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409307000
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409290190
WILT JANELLE C
3035 S SHIELA AVE
TUCSON , AZ 85735-8573

40929018B
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929018A
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929017B
MAHLE ERNEST E
PO BOX 21239
WICKENBURG , AZ 85358-8535

40929017C
MAYNEZ M ANTONIO VISENTE
4209 HAMPSHIRE LN
EL PASO , TX 79902-2133

40929017A
HAASCO MEDIA LLC
8200 CANNON CT
LAGO VISTA , TX 78645-5481

40929011A
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929011B
SPINDLER REGINALD A
MAIL RETURN
, -

409290120
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290130
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290140
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2065 E CIRCLE RIDGE DR
SAINT GEORGE , UT 84790-8479

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HAASCO MEDIA LLC
15715 WHITEWATER LN
HOUSTON , TX 77079-9254

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2375 E CAMELBACK RD STE 600
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409290100
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290090
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290070
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929001A
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40929002B
OLMSTEAD PAUL (EST OF)
2865 E NANCE ST
MESA , AZ 85213-3164

40929002A
BRIGGS JAMES E JR
5901 E MIRAMAR DR
TUCSON , AZ 85715-5300

40929001B
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SAN DIEGO , CA 92131-9213

409290030
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
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PHOENIX , AZ 85016-6349

409290040
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409290050
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
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409290060
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409300020
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409300010
WADINA GILBERT S & JUDY
3146 CHARLES MACDONALD DR
SARASOTA , FL 34240-0871

409140140
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40925003C
JAMES LAURENCE P
917 N COLLEGE AVE
CLAREMONT , CA 91711-1392

409257000
, -

409260150
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40926014B
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409270040
WHITE RONELLA T
MAIL RETURN
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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409260130
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40926014A
STATE OF ARIZONA
1616 W ADAMS ST
PHOENIX , AZ 85007-7261

409260160
KETOLA MARGARET H TR
MAIL RETURN
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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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, -

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HAASCO MEDIA LLC
8200 CANNON CT
LAGO VISTA , TX 78645-5481

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, -

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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LA OSA LIVESTOCK CO
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COUNTRY STORE GALLERY INC
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2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
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40925003E
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40926004B
666ISMONEY LC
PO BOX 666
TUCSON , AZ 85702-2066

40926004F
BROWN CAROL
2114 W GRANT RD 42
TUCSON , AZ 85745-8574

409260050
LA OSA LIVESTOCK CO
MAIL RETURN
, -

40926004E
BROWN HARLEY
2114 W GRANT RD 42
TUCSON , AZ 85745-8574

40927003B
WHITE RONELLA T
MAIL RETURN
, -

40926004D
ARIZONA BOARD OF REGENTS
PO BOX 210186
TUCSON , AZ 85721-1018

40926004G
HARRIS MURREL (EST OF)
MAIL RETURN
, -

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VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
MAIL RETURN
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40926021A
HAASCO MEDIA LLC
15715 WHITEWATER LN
HOUSTON , TX 77079-9254

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VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
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40926028A
HAASCO MEDIA LLC
15715 WHITEWATER LN
HOUSTON , TX 77079-9254

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VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
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MAIL RETURN
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40914005C
SASCO CEMETERY LLC
PO BOX 1009
RED ROCK , AZ 85145-5100

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409250040
WOEHLECKE KARL A
PO BOX 1009
RED ROCK , AZ 85145-5100

40925002D
WOEHLECKE KARL A & LISA F
PO BOX 1009
RED ROCK , AZ 85145-5100

40925002B
CADMAN TONI
540 S OTIS ST
LAKEWOOD , CO 80226-6344

409270020
WHITE RONELLA T
12010 E RICE RD
RED ROCK , AZ 85145-8514

40927003A
WHITE RONELLA T
MAIL RETURN
, -

409240050
BENEDETTO ANTHONY & ERNESTINE FAMILY TR
PO BOX 1027
RED ROCK , AZ 85145-5100

409240040
BENEDETTO ANTHONY
PO BOX 1027
RED ROCK , AZ 85145-5100

409240030
BENEDETTO ANTHONY & ERNESTINE FAMILY TR
PO BOX 1027
RED ROCK , AZ 85145-5100

409240020
BENEDETTO ANTHONY
PO BOX 1027
RED ROCK , AZ 85145-5100

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WOEHLECKE KARL A
PO BOX 1009
RED ROCK , AZ 85145-5100

40923005C
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

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WHITE RONELLA T
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D&S LAND & CATTLE LLC
14901 N AGUIRRE RD
MARANA , AZ 85653-3910

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SKYBRIDGE LENDING LLC
MAIL RETURN
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VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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WHITE RONELLA T
MAIL RETURN
, -

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ABA LLC
7240 N DREAMY DRAW DR UNIT 110
PHOENIX , AZ 85020-0526

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SKYBRIDGE LENDING LLC
3412 N 62ND ST
SCOTTSDALE , AZ 85251-1543

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VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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PHOENIX , AZ 85016-6349

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PO BOX 1126
RED ROCK , AZ 85145-5100

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PO BOX 1126
RED ROCK , AZ 85145-5100

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WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

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VERMA LA OSA RANCH I-10/SASCO CASA GRANDE 3677 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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PO BOX 1126
RED ROCK , AZ 85145-5100

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WHITE RONELLA T
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2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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40917001A
ENGLAND DON A JR
1789 E HATFIELD RD
CASA GRANDE , AZ 85193-3961

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911002G
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

409410010
JVERMA PINAL 156 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911002E
VERMA LA OSA RANCH 1-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911001B
GOBEA FRANK
6229 E BAUMGARTNER RD
ELOY , AZ 85131-1954

409117000
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409127000
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411327140
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411327130
, -

41132021B
DONLEY FAM TRUST
10475 W QUARTZ DR
CASA GRANDE , AZ 85193-3914

41132931E
, -

41132831D
ARIZONA ORGANIC BEANS LLLP
PO BOX 68437
TUCSON , AZ 85737-7843

41132831C
, -

411320220
PECAN CREEK RANCH FARM LLC
1955 S LINDSAY RD
GILBERT , AZ 85295-5472

41132831B
, -

40913002C
WAGNER LOUIS EDWARD AND MARY JANE CO-TRS
101 RAINBOW DR # 4548
LIVINGSTON , TX 77399-9930

40913002D
WAGNER LOUIS EDWARD AND MARY JANE CO-TRS
101 RAINBOW DR 4548
LIVINGSTON , TX 77399-9104

41132021D
CENTRAL ARIZONA IRRIGATION & DRAINAGE DISTRICT
231 S SUNSHINE BLVD
ELOY , AZ 85131-1245

41132021C
DONLEY FAMILY TRUST
10475 W QUARTZ DR
CASA GRANDE , AZ 85193-3914

40925002F
VERMA LA OSA RANCH I-10/SASCO 3700 LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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VERMA LA OSA RANCH 1-10/SASCO RD CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

40911015D
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40911015E
VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
3301 W INDIAN SCHOOL RD
PHOENIX , AZ 85017-7385

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WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

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VERMA LA OSA RANCH 1-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

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VERMA LA OSA RANCH 1-10/SASCO RD; CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

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VERMA LA OSA RANCH I-10/SASCO RD, CASA GRANDE 3677 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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PO BOX 1126
RED ROCK , AZ 85145-5100

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2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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RED ROCK , AZ 85145-5100

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2375 E CAMELBACK RD STE 600
PHOENIX , AZ 85016-6349

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WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

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MAIL RETURN
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PO BOX 1126
RED ROCK , AZ 85145-5100

40925002H
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

40925002J
WHITE RONELLA T
PO BOX 1126
RED ROCK , AZ 85145-5100

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PO BOX 1126
RED ROCK , AZ 85145-5100

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PO BOX 1126
RED ROCK , AZ 85145-5100

