



**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT  
1325 J STREET  
SACRAMENTO CA 95814-2922

**CESPK-RDC-S**

**22 APRIL 2024**

**MEMORANDUM FOR RECORD**

**SUBJECT:** US Army Corps of Engineers (Corps) Approved Jurisdictional Determination in accordance with the "Revised Definition of 'Waters of the United States'"; (88 FR 3004 (January 18, 2023) as amended by the "Revised Definition of 'Waters of the United States'; Conforming" (8 September 2023),<sup>1</sup> SPK-2022-00367.

**BACKGROUND.** An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.<sup>2</sup> AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.<sup>3</sup>

On January 18, 2023, the Environmental Protection Agency (EPA) and the Department of the Army ("the agencies") published the "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule"). On September 8, 2023, the agencies published the "Revised Definition of 'Waters of the United States'; Conforming", which amended the 2023 Rule to conform to the 2023 Supreme Court decision in *Sackett v. EPA*, 598 U.S., 143 S. Ct. 1322 (2023) ("*Sackett*").

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. For the purposes of this AJD, we have relied on Section 10 of the Rivers and Harbors Act of 1899 (RHA),<sup>4</sup> the 2023 Rule as amended, as well as other applicable guidance, relevant case law, and longstanding practice in evaluating jurisdiction.

---

<sup>1</sup> While the Revised Definition of "Waters of the United States"; Conforming had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.

<sup>2</sup> 33 CFR 331.2.

<sup>3</sup> Regulatory Guidance Letter 05-02.

<sup>4</sup> USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

1. SUMMARY OF CONCLUSIONS.

a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States).

<b>Name of Aquatic Resource</b>	<b>Cowardin Code</b>	<b>Description</b>	<b>Waters of the U.S.</b>	<b>Navigable Waters of the U.S.</b>
JC-1a	R5UB	Jensen Canal; artificial canal	Yes	No
JC-1b	R5UB	Jensen Canal; artificial canal	Yes	No
JC-1c	R5UB	Jensen Canal; artificial canal	Yes	No
JC-1d	R5UB	Jensen Canal; artificial canal	Yes	No
JC-1e	R5UB	Jensen Canal; artificial canal	Yes	No
JC-1f	R5UB	Jensen Canal; artificial canal	Yes	No
FS-1	R5UB	James Bypass; artificial waterway	Yes	No
JC-2a	R5UB	Jensen Canal; artificial canal	Yes	No
JC-2b	R5UB	Jensen Canal; artificial canal	Yes	No
JC-2c	R5UB	Jensen Canal; artificial canal	Yes	No
JC-2d	R5UB	Jensen Canal; artificial canal	Yes	No
JC-3a	R5UB	Jensen Canal; artificial canal	Yes	No
JC-3b	R5UB	Jensen Canal; artificial canal	Yes	No
JC-3c	R5UB	Jensen Canal; artificial canal	Yes	No
JC-3d	R5UB	Jensen Canal; artificial canal	Yes	No
JC-3e	R5UB	Jensen Canal; artificial canal	No	No
JC-3f	R5UB	Jensen Canal; artificial canal	No	No
JC-3g	R5UB	Jensen Canal; artificial canal	No	No



CESPK-RDC-S

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2022-00367

JC-3h	R5UB	Jensen Canal; artificial canal	No	No
EC-1	R5UB	Eastside Canal; artificial canal	No	No
AC-1a	R5UB	American Canal; artificial canal	No	No
AC-1b	R5UB	American Canal; artificial canal	No	No
AC-1c	R5UB	American Canal; artificial canal	No	No
AC-1d	R5UB	American Canal; artificial canal	No	No
AC-1e	R5UB	American Canal; artificial canal	No	No
EC-2a	R5UB	Eastside Canal; artificial canal	Yes	No
EC-2b	R5UB	Eastside Canal; artificial canal	Yes	No
EC-2c	R5UB	Eastside Canal; artificial canal	Yes	No
EC-2d	R5UB	Eastside Canal; artificial canal	Yes	No
EC-2e	R5UB	Eastside Canal; artificial canal	Yes	No
EC-2f	R5UB	Eastside Canal; artificial canal	Yes	No
EC-2g	R5UB	Eastside Canal; artificial canal	Yes	No
DC-1	R5UB	Dry Creek Canal; artificial canal	Yes	No

2. REFERENCES.

a. “Revised Definition of ‘Waters of the United States,’” 88 FR 3004 (January 18, 2023) (“2023 Rule”)

b. “Revised Definition of ‘Waters of the United States’; Conforming” 88 FR 61964 (September 8, 2023))

c. *Sackett v. EPA*, 598 U.S., 143 S. Ct. 1322 (2023)

3. REVIEW AREA. The aquatic resource delineation (ARD) review area consists of an approximately 1473.06-acre study area that includes portions of lands within the approximately 123,000-acre McMullin Area Groundwater Sustainability Agency (MAGSA) boundary. The ARD review area is located west of State Route 99 in Fresno

CESPK-RDC-S

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2022-00367

County, approximately 16 miles southwest of Fresno, California. The approximate center of the review area is located at Latitude 36.6622, Longitude -120.0248. For additional details, see the enclosed February 2024, *Appendix A: Aquatic Resource Delineation Maps* prepared by [REDACTED] (Enclosure 1).