40925003G
VERMA LA OSA RANCH 1-10; CASA GRANDE 3677 ACRES LLC
MAIL RETURN
, -

JVERMA PINAL 156 ACRES LLC
2375 E CAMELBACK RD STE 600
PHOENIX, AZ 85016-6349

VERMA LA OSA RANCH 1-10/
2375 E CAMELBACK RD STE 600
PHOENIX, AZ 85016-6349

GOBEA FRANK
6229 E BAUMGARTNER RD
ELOY, AZ 85131-1954

DONLEY FAM TRUST
10475 W QUARTZ DR
CASA GRANDE, AZ 85193-3914

ARIZONA ORGANIC BEANS LLLP
PO BOX 68437
TUCSON, AZ 85737-7843

PECAN CREEK RANCH FARM LLC
1955 S LINDSAY RD
GILBERT, AZ 85295-5472

WAGNER LOUIS EDWARD AND MARY JANE CO-TRS
101 RAINBOW DR 4548
LIVINGSTON, TX 77399-9104

CENTRAL ARIZONA IRRIGATION & DRAINAGE DISTRICT
231 S SUNSHINE BLVD
ELOY, AZ 85131-1245

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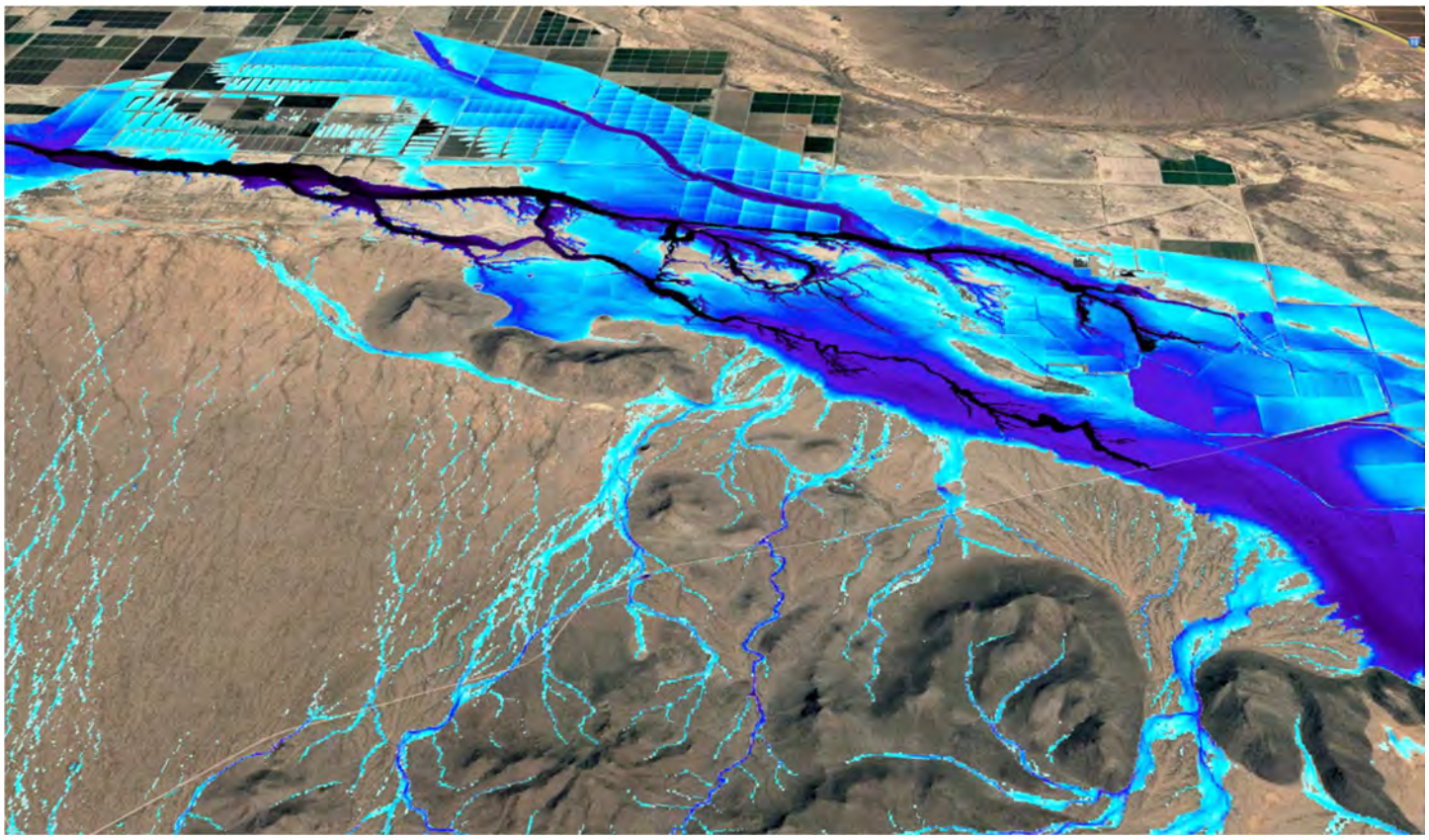
3301 W INDIAN SCHOOL RD
PHOENIX, AZ 85017-7385



PRELIMINARY HYDROLOGY STUDY

Pinal Solar Project

Pinal County, Arizona

JULY 11, 2023

PREPARED FOR:

STELLAR
RENEWABLE POWER

PREPARED BY:

Westwood

Westwood

Preliminary Hydrology Study

Pinal Solar Project

Pinal County, Arizona

Prepared For:

Stellar Renewable Power

Prepared By:

Westwood
12701 Whitewater Drive, Suite 300
Minnetonka, MN 55343
(952) 937-5150

Project Number: R0044731.00
Date: July 11, 2023

Westwood

Table of Contents

Tables

Exhibits

Appendices

Executive Summary

The purpose of this study is to analyze and review the existing hydrology of the Pinal Solar Project (Project or Site) and any impacts that the hydrology may play in the design of the proposed solar array. This report was prepared to be used by the Project Team in the design and layout of the Project and not intended for submittal to reviewing agencies for stormwater permitting.

The Project Site is proposed on approximately 3,100 acres and is located within Pinal County, Arizona, approximately 10 miles west of Red Rock, Arizona. The majority of the Site is located on land that generally slopes to the northwest. However, the center and southeast portions of the Site are located on hillsides with steep slopes that generally slope north and northeast. The modeled watershed area encompasses approximately 155 square miles and generally drains towards the northwest.

The analysis shows varying water depths and velocities across the majority of the Site (Exhibits 6 through 7A). Higher flood depths exist within the Greene Canal and its surrounding areas located in the northern portion of the Site. Higher flood depths are also found along the Los Robles Wash which flows adjacent to the Site, and through portions of the east side of the Site. High velocities and scour are found in the northern and central portions of the Site, and along the eastern portion of the Site within the Greene Canal, Los Robles Wash, and their adjoining tributaries.

Based on experience with similar projects, portions of the Site are suitable for the planned development by avoiding or designing to areas of high flood depths.

1.0 Data Sources

Table 1 – Data Sources

Task	Format	Source	Use
Elevation	1-meter Tiff 1-meter Lidar	The National Map The National Map	FLO-2D Model Elevations
Crop Data	Shapefile	USDA 2021 Cropland Data Layer	Landcover
Soils	Shapefile	USGS SSURGO Dataset	Curve Numbers
Precipitation	PDF File	NOAA Atlas 14	Design Storms
HUC-12 Drainage Boundary	Shapefile	USGS	Define Model Extents
Site Boundary	Layout AZ Pinal County 221.25 MWp0.34_GCR.kml	Stellar Renewable Power	Define Model Extents
2014 Aerial Photography	ArcGIS Map Service	USDA FSA	Reference
FEMA Flood Zones	PDF; Shapefile	FEMA	Reference

2.0 Coordinate System

Table 2 – Coordinate System Used

Projection	State Plane Coordinate System
Zone	Arizona Central (FIPS 202)
Datum	NAD83
Planar Units	Feet (International)

3.0 Existing Conditions

3.1 Project Location

The Project Site covers approximately 3,100 acres and is located within Pinal County, Arizona (Exhibit 1). The Project Site is located approximately 35 miles northwest of Tucson, Arizona, and is located near Red Rock, Arizona. Red Rock is located 10 miles east of the Project Area (Exhibit 1).

3.2 Watershed Hydrology

The modeled watershed area encompasses approximately 155 square miles that generally drains to the northwest. However, in the southwest section of the modeled watershed, an alluvial fan causes water to drain to the north and northeast. In the southeast section of the modeled watershed, the Santa Cruz River flows northwest. North of the project boundary, the Santa Cruz River branches off to form the Greene Canal, which flows through the northern portion of the Site and exits the modeled watershed in the northwest. Also in the southeast section of the watershed, Blanco Wash flows to the north and connects to the Los Robles Wash which then flows northwest into the eastern portion of the Site. In the northern section of the Site, the Los Robles Wash and Greene Canal combine and flow northwest to exit the modeled watershed.

3.3 Onsite Conditions

The majority of the Project is located on the Greene Canal HUC-12 Boundary, with the exception of the northeastern most section of the Site, which is located on the Silver Bell Wash HUC-12 Boundary. The Site generally drains to the north and northwest toward the Greene Canal, with the exception of the central portion of the Site which is located on a steep hill and drains north and northeast. In general, the Site has slopes of less than 3%, although the southernmost portion of the Site can reach slopes greater than 10%, and on the hilltop in the central portion of the Site, slopes can exceed 30%.

US Fish and Wildlife Service National Wetlands Inventory (NWI Wetlands) provides information on the distribution of US wetlands and are shown in Exhibit 2. The NWI Wetlands dataset is not all-inclusive and other wetlands not shown may exist. The landcover on the Project area is primarily shrubland (Exhibit 4) and has soils that are primarily belonging to Hydrologic Soil Group (HSG) C (Exhibit 3). Typically, C soils are Clay Loams. Soils belonging to Hydrologic Soil Group C exhibit low infiltration rates; therefore, standing water will be slow to infiltrate during and after storm events when compared to soils belonging to Hydrologic Soil Groups A or B.

The main potential hydrologic issues on Site are flooding and erosive velocities.

3.4 FEMA Flood Zones

FEMA has completed a study to determine flood hazards for the selected location; the project area is covered by FIRM panels 04021C2375E and 04021C2350E (Appendix C). The Project contains areas of FEMA Zone A flood hazards (Exhibits 2 and 6). The FEMA Zone A covers the majority of the northern portion of the Site and cuts through the entirety of the northeast side of the Site. A FEMA Zone A flood hazard is a 100-year flood hazard with no defined base flood elevation. No preliminary or pending FEMA changes are proposed within the project area.

4.0 Proposed Conditions

4.1 Proposed Conditions

The majority of the proposed solar facility will consist of above ground mounted solar modules. A small amount of impervious surface will be added from the gravel access roads and electrical equipment pads. The Project should be designed to minimize grading and maintain existing drainage patterns. A flood analysis of pre-development and post development depths may need to be completed once civil design is finalized for permitting purposes.

4.2 Post-Construction Stormwater Management

A desktop review of Pinal County Stormwater Management and Drainage Requirements did not reveal any solar-specific regional or county requirements. The Project therefore should comply with all state stormwater management requirements, as applicable. As the Project design progresses, local stormwater management requirements should be reviewed to confirm that all applicable requirements have been identified and met.

5.0 FLO-2D Modeling

5.1 FLO-2D Modeling Overview

FLO-2D is a physical process model that routes rainfall runoff and flood hydrographs over flow surfaces or in channels using the dynamic wave approximation to the momentum equation. FLO-2D offers advantages over 1-D models and unit hydrograph methods by allowing for breakout flows and visualization of flows across a potential site. The primary inputs are a DTM (elevation data), curve numbers, and precipitation.

A FLO-2D model with 50-foot grid cells was utilized to model the watershed within and directly impacting the Project Site.

5.2 Elevation Data

The elevation data input into the FLO-2D model was a blend of 1m Tiff data from The National Map and 1m Lidar data from The National Map (Exhibit 5). The 1m Tiff data was used for topographic coverage of the 50,000 acres, and the 1m Lidar data was used for topographic coverage of the 49,000 acres (Exhibit 5). This data was exported as a single digital terrain model (DTM), which is read directly into FLO-2D.

5.3 Watershed Soils and Land Cover

USDA-NRCS SSURGO soil data provides soil types within the Project boundary and full coverage of the contributing watershed. Soils are primarily classified as Hydrologic Soil Group (HSG) C within the Project boundary (Exhibit 3). Land cover was obtained from the USDA 2021 Cropland Data Layer. Exhibit 4 displays the land cover classes for the entire watershed. Curve numbers were applied to each grid cell in the FLO-2D model based on intersecting the grid with the curve numbers (Exhibit 5).

5.4 Precipitation

Precipitation data was downloaded from NOAA Atlas 14 (Appendix A) and used for the FLO-2D analysis for the 100-year, 24-hour storm event. Using the 100-year rainfall depth of 3.84 inches for this location allows for the best initial analysis in order to determine the worst areas of flooding and erosion during the storm event. Rainfall inputs were distributed based on a site-specific nested Atlas 14 distribution pattern.

5.5 Inflows

Inflow 1 represents Blanco Wash which enters the modeled watershed from the southeast and flows approximately 2 miles north before joining the Los Robles Wash, which continues to the east of the Project area. Inflow 2 represents Los Robles wash which also enters the modeled watershed from the southeast. The Pima County FEMA Flood Insurance Study reports a 100-year peak flood of 35,000 cfs for the Los Robles Wash and 17,000 cfs for Blanco Wash (Appendix D). Also in the southeast of the modeled watershed, Inflow 3 represents the Santa Cruz River which flows northwest to the east of the Project area. StreamStats data reports a 100-year peak flood of 29,600 cfs for the Santa Cruz River (Appendix F). Inflow 4 was added to the southeast side of the modeled watershed, north of the Santa Cruz inflow, to model the potential effects of an alluvial fan approximately 3 miles away from the modeled watershed boundary. This additional inflow has a 100-year peak flood of 10,900 cfs according to StreamStats data (Appendix E). Inflow hydrographs were created using this data and added to the model (Exhibit 6).

6.0 Flood Analysis Results

6.1 Existing Conditions Flood Analysis

The analysis shows varying water depths and velocities across the majority of the Site (Exhibits 6 through 7A). During a 100-year storm, the flood depths across the majority of the Site are less than 0.5 feet with velocities less than 1 foot/second. However, widespread flooding occurs in the central portion of the Site where an unnamed creek flows. In this area, flood depths can exceed 4 feet and velocities can exceed 1.5 feet/second. Additionally, within and adjacent to the Greene Canal and Los Robles Wash, flood depths and velocities can exceed 10 feet and 8 feet/second, respectively. See Table 3 below for a breakdown of flood depths within the Project Site.

Table 3 – Flood Depths Onsite

Peak Flow Depth (ft)	Percentage of Project Area Covered by Peak Flow Depths
0.00 - 0.49	56.3%
0.50 - 1.00	5.1%
1.01 - 1.50	2.9%
1.51 - 2.00	3.4%
2.01 - 2.50	6.8%
2.51 - 3.00	3.7%
3.01 - 4.00	2.8%
4.01 - 6.00	3.1%
6.01+	15.9%

See Exhibits 6 through 7A for areas within the Project with higher flood depths and velocities.

6.2 Scour

Minimal scour is expected onsite, except for the northern portion and east side of the Site where scour can exceed 2 feet along the Green Canal and Los Robles Wash (Exhibit 8). Scour will also exceed 2 feet in the center portion of the Site where an unnamed tributary flows northwest into the Los Robles Wash. The scour depths calculated for this Project are based on HEC-18 Pier Scour Equations of a 6-inch-wide pile perpendicular to flow. Scour calculations consist of local scour only with unarmored soils and pile bases to provide the conservative local scour results. These scour results do not account for general, rill, or gully scour.

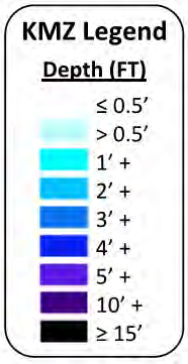
7.0 Recommendations

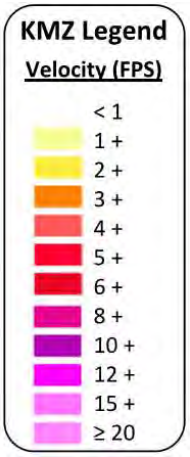
Based on experience on similar projects, portions of the Site are suitable for the planned development and hydrologic concerns can be addressed by either avoiding areas of high flood depths or through detailed engineering design.

8.0 Next Steps

1. Final engineering design should account for the flood depths and velocities presented in Exhibits 6-7A.
2. Facilities to be elevated 1' above the 100-year, 24-hour peak flood elevations.
3. Proposed facilities should avoid FEMA Flood Zones located onsite.
4. Stormwater management should be revisited to ensure the final design meets the local and state requirements.

9.0 Included Output Files





1. Shapefile of 100-Year Rain Event Flow Depth
   2023-07-11_Pinal_PrelimFlowDepthatCell.shp
   Attribute "ID" = Grid Cell Number
   Attribute "VAR" = Max Flow Depth (Feet)

2. Shapefile of 100-Year Rain Event Velocity
   2023-07-11_Pinal_PrelimVelocityatCell.shp
   Attribute "ID" = Grid Cell Number
   Attribute "VAR" = Max Velocity (Feet)

3. KMZ of FLO-2D Results
   2023-07-11_Pinal_PrelimFLO-2D.kmz
   Overlay in Google Earth for graphical representation.

10.0 References Cited

National Engineering Handbook, Part 630 Hydrology. Chapter 9 Hydrologic Soil-Cover Complexes. USDA. NRCS. 210-VI-NEH, July 2004

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FEMA Flood Insurance Rate Maps, retrieved July 2023, from https://msc.fema.gov/portal/advanceSearch#searchresultsanchor

USGS Streamstats Flow Rates, retrieved July 2023, from https://www.usgs.gov/mission-areas/water-resources/science/streamstats-streamflow-statistics-and-spatial-analysis-tools?qt-science_center_objects=0#qt-science_center_objects

Exhibits

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary

Westwood
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N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 1: Location Map

July 7, 2023

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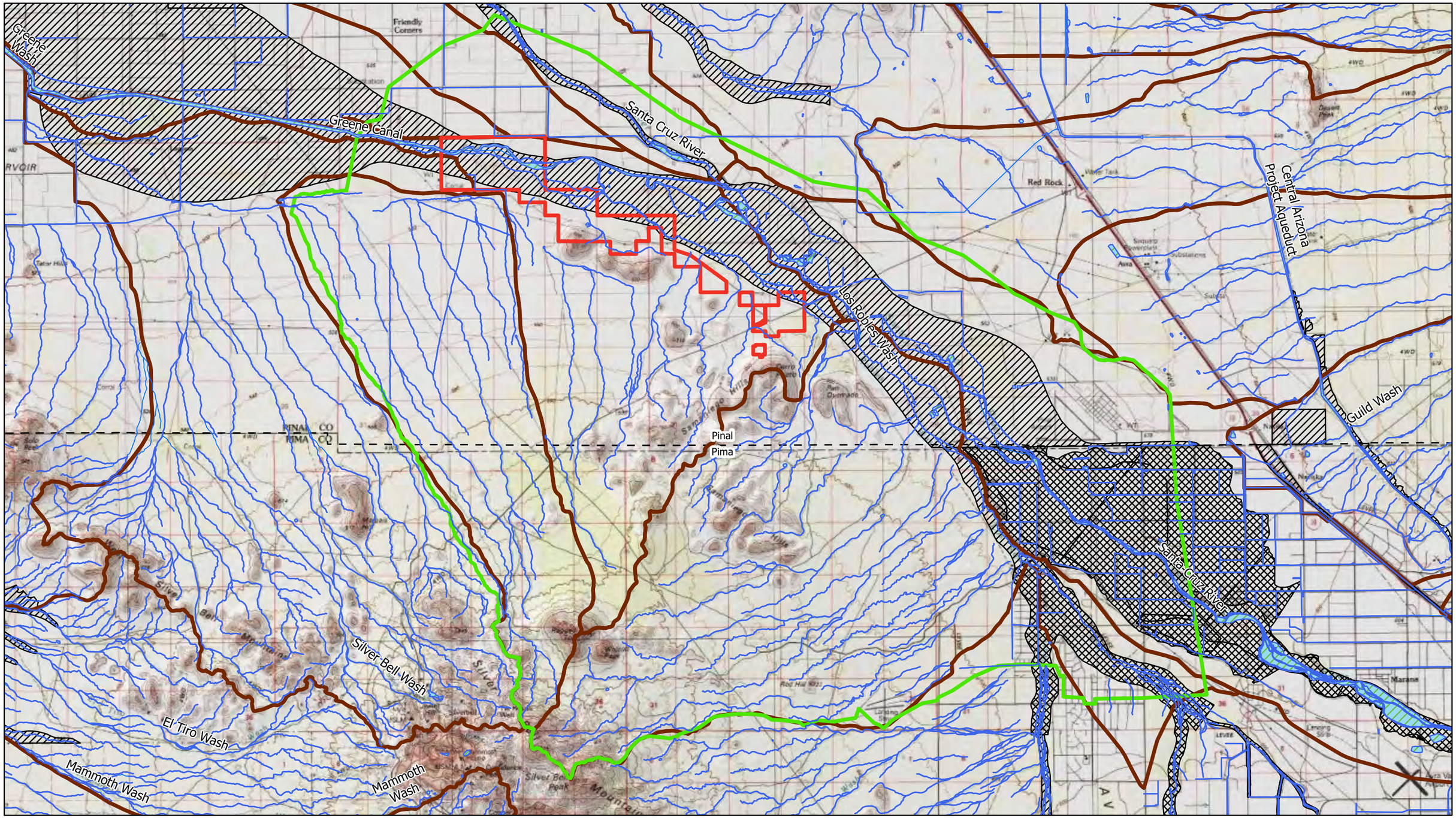
01-Location Map - Location Map | 7/10/2023 2:23 PM | mjennings



Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- HUC-12 Boundary
- County Boundary
- FEMA Zone A
- FEMA Zone AE
- NWI Wetlands
- NHD Flowlines

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N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 2: Base Hydrologic Map