**4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), THE TERRITORIAL SEAS, OR INTERSTATE WATER TO WHICH THE AQUATIC RESOURCE IS CONNECTED.**

The nearest TNW is the San Joaquin River, which is approximately 10 miles northwest of the review area. Twenty-seven of the aquatic features within the review area (JC-1a, JC-1b, JC-1c, JC-1d, JC-1e, JC-1f, JC-2a, JC-2b, JC-2c, JC-2d, JC-3a, JC-3b, JC-3c, JC-3d, JC-3e, JC-3f, JC-3g, JC-3h, FS-1, EC-2a, EC-2b, EC-2c, EC-2d, EC-2e, EC-2f, EC-2g, DC-1) flow through offsite and onsite features that eventually reach the Fresno Slough, a tributary of the San Joaquin River.

**5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, THE TERRITORIAL SEAS, OR INTERSTATE WATER.**

i) **JC-1a, JC-1b, JC-1c, JC-1d:** Within the review area, water flows westward from JC-1d towards JC-1a. From the review area, the canal flows southwest for approximately 1.5 miles before entering the Fresno Slough. The Fresno Slough flows northwest for approximately 9.4 miles before entering the San Joaquin River near the Mendota Pool area. The San Joaquin River is classified as a TNW beginning approximately 19.5 miles upstream of the Mendota Pool area (Enclosure 2).

ii) **JC-1e, JC-1f:** Within the review area, JC-1f flows west into JC-1e through a valve. Water from JC-1e crosses through two pipes into an adjacent canal section (JC-2d) then flows directly northwest into JC-1d through a valve. JC-1d flows westward through JC-1c, JC-1b, and JC-1a before entering into the Fresno Slough and eventually, the San Joaquin River as described above (Enclosure 2).

iii) **JC-2a, JC-2b, JC-2c, JC-2d:** Within the review area, JC-2a flows north through a valve and into JC-2b. Water from JC-2b flows eastward and is pumped into JC-2c. Flows from JC-2c continue eastward then flow through an underground road crossing and into JC-2d. Water in JC-2d flows northwest into JC-1d. JC-1d flows westward through JC-1c, JC-1b, and JC-1a before entering into the Fresno Slough and the San Joaquin River as described above (Enclosure 2).

iv) **FS-1:** FS-1 is small segment of the James Bypass. From the review area, FS-1 flows north into JC-2a. From JC-2a, flows continue to the San Joaquin River as described above (Enclosure 2).

v) **JC-3a, JC-3b, JC-3c, JC-3d:** Within the review area, water flows northwest through JC-3d and then crosses through a valve into JC-3c. Flows continue westward

through JC-3c and JC-3b for approximately 1.5 miles, then southwest through JC-3a. Water from JC-3a flows southwest and enters the James Bypass. From this point, the James Bypass continues northwest for approximately 2.8 miles before entering the Fresno Slough. The Fresno Slough flows northwest for approximately 11 miles before entering the San Joaquin River at the Mendota Pool area (Enclosure 3).

vi) **JC-3e, JC-3f, JC-3g, JC-3h:** Within the review area, groundwater is pumped into the eastern end of JC-3h and flows westward through JC-3g, JC-3f, and JC-3e. Water from JC-3e flows west into JC-3c and follows the flowpath to the San Joaquin River described above (Enclosure 3).

vii) **EC-2a, EC-2b, EC-2c, EC-2d, EC-2e, EC-2f, EC-2g:** Within the review area, flows travel westward from EC-2g towards EC-2a. At the downstream (west) end of EC-2a, the canal waters enter an approximately 0.7-mile-long underground pipeline that directs water southwest. The pipeline outlets into a canal along S McMullin Grade Road. The canal continues flowing southwest along S McMullin Grade Road for approximately 7.1 miles. The canal then flows west for approximately 1.5 miles and south for approximately 0.4 miles until it reaches W Floral Avenue. At W Floral Avenue, the canal flows through an underground pipeline for approximately 0.2 miles then re-emerges into a canal on the west side of the James Bypass. Water flows north in the canal adjacent to the James Bypass for approximately 8.8 miles. The water then flows through a pump station located at the intersection of W Malaga Avenue and S El Dorado Avenue and into the James Bypass. From this point, flows continue northwest in the James Bypass for approximately 4.2 miles before entering the Fresno Slough. The Fresno Slough flows northwest for approximately 11 miles before entering the San Joaquin River at the Mendota Pool area (Enclosure 4).

viii) **DC-1:** From the review area, DC-1 flows south for approximately 2.0 miles until it reaches the Dry Creek Tail. Water from the Dry Creek Tail flows into the Dry Creek Extension canal and flows eastward for approximately 0.5 miles and then south for approximately 0.5 miles. From the Dry Creek Extension canal, water enters a canal along S McMullin Grade Road. The canal continues flowing southwest along S McMullin Grade Road for approximately 4.3 miles. From this point, flows continue to the San Joaquin River as described above (Enclosure 5).

ix) Aquatic features AC-1a, AC-1b, AC-1c, AC-1d, AC-1e, and EC-1 do not have a downstream connection to a TNW, the territorial seas, or an interstate water.