July 7, 2023

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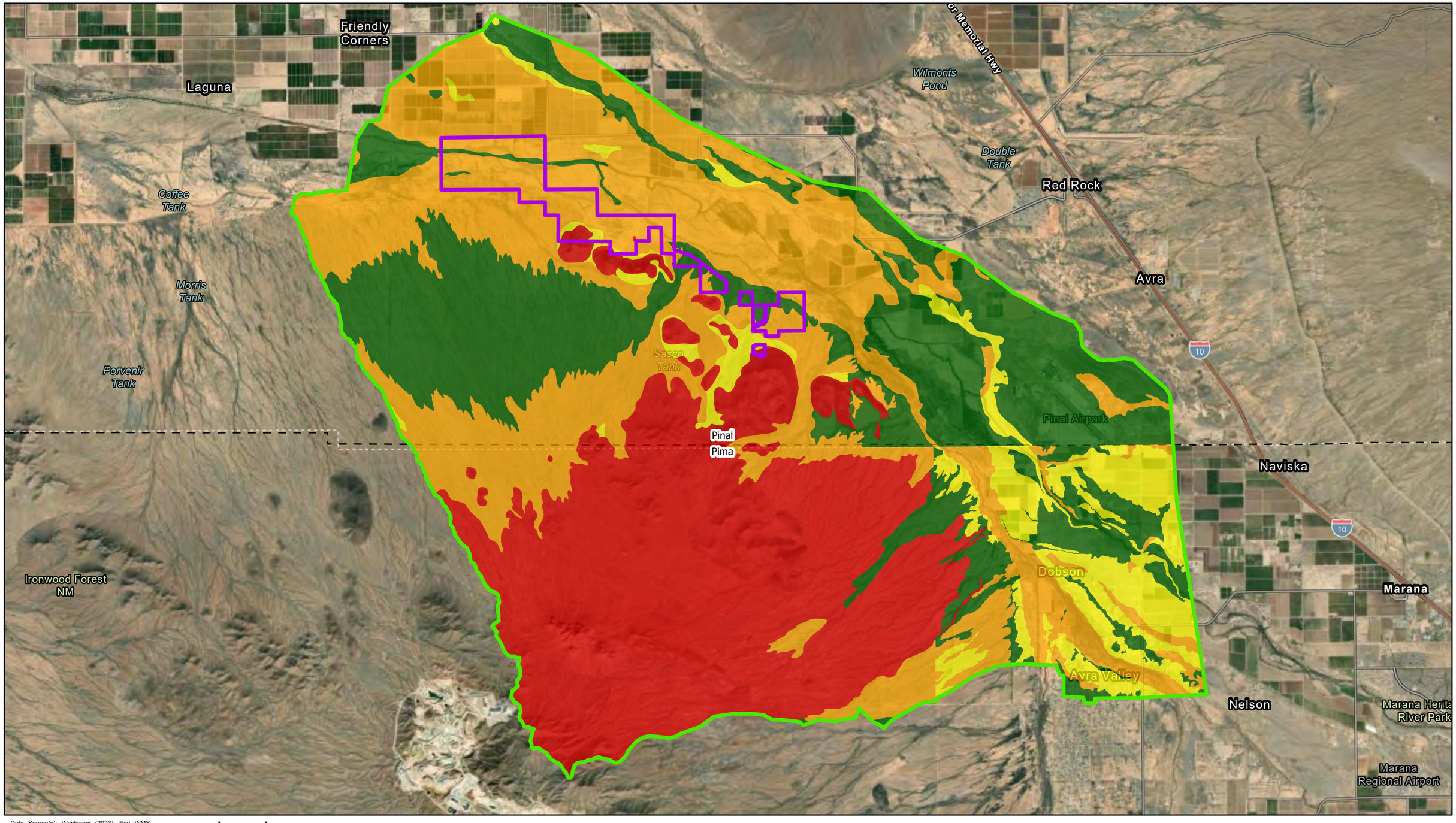
02-Base Hydrologic Map - USGS, FEMA, and NWI Wetlands Map | 7/10/2023 2:23 PM | tgeringe



Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary

Hydrologoic Soil Group

- A
- B
- C
- D

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N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 3: Soils Map

July 7, 2023

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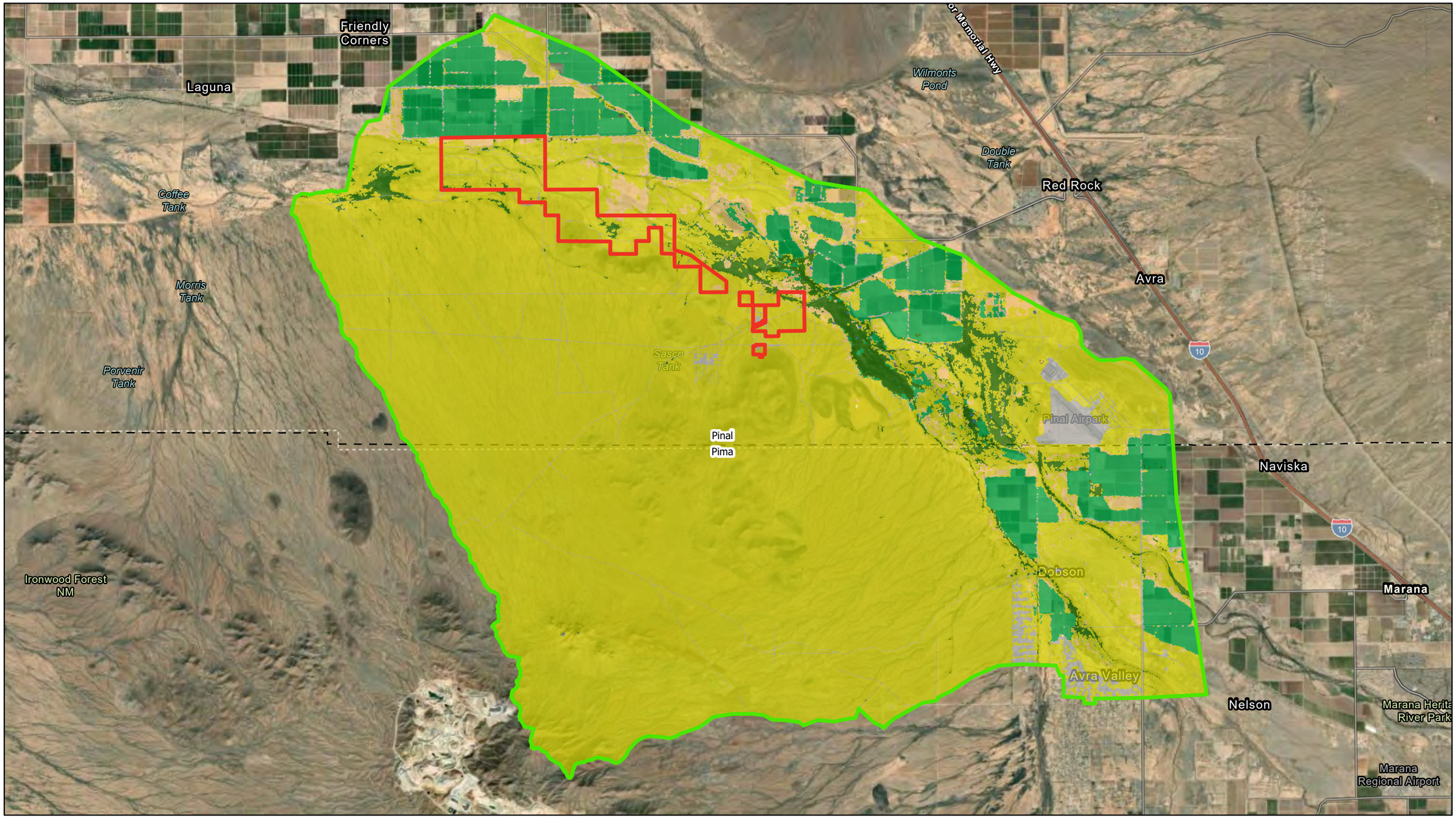
03-Soils Map - Soils Map | 7/10/2023 2:23 PM | mjennings



Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary

Landcover

- Barren
- Cultivated
- Developed
- Fallow
- Woods
- Pastureland
- Shrubland
- Water
- Wetland

N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 4: Landcover Map

July 7, 2023

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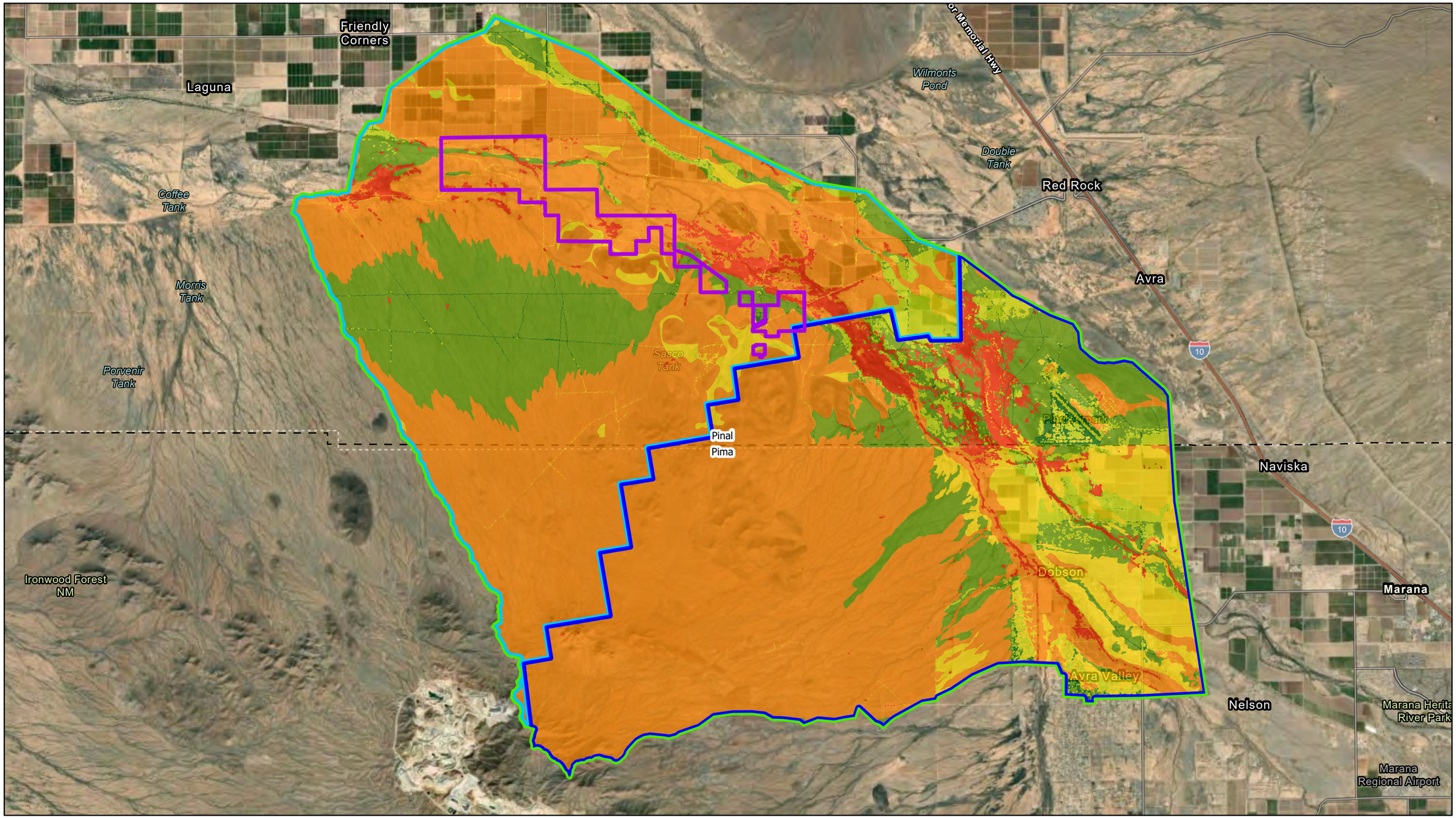
04-Landcover Map - Landcover 7/10/2023 2:23 PM mjennings



Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- 1m TNM Topography Coverage
- 1m Lidar TNM Topography Coverage

Curve Number

- 40 - 49
- 50 - 59
- 60 - 69
- 70 - 79
- 80 - 89
- 90 - 99

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N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 5: Curve Number and Topographic Source Map

July 7, 2023

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05-CON And Topo Sources - CN and Topo Sources | 7/12/2023 2:23 PM | igiannitsis

Friendly Corners
Laguna
Wilmonts Pond
Double Tank
Red Rock
Coffee Tank
Morris Tank
Avra
Porvenir Tank
Pinal
Pima
Inflow 4: 10,900 cfs
Naviska
Ironwood Forest NM
Inflow 3: 29,600 cfs
Marana
Inflow 1: 17,000 cfs
Inflow 2: 35,000 cfs
Nelson
Marana Regional Airport

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- Modeled Inflows
- FEMA Zone A
- FEMA Zone AE
- Max Water Depth (ft)
  - 0.50 - 1.00
  - 1.01 - 1.50
  - 1.51 - 2.00
  - 2.01 - 2.50
  - 2.51 - 3.00
  - 3.01 - 4.00
  - 4.01 - 6.00
  - 6.01 +

N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 6: 100-Year Max Water Depth Map

July 7, 2023

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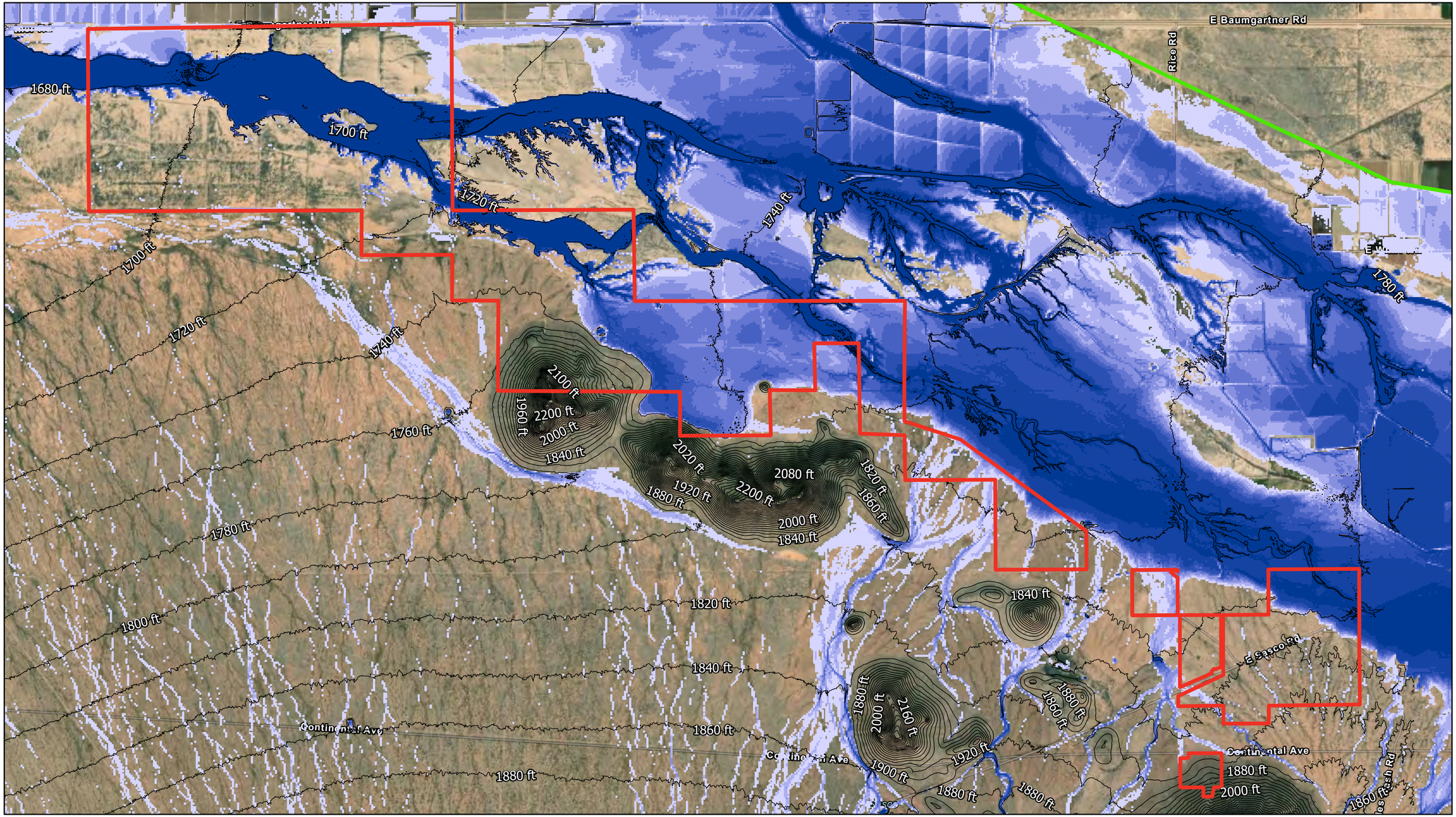
06-100 YR Max Water Depth Map - 100 Yr Max Water Depth | 7/7/2023 2:23 PM | mjennings



Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- 20' Contours

Max Water Depth (ft)

- 0.50 - 1.00
- 1.01 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 4.00
- 4.01 - 6.00
- 6.01 +

N

0 Miles 0.5

Pinal County Solar Project

Pinal County, Arizona

Exhibit 6A: 100-Year Max Water Depth Project Area Map

July 7, 2023

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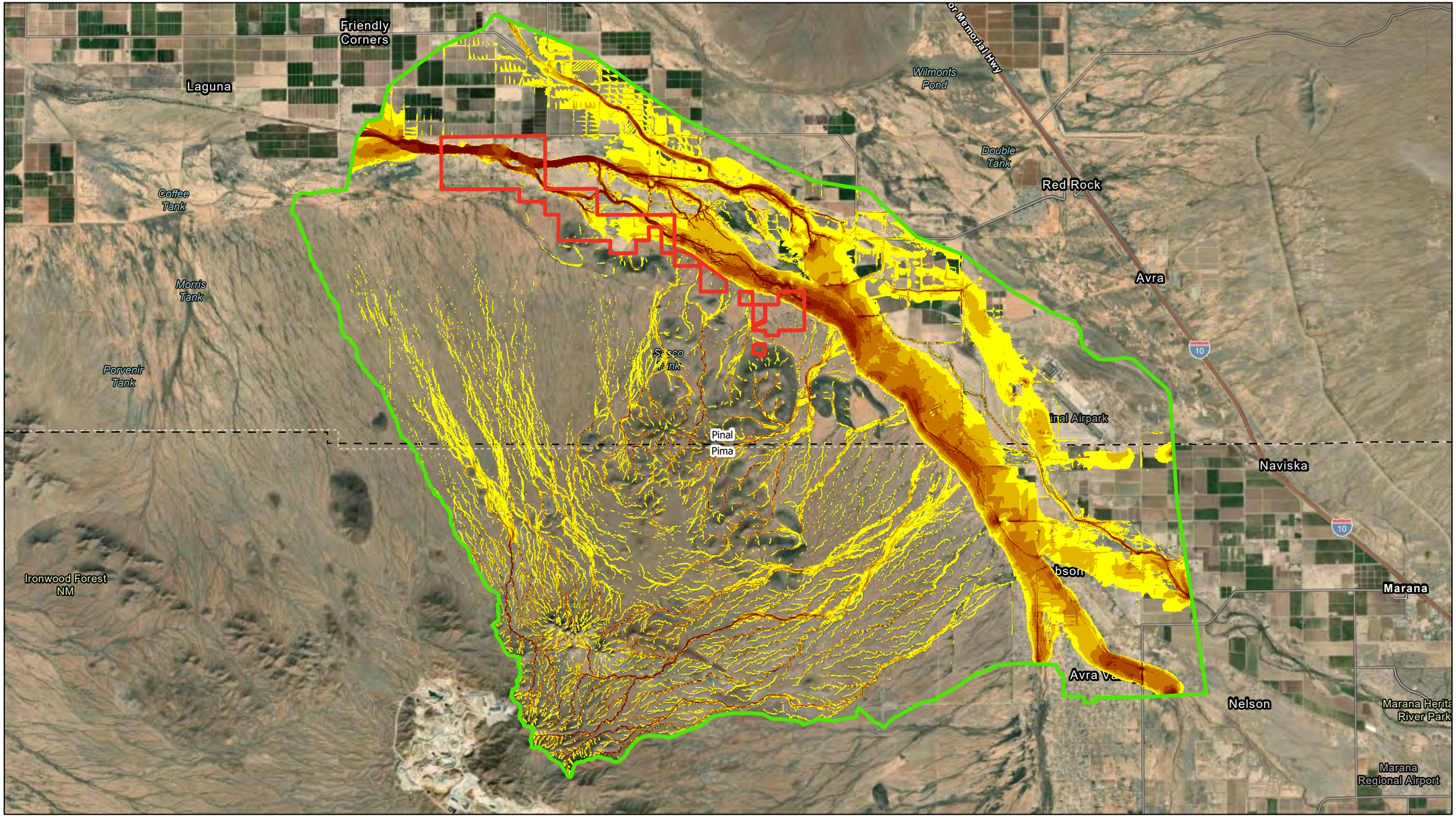
06-14-07 Yr Max Water Depth Project Area Maps - 100 Yr Max Water Depth Project Area | 7/10/2023 2:20 PM | tjennings



Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary

Peak Velocity (fps)

- 1.00 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 4.00
- 4.01 +

N

0 Miles 1.75

Pinal County Solar Project

Pinal County, Arizona

Exhibit 7: 100-Year Peak Velocity Map

July 7, 2023

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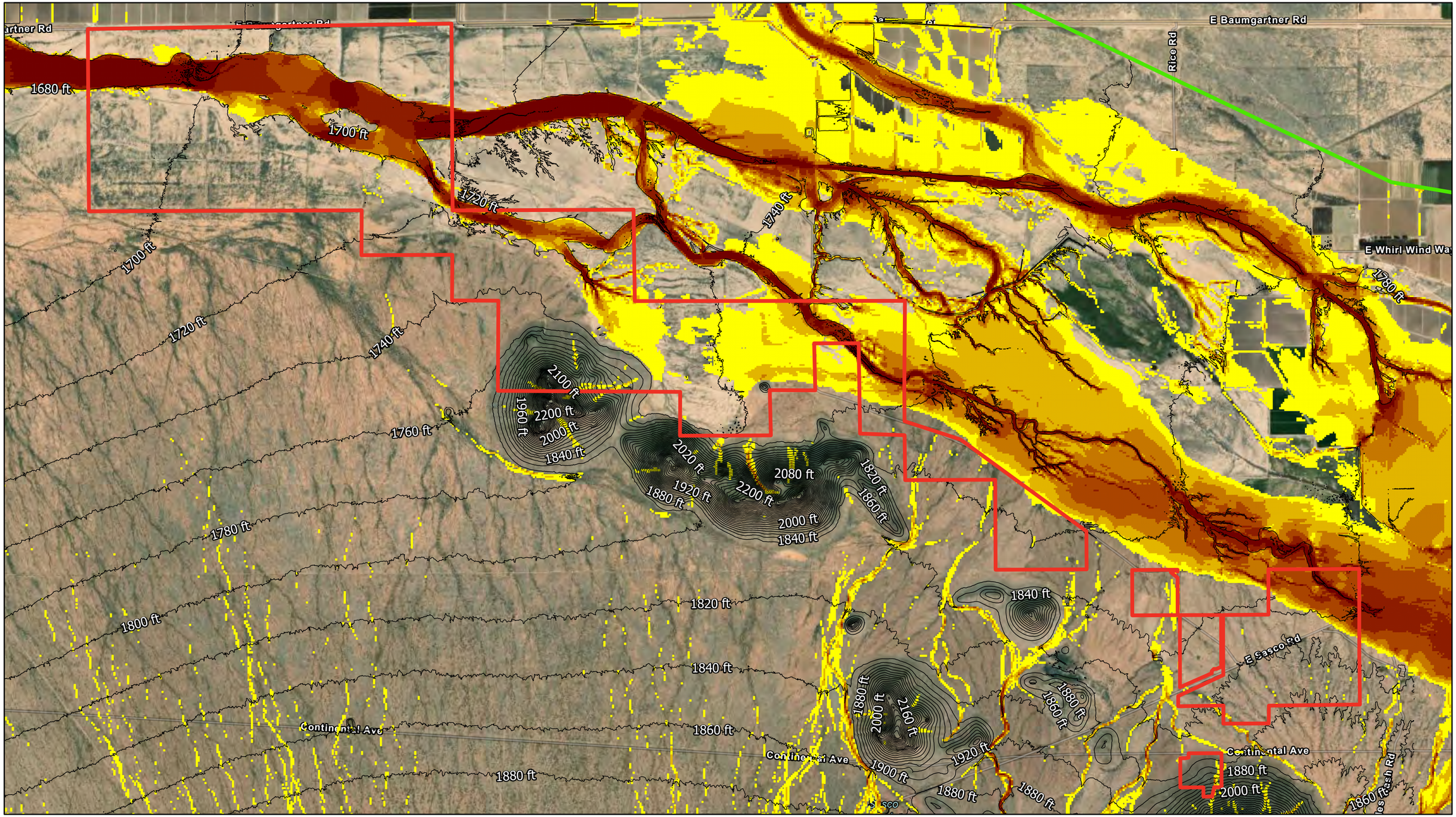
07:100 Yr Peak Velocity Maps - 100 Yr Peak Velocity | 7/10/2023 2:22 PM | mseniss



Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- 20' Contours

Peak Velocity (fps)

- 1.00 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 4.00
- 4.01 +

N

0 Miles 0.5

Pinal County Solar Project

Pinal County, Arizona

Exhibit 7A: 100-Year Peak Velocity Project Area Map

July 7, 2023

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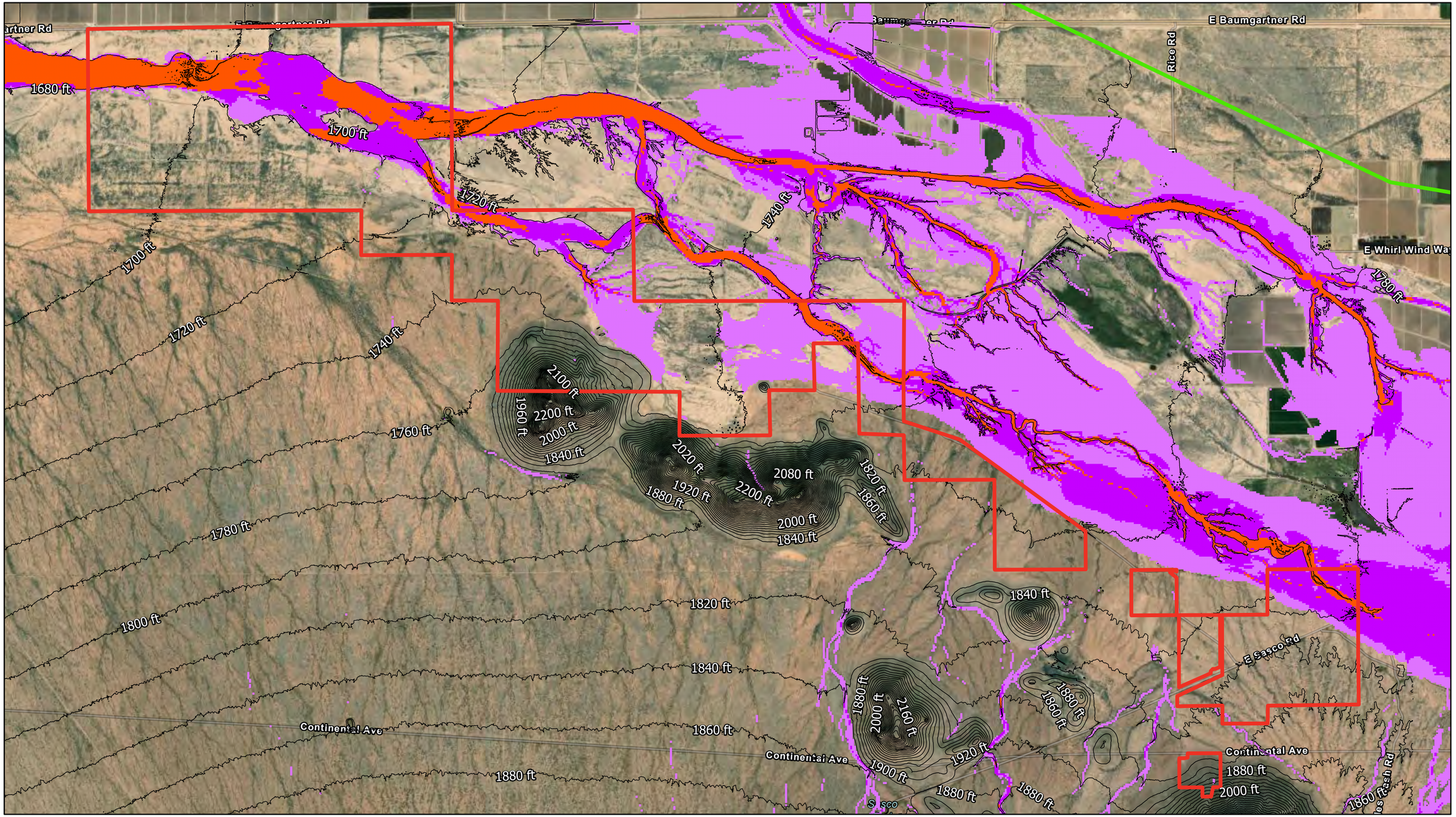

Data Source(s): Westwood (2023); Esri WMS Basemap Imagery (Accessed 2023); USGS (2023); FEMA (2023); USDA (2023)

Legend

- Project Area
- FLO-2D Model Boundary
- County Boundary
- 20' Contours
- Scour (ft)
  - 1.00 - 1.50
  - 1.51 - 2.00
  - 2.01 +

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N

0 0.5 Miles

Pinal County Solar Project

Pinal County, Arizona

Exhibit 8: 100-Year Scour Map

July 7, 2023

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06-100 YR Scour Map - 100 YR Scour | 7/10/2023 2:21 PM | bjennings