6. **SECTION 10 JURISDICTIONAL WATERS:** There are no Section 10 Jurisdictional Waters within the review area.

7. **SECTION 404 JURISDICTIONAL WATERS:** The following aquatic resources within the review area were determined to meet the definition of waters of the United States in

CESPK-RDC-S

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2022-00367

accordance with the 2023 Rule as amended, consistent with the Supreme Court's decision in *Sackett*: JC-1a, JC-1b, JC-1c, JC-1d, JC-1e, JC-1f, JC-2a, JC-2b, JC-2c, JC-2d, JC-3a, JC-3b, JC-3c, JC-3d, FS-1, EC-2a, EC-2b, EC-2c, EC-2d, EC-2e, EC-2f, EC-2g, DC-1.

- a. Traditional Navigable Waters (TNWs) (a)(1)(i): N/A.
- b. The Territorial Seas (a)(1)(ii): N/A.
- c. Interstate Waters (a)(1)(iii): N/A.
- d. Impoundments (a)(2): N/A.
- e. Tributaries (a)(3):

i) **JC-1a, JC-1b, JC-1c, JC-1d, JC-2a, JC-2b, JC-2c, JC-2d, FS-1**: Aquatic features JC-1a through JC-2d total approximately 22,176 total linear feet/ 4.2 miles and are separate sections of the same man-made canal. The canal is a divergent path of the James Bypass. FS-1 is an approximately 39 linear foot segment of the James Bypass and flows directly into JC-2a. The tributary reach that encompasses these aquatic features (Reach 1) begins outside of the review area within an upstream portion of the James Bypass. Reach 1 ends approximately 16,385 linear feet (LF)/ 3.1 miles downstream of JC-1a, where the constructed canal flows into the Fresno Slough near the Mendota Wildlife Area. During our analysis, Reach 1 displayed flows at a rate/frequency indicative of a relatively permanent water feature consistent with the 2023 Water Rule as Amended. Please see the enclosed Digital Globe imagery and Antecedent Precipitation Tool (APT) reports used during our analysis (Enclosures 6 and 7).

ii) **JC-1e, JC-1f**: These aquatic features, totaling approximately 5,221 LF/ 1.0 mile, are sections of the same man-made canal. Both aquatic features belong to the same tributary reach (Reach 2). Reach 2 begins at the eastern end of JC-1f, where groundwater is pumped into the canal through a pipe. Reach 2 ends at the western end of JC-1f, where water flows into Reach 1. During our analysis, the tributary reach displayed flows at a rate/frequency indicative of a relatively permanent water feature consistent with the 2023 Water Rule as Amended. Please see the enclosed Digital Globe imagery and APT reports used during our analysis (Enclosures 6 and 7).

iii) **JC-3a, JC-3b, JC-3c, JC-3d**: JC-3d is a 49.0 LF segment of canal located between Jensen Avenue and West Central Avenue. The tributary reach to which JC-3d belongs (Reach 3), is the 2.0-mile-long canal that begins south of JC-3d, where groundwater is pumped into the canal. JC-3a, JC-3b, and JC-3c measure approximately 15,808 total LF/ 3.0 miles. They belong to the same tributary reach (Reach 4) which

CESPK-RDC-S

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2022-00367

measures approximately 16,809 total LF/ 3.2 miles. Reach 4 begins at the eastern end of JC-3c. Reach 4 diverges at the southern end of JC-3a and has two downstream end points. The first end point is located near the intersection of South James Road and Riverside Drive, where JC-3a connects with the James Bypass through a 1,083 LF/ 0.20 mile constructed channel. The second end point of Reach 4 is located near the intersection of West American Avenue and South Yuba Road. During our analysis, Reach 3 and Reach 4 displayed flows at a rate/frequency indicative of relatively permanent water features consistent with the 2023 Water Rule as Amended. Please see the enclosed Digital Globe imagery and APT reports used during our analysis (Enclosures 6 and 7).

iv) **EC-2a, EC-2b, EC-2c, EC-2d, EC-2e, EC-2f, EC-2g**: These aquatic resources total approximately 20,870 LF/ 4.0 miles and are segments of the Central Wasteway Canal. The tributary reach (Reach 5) to which these aquatic resources belong begins outside of the review area, where the Central Wasteway Canal merges with the Fresno Colony Canal. Reach 5 ends approximately 3.6 miles downstream of EC-2a, where the canal merges with the Dry Creek Canal. During our analysis, the tributary reach displayed flows at a rate/frequency indicative of a relatively permanent water feature consistent with the 2023 Water Rule as Amended. Please see the enclosed Digital Globe imagery and APT reports used during our analysis (Enclosures 6 and 7).

v) **DC-1**: DC-1 is an approximately 198 LF segment of the Dry Creek Canal, owned and operated by Fresno Irrigation District. The tributary reach of the canal segment (Reach 6) begins outside of the review area and approximately 26,573 LF/ 5.0 miles upstream of DC-1, where the West Rolinda Ditch flows into the Dry Creek Canal. Reach 6 ends approximately 15,670 LF/ 3.0 miles downstream of DC-1 where the Dry Creek Canal Extension flows into a canal that runs along the McMullin Grade. The flow characteristics observed via Digital Globe imagery at the farthest downstream limit of Reach 6 do not display flows at a rate/frequency indicative of a relatively permanent water feature. However, these characteristics are not representative of the entire evaluated tributary reach. Approximately 12.1% of the evaluated tributary reach displays non-relatively permanent flow characteristics. The remaining 87.9% of the tributary reach, which includes the entire portion of the reach located upstream of the Dry Creek Tail, displays flows at a rate/frequency indicative of a relatively permanent water feature. Therefore, the relatively permanent characteristic best characterizes Reach 6. Please see the enclosed Digital Globe imagery and APT reports used during our analysis (Enclosures 6 and 7).

f. Adjacent Wetlands (a)(4): N/A.

g. Additional Waters (a)(5): N/A.

## 8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the 2023 Rule as amended (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).

Canal segments **EC-1**, **AC-1a**, **AC-1b**, **AC-1c**, **AC-1d**, and **AC-1e** are relatively permanent waters that do not have a tributary connection to an (a)(1), (a)(2) or (a)(5) water. Additionally, Google Earth Pro aerial imagery shows that EC-1 does not display flows at rate/frequency indicative of a relatively permanent water. Groundwater is pumped into EC-1 and flows south for approximately 0.52 miles before the canal terminates at W Annadale Avenue. AC-1a receives pumped groundwater from JC-3d. Flows travel southeast across AC-1a, AC-1b, AC-1c, AC-1d, and AC-1e until the canal terminates at the intersection of S Yuba Avenue and W American Avenue.

Canal segments **JC-3e**, **JC-3f**, **JC-3g**, and **JC-3g** are non-relatively permanent tributaries. During our analysis, these aquatic resources did not display flows at a rate/frequency indicative of a relatively permanent water feature consistent with the 2023 Water Rule as Amended. Please see the enclosed Digital Globe imagery and APT reports used during our analysis (Enclosure 8).

Table 1: Relatively permanent water that is not an a (3) tributary.

Name of Aquatic Resource	Cowardin Code	Area (acres)	Length (LF)	Local Waterway
EC-1	R5UB	0.43	2,626	James Bypass
AC-1a	R5UB	5.43	6,672	James Bypass
AC-1b	R5UB	1.84	3,063	James Bypass
AC-1c	R5UB	0.29	369	James Bypass
AC-1d	R5UB	0.96	1,559	James Bypass
AC-1e	R5UB	1.05	1,874	James Bypass

Table 2: Non-relatively permanent tributaries.

Name of Aquatic Resource	Cowardin Code	Area (acres)	Length (LF)	Local Waterway
JC-3e	R5UB	0.017	26	James Bypass
JC-3f	R5UB	0.93	1,346	James Bypass
JC-3g	R5UB	0.74	1,293	James Bypass
JC-3h	R5UB	1.99	2,652	James Bypass

CESPK-RDC-S

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2022-00367

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.

a. *Aquatic Resources Delineation Report: Aquaterra Groundwater Banking Project.*

 June 10, 2022.

b. Digital Globe Aerial Photographs, Archive dated March 14, 2018; January 12, 2020; April 16, 2020; May 27, 2020; June 14, 2021; February 20, 2022; January 27, 2023; March 18, 2023; April 20, 2023; April 28, 2023; June 20, 2023; September 6, 2023; September 24, 2023; October 2, 2023; February 11, 2024; February 22, 2024.

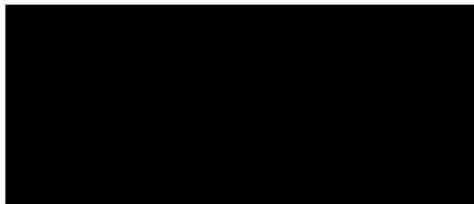
c. Google Earth Pro. Imagery dates: May 21, 2020; April 21, 2021; June 13, 2021; November 27, 2022; May 23, 2023. Accessed April 15, 2024.

d. USACE ERDC Antecedent Precipitation Tool, Dates: March 14, 2018; April 16, 2020; May 27, 2020; June 14, 2021; February 20, 2022; January 27, 2023; March 18, 2023; April 28, 2023; June 20, 2023; September 24, 2023; October 2, 2023; February 22, 2024.

e. USGS National Hydrography Dataset. Accessed March 20, 2024.

10. OTHER SUPPORTING INFORMATION. During our analysis, the APT tool was utilized to confirm that dates with normal climatic and hydrologic conditions were used to determine tributary flow regimes. Tributary reaches that were determined to be non-relatively permanent (EC-1, JC-3e, JC-3f, JC-3g, and JC-3h) did not display flowing or standing water under “normal” or “wetter than normal” conditions, as determined by the APT results included in Enclosure 8.

11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR’s structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.