Appendix A

NOAA Atlas 14 Precipitation Data

NOAA Atlas 14, Volume 1, Version 5
Location name: Red Rock, Arizona, USA*
Latitude: 32.5657°, Longitude: -111.4847°
Elevation: 1732 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.206** (0.177-0.246)	**0.268** (0.231-0.321)	**0.362** (0.309-0.431)	**0.433** (0.367-0.512)	**0.529** (0.443-0.623)	**0.604** (0.498-0.709)	**0.679** (0.551-0.798)	**0.756** (0.603-0.889)	**0.857** (0.667-1.01)	**0.935** (0.712-1.11)
10-min	**0.314** (0.270-0.374)	**0.408** (0.352-0.488)	**0.552** (0.470-0.655)	**0.659** (0.559-0.779)	**0.806** (0.675-0.949)	**0.919** (0.759-1.08)	**1.03** (0.839-1.22)	**1.15** (0.918-1.35)	**1.30** (1.02-1.54)	**1.42** (1.08-1.69)
15-min	**0.389** (0.335-0.464)	**0.507** (0.436-0.605)	**0.684** (0.583-0.812)	**0.817** (0.693-0.966)	**0.999** (0.836-1.18)	**1.14** (0.941-1.34)	**1.28** (1.04-1.51)	**1.43** (1.14-1.68)	**1.62** (1.26-1.91)	**1.76** (1.34-2.10)
30-min	**0.524** (0.451-0.625)	**0.682** (0.587-0.815)	**0.921** (0.786-1.09)	**1.10** (0.933-1.30)	**1.35** (1.13-1.58)	**1.53** (1.27-1.80)	**1.73** (1.40-2.03)	**1.92** (1.53-2.26)	**2.18** (1.70-2.58)	**2.38** (1.81-2.82)
60-min	**0.649** (0.558-0.773)	**0.844** (0.727-1.01)	**1.14** (0.973-1.35)	**1.36** (1.16-1.61)	**1.66** (1.39-1.96)	**1.90** (1.57-2.23)	**2.14** (1.73-2.51)	**2.38** (1.90-2.80)	**2.70** (2.10-3.19)	**2.94** (2.24-3.49)
2-hr	**0.744** (0.645-0.872)	**0.963** (0.832-1.13)	**1.28** (1.10-1.50)	**1.52** (1.29-1.78)	**1.85** (1.56-2.15)	**2.11** (1.75-2.45)	**2.37** (1.94-2.76)	**2.64** (2.12-3.08)	**3.01** (2.35-3.53)	**3.30** (2.51-3.89)
3-hr	**0.802** (0.697-0.942)	**1.02** (0.891-1.21)	**1.34** (1.16-1.58)	**1.59** (1.36-1.86)	**1.95** (1.64-2.27)	**2.22** (1.85-2.59)	**2.52** (2.06-2.94)	**2.83** (2.26-3.30)	**3.26** (2.53-3.83)	**3.61** (2.73-4.26)
6-hr	**0.960** (0.847-1.10)	**1.21** (1.07-1.39)	**1.55** (1.36-1.78)	**1.82** (1.59-2.08)	**2.19** (1.89-2.49)	**2.49** (2.11-2.83)	**2.80** (2.33-3.18)	**3.12** (2.55-3.56)	**3.57** (2.83-4.08)	**3.92** (3.04-4.51)
12-hr	**1.09** (0.974-1.23)	**1.37** (1.23-1.55)	**1.74** (1.54-1.95)	**2.02** (1.79-2.27)	**2.42** (2.12-2.70)	**2.72** (2.36-3.04)	**3.04** (2.59-3.41)	**3.36** (2.82-3.78)	**3.81** (3.11-4.32)	**4.15** (3.32-4.75)
24-hr	**1.29** (1.17-1.43)	**1.64** (1.49-1.81)	**2.11** (1.91-2.32)	**2.48** (2.24-2.73)	**3.00** (2.70-3.30)	**3.41** (3.05-3.75)	**3.84** (3.41-4.22)	**4.28** (3.77-4.72)	**4.89** (4.26-5.40)	**5.38** (4.63-5.94)
2-day	**1.39** (1.26-1.54)	**1.77** (1.61-1.96)	**2.31** (2.08-2.54)	**2.73** (2.46-3.01)	**3.33** (2.98-3.66)	**3.80** (3.38-4.18)	**4.30** (3.80-4.73)	**4.82** (4.23-5.33)	**5.54** (4.81-6.14)	**6.12** (5.25-6.82)
3-day	**1.48** (1.34-1.64)	**1.88** (1.71-2.08)	**2.46** (2.22-2.71)	**2.92** (2.63-3.22)	**3.57** (3.19-3.93)	**4.09** (3.64-4.50)	**4.65** (4.10-5.12)	**5.23** (4.58-5.78)	**6.05** (5.23-6.72)	**6.71** (5.74-7.49)
4-day	**1.57** (1.42-1.74)	**1.99** (1.81-2.21)	**2.61** (2.36-2.89)	**3.10** (2.80-3.43)	**3.81** (3.41-4.20)	**4.38** (3.90-4.83)	**4.99** (4.40-5.51)	**5.64** (4.93-6.24)	**6.56** (5.65-7.28)	**7.30** (6.22-8.15)
7-day	**1.76** (1.58-1.96)	**2.23** (2.02-2.49)	**2.92** (2.63-3.25)	**3.48** (3.13-3.87)	**4.28** (3.82-4.74)	**4.92** (4.36-5.46)	**5.61** (4.93-6.23)	**6.34** (5.53-7.05)	**7.38** (6.34-8.24)	**8.22** (6.98-9.23)
10-day	**1.94** (1.75-2.16)	**2.47** (2.22-2.75)	**3.22** (2.90-3.58)	**3.83** (3.44-4.26)	**4.69** (4.19-5.21)	**5.39** (4.78-5.98)	**6.13** (5.40-6.81)	**6.90** (6.03-7.69)	**8.00** (6.89-8.94)	**8.89** (7.57-9.98)
20-day	**2.38** (2.14-2.64)	**3.04** (2.74-3.37)	**3.98** (3.58-4.40)	**4.69** (4.21-5.19)	**5.66** (5.06-6.26)	**6.41** (5.70-7.09)	**7.18** (6.36-7.96)	**7.97** (7.01-8.83)	**9.03** (7.86-10.1)	**9.85** (8.50-11.0)
30-day	**2.84** (2.58-3.12)	**3.63** (3.30-4.00)	**4.73** (4.29-5.19)	**5.56** (5.04-6.10)	**6.69** (6.03-7.34)	**7.56** (6.78-8.28)	**8.45** (7.53-9.26)	**9.35** (8.29-10.3)	**10.6** (9.27-11.7)	**11.5** (10.0-12.8)
45-day	**3.36** (3.05-3.68)	**4.30** (3.91-4.71)	**5.58** (5.07-6.11)	**6.53** (5.92-7.15)	**7.77** (7.02-8.49)	**8.70** (7.83-9.51)	**9.64** (8.64-10.5)	**10.6** (9.42-11.6)	**11.8** (10.4-13.0)	**12.7** (11.2-14.0)
60-day	**3.73** (3.40-4.09)	**4.78** (4.35-5.24)	**6.19** (5.64-6.78)	**7.23** (6.58-7.91)	**8.58** (7.77-9.38)	**9.58** (8.64-10.5)	**10.6** (9.50-11.6)	**11.5** (10.3-12.7)	**12.8** (11.4-14.1)	**13.7** (12.1-15.2)

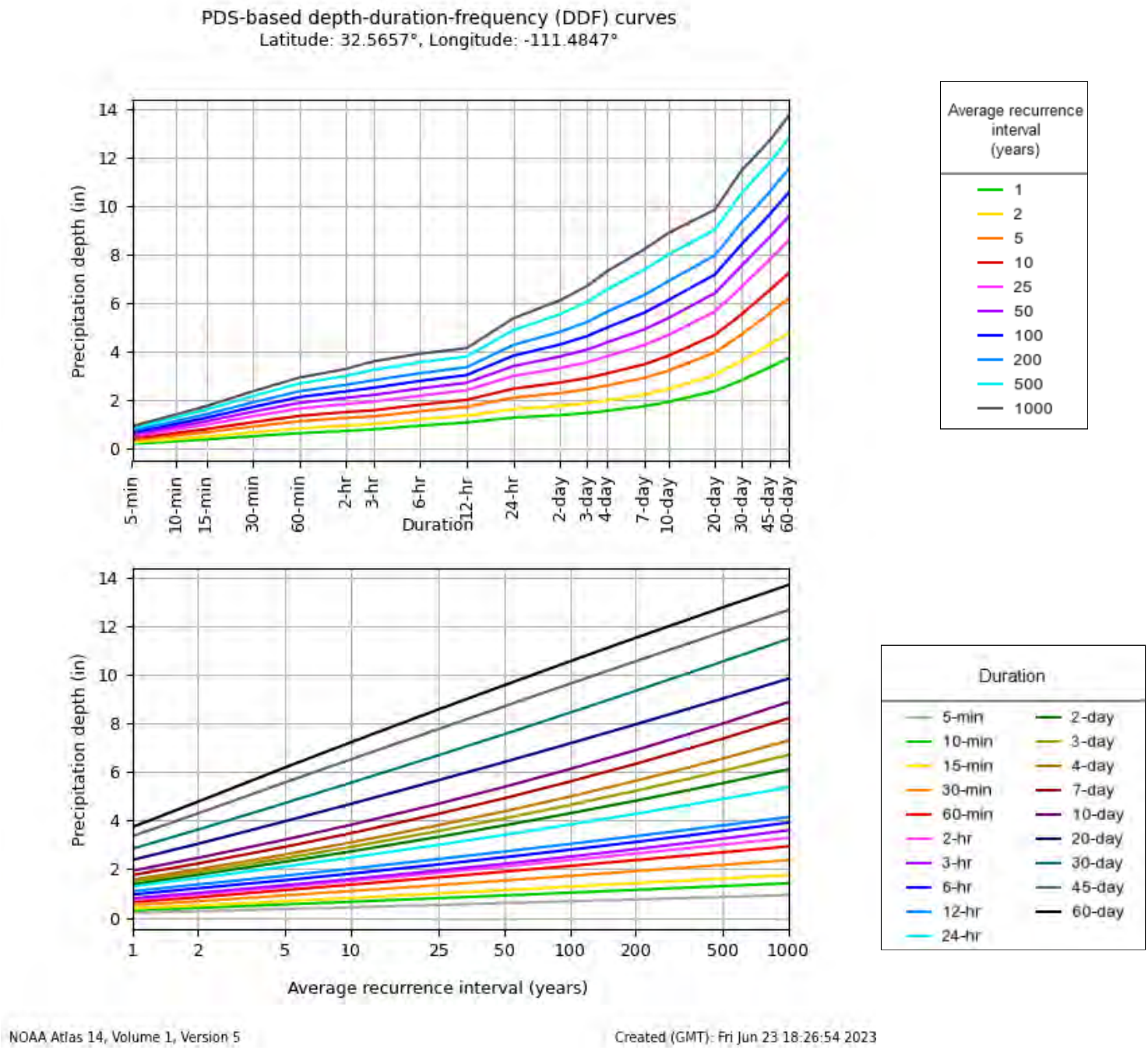
[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Back to Top