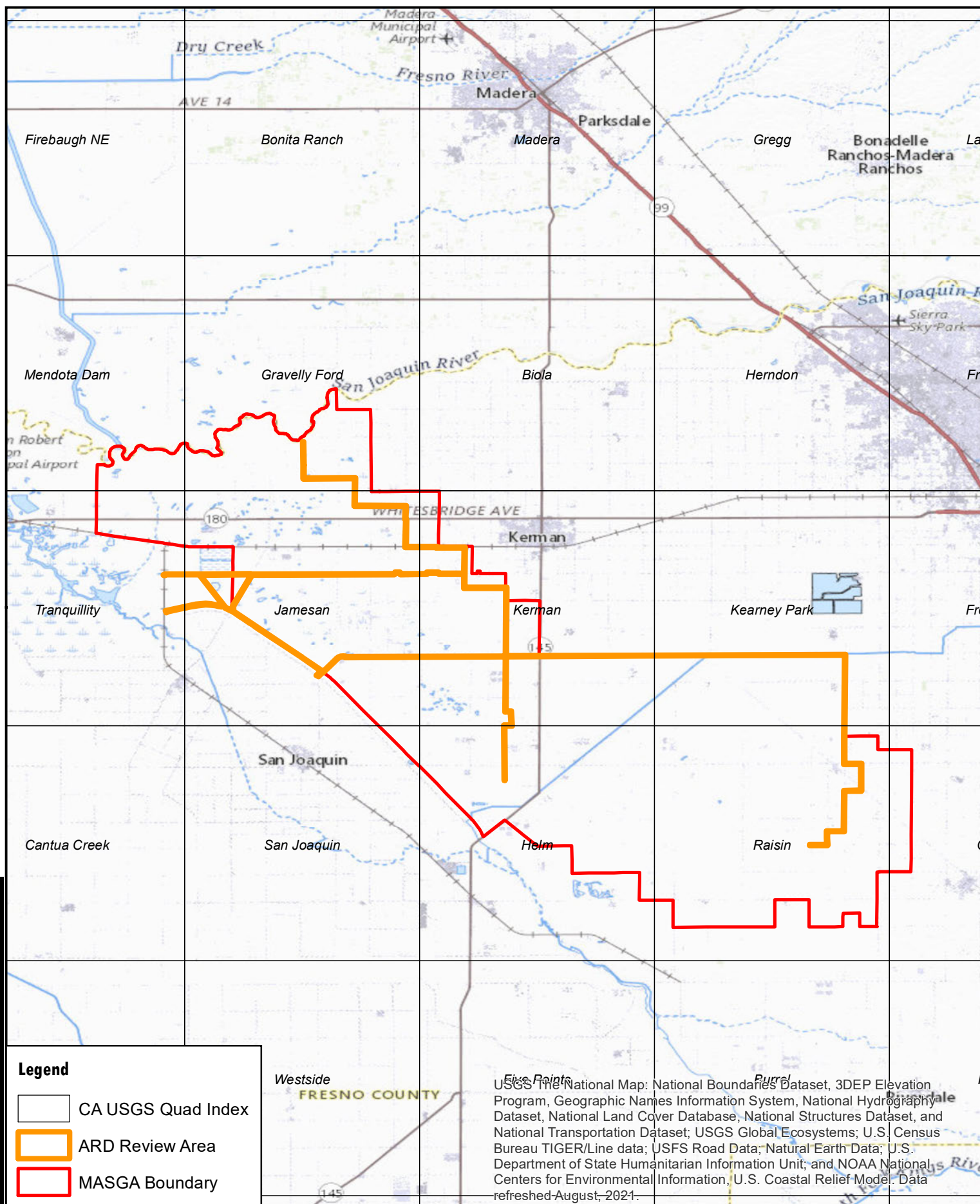
CESPK-RDC-S

SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), SPK-2022-00367

8 Encls

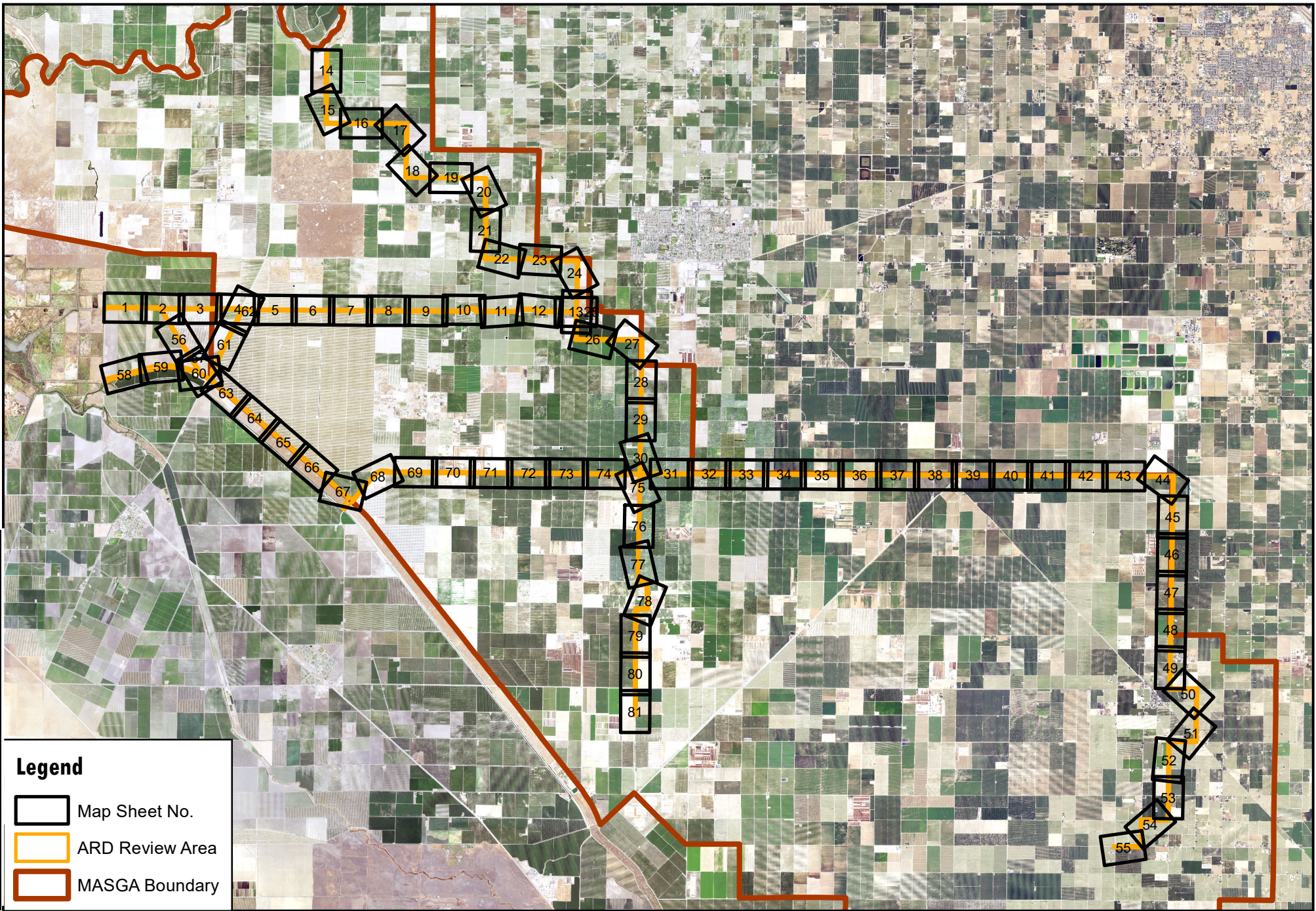
1. Aquatic Resources DelineationMap
2. Jensen Canal Sections 1 and 2 Flowpath Map
3. Jensen Canal Section 3 Flowpath Map
4. Enterprise Canal Section 2 Flowpath Map
5. Dry Creek Canal Flowpath Map
6. Digital Globe Aerial Imagery of a (3) Tributaries
7. Antecedent Precipitation Tool (APT) Reports
8. Digital Globe Aerial Imagery and APT Reports of Non-RPW Tributaries







**Figure B-1. USGS Quadrangle Index**





### Legend

-  Map Sheet No.
-  ARD Review Area
-  MASGA Boundary



1 inch = 12,500 feet  
0 6,250 12,500  
Feet

Date: 5/23/2022

## ARD Map Index

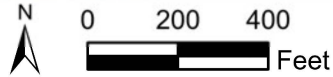
MAGSA Aquaterra Waterbank Project





**Legend**

- ARD Review Area
- Other Waters
- OHWM Transect Points
- ARD Photo Points



ARD Map Figure No. 1 (revised)

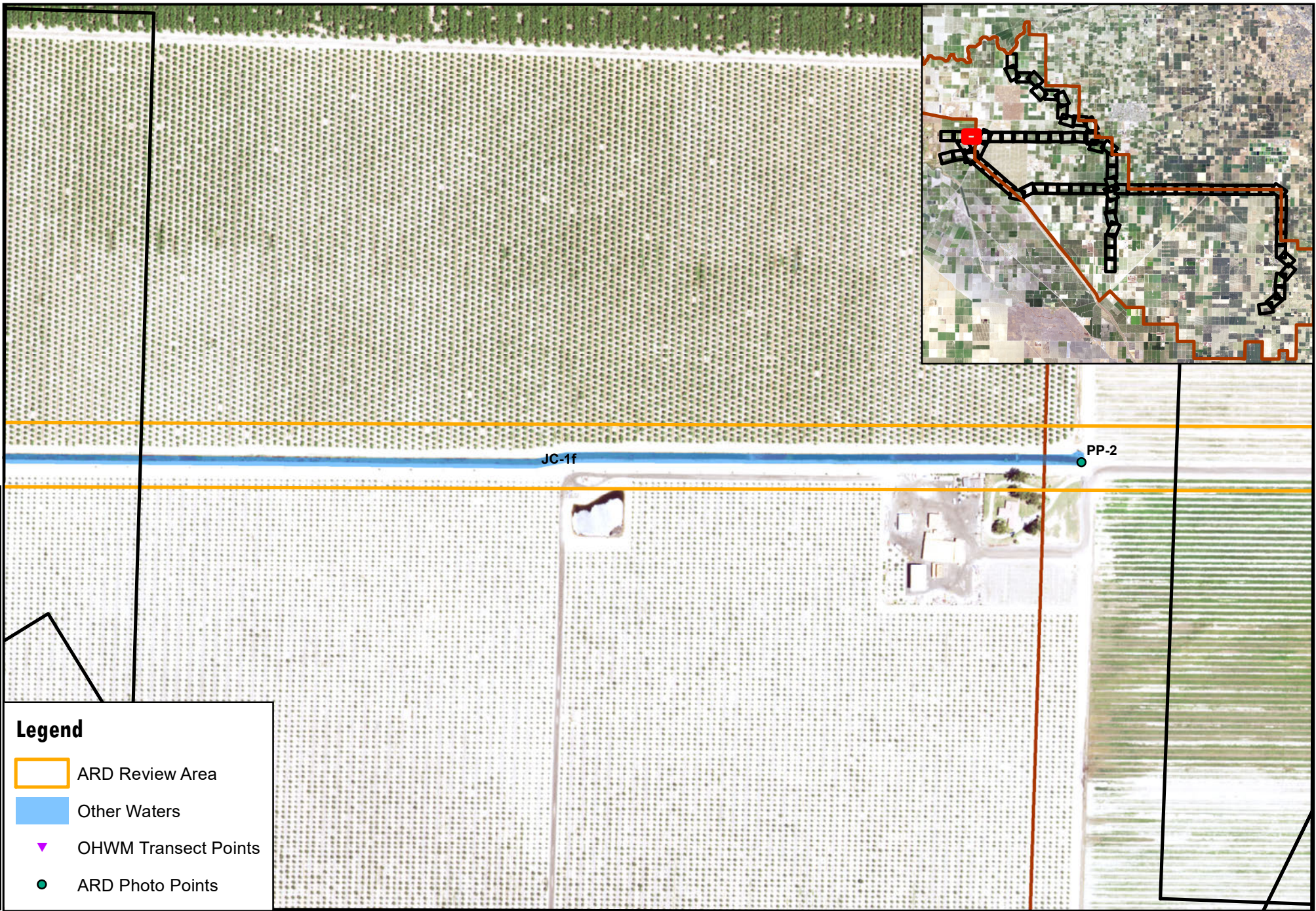




0 200 400 Feet

ARD Map Figure No. 2 (revised)