PF graphical



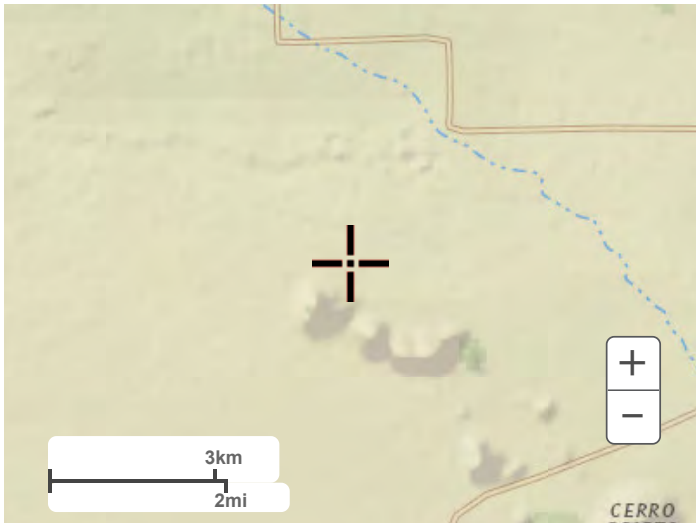
NOAA Atlas 14, Volume 1, Version 5

Created (GMT): Fri Jun 23 18:26:54 2023

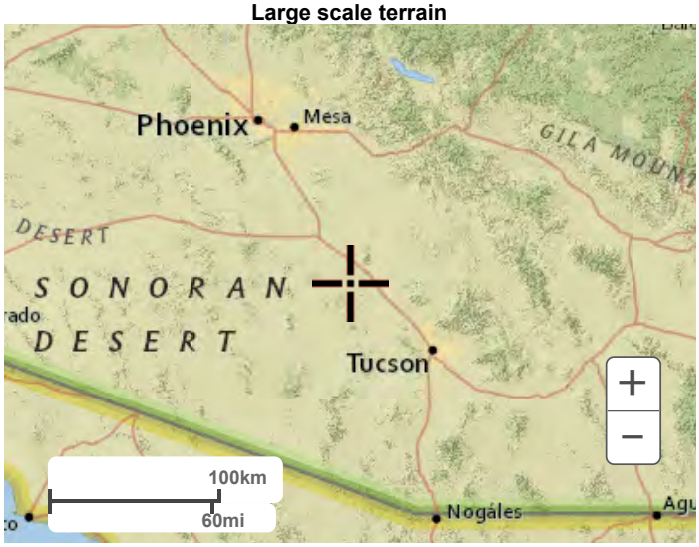
Back to Top

Maps & aerials

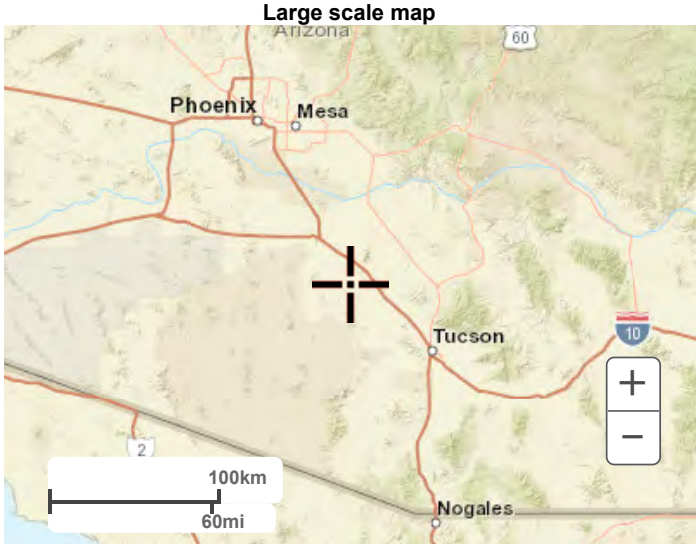
Small scale terrain



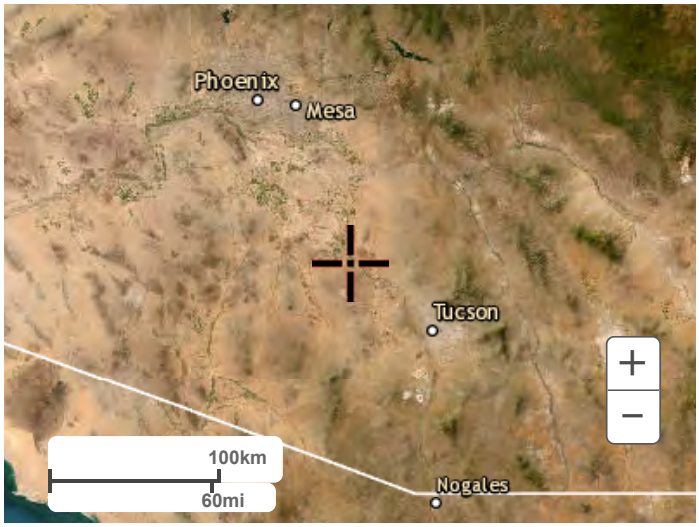
Large scale terrain



Large scale map



Large scale aerial



Back to Top

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

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Appendix B

Curve Number Table

Table 2. Semi-Arid Curve Numbers (adapted from NEH 630)

Class	Value	Classification Description	Curve Number				
			Soil Type*				
			A	B	C	D	W
Water	11	**Open Water** - areas of open water, generally with less than 25% cover of vegetation or soil.	98	98	98	98	100
	12	**Perennial Ice/Snow** - areas characterized by a perennial cover of ice and/or snow, generally greater than 25% of total cover.	98	98	98	98	100
Developed	21	**Developed, Open Space** - areas with a mixture of some constructed materials, but mostly vegetation in the form of lawn grasses. Impervious surfaces account for less than 20% of total cover. These areas most commonly include large-lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes.	46	65	77	82	100
	22	**Developed, Low Intensity** - areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 20% to 49% percent of total cover. These areas most commonly include single-family housing units.	61	75	83	87	100
	23	**Developed, Medium Intensity** – areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 50% to 79% of the total cover. These areas most commonly include single-family housing units.	77	85	90	95	100
	24	**Developed High Intensity** -highly developed areas where people reside or work in high numbers. Examples include apartment complexes, row houses and commercial/industrial. Impervious surfaces account for 80% to 100% of the total cover.	89	92	94	95	100
Barren	31	**Barren Land (Rock/Sand/Clay)** - areas of bedrock, desert pavement, scarps, talus, slides, volcanic material, glacial debris, sand dunes, strip mines, gravel pits and other accumulations of earthen material. Generally, vegetation accounts for less than 15% of total cover.	77	86	91	94	100
Forest	41	**Deciduous Forest** - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. More than 75% of the tree species shed foliage simultaneously in response to seasonal change.	43	55	70	77	100
	42	**Evergreen Forest** - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. More than 75% of the tree species maintain their leaves all year. Canopy is never without green foliage.	43	55	70	77	100
	43	**Mixed Forest** - areas dominated by trees generally greater than 5 meters tall, and greater than 20% of total vegetation cover. Neither deciduous nor evergreen species are greater than 75% of total tree cover.	43	55	70	77	100
Shrubland	51	**Dwarf Scrub** - Alaska only areas dominated by shrubs less than 20 centimeters tall with shrub canopy typically greater than 20% of total vegetation. This type is often co-associated with grasses, sedges, herbs, and non-vascular vegetation.	55	71	81	89	100
	52	**Shrub/Scrub** - areas dominated by shrubs; less than 5 meters tall with shrub canopy typically greater than 20% of total vegetation. This class includes true shrubs, young trees in an early successional stage or trees stunted from environmental conditions.	55	71	81	89	100
Herbaceous	71	**Grassland/Herbaceous** - areas dominated by gramanoid or herbaceous vegetation, generally greater than 80% of total vegetation. These areas are not subject to intensive management such as tilling, but can be utilized for grazing.	55	71	81	89	100
	72	**Sedge/Herbaceous** - Alaska only areas dominated by sedges and forbs, generally greater than 80% of total vegetation. This type can occur with significant other grasses or other grass like plants, and includes sedge tundra, and sedge tussock tundra.	55	71	81	89	100
	73	**Lichens** - Alaska only areas dominated by fruticose or foliose lichens generally greater than 80% of total vegetation.	55	71	81	89	100
	74	**Moss** - Alaska only areas dominated by mosses, generally greater than 80% of total vegetation.	55	71	81	89	100
Planted/Cultivated	81	**Pasture/Hay** – areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops, typically on a perennial cycle. Pasture/hay vegetation accounts for greater than 20% of total vegetation.	55	71	81	89	100
	82	**Cultivated Crops** – areas used for the production of annual crops, such as corn, soybeans, vegetables, tobacco, and cotton, and also perennial woody crops such as orchards and vineyards. Crop vegetation accounts for greater than 20% of total vegetation. This class also includes all land being actively tilled.	67	78	85	89	100
	83	**Small Grains**	63	75	83	87	100
Wetlands	91	**Woody Wetlands** - areas where forest or shrubland vegetation accounts for greater than 20% of vegetative cover and the soil or substrate is periodically saturated with or covered with water.	45	66	77	83	100
	92	**Emergent Herbaceous Wetlands** - Areas where perennial herbaceous vegetation accounts for greater than 80% of vegetative cover and the soil or substrate is periodically saturated with or covered with water.	45	66	77	83	100

*A/D, B/D and C/D soils lumped as D soils, W denotes water

**Curve Numbers for NLCD Codes 41-43 have been increased from 30 to 43 as many of these areas are partially grazed Woods-grass combination.