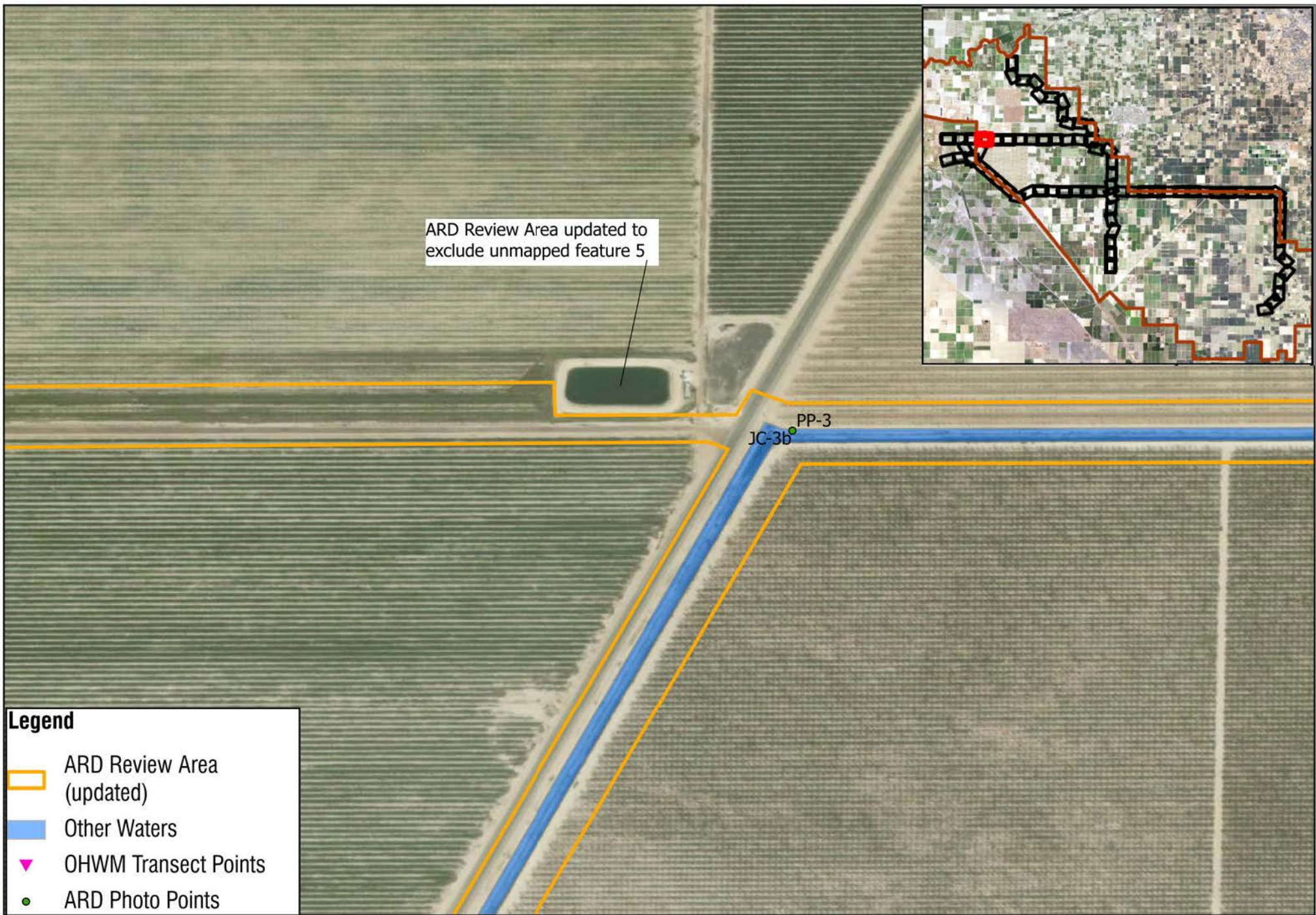


**ARD Map Figure No.3**

Date: 5/26/2022

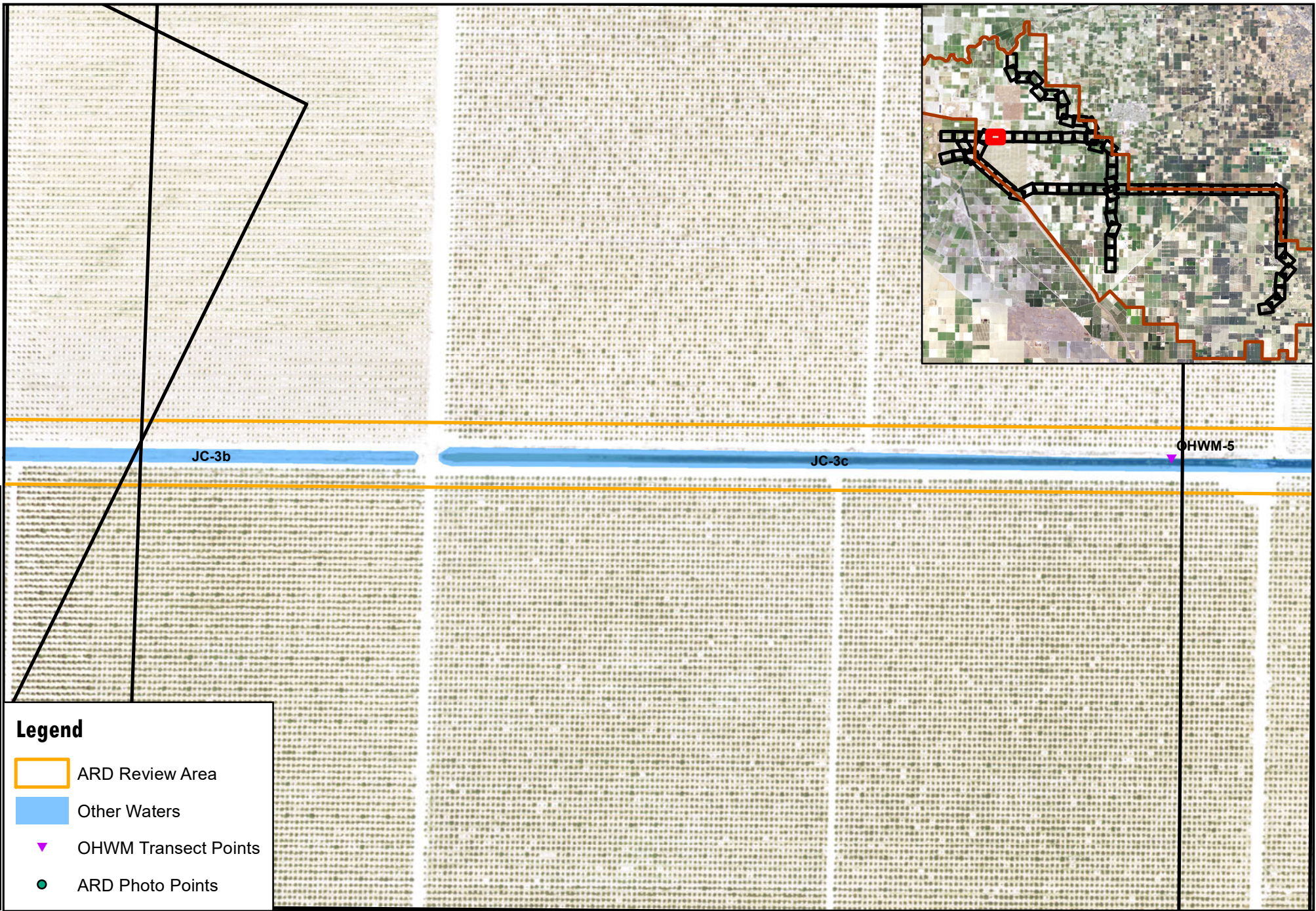
MAGSA Aquaterra Waterbank Project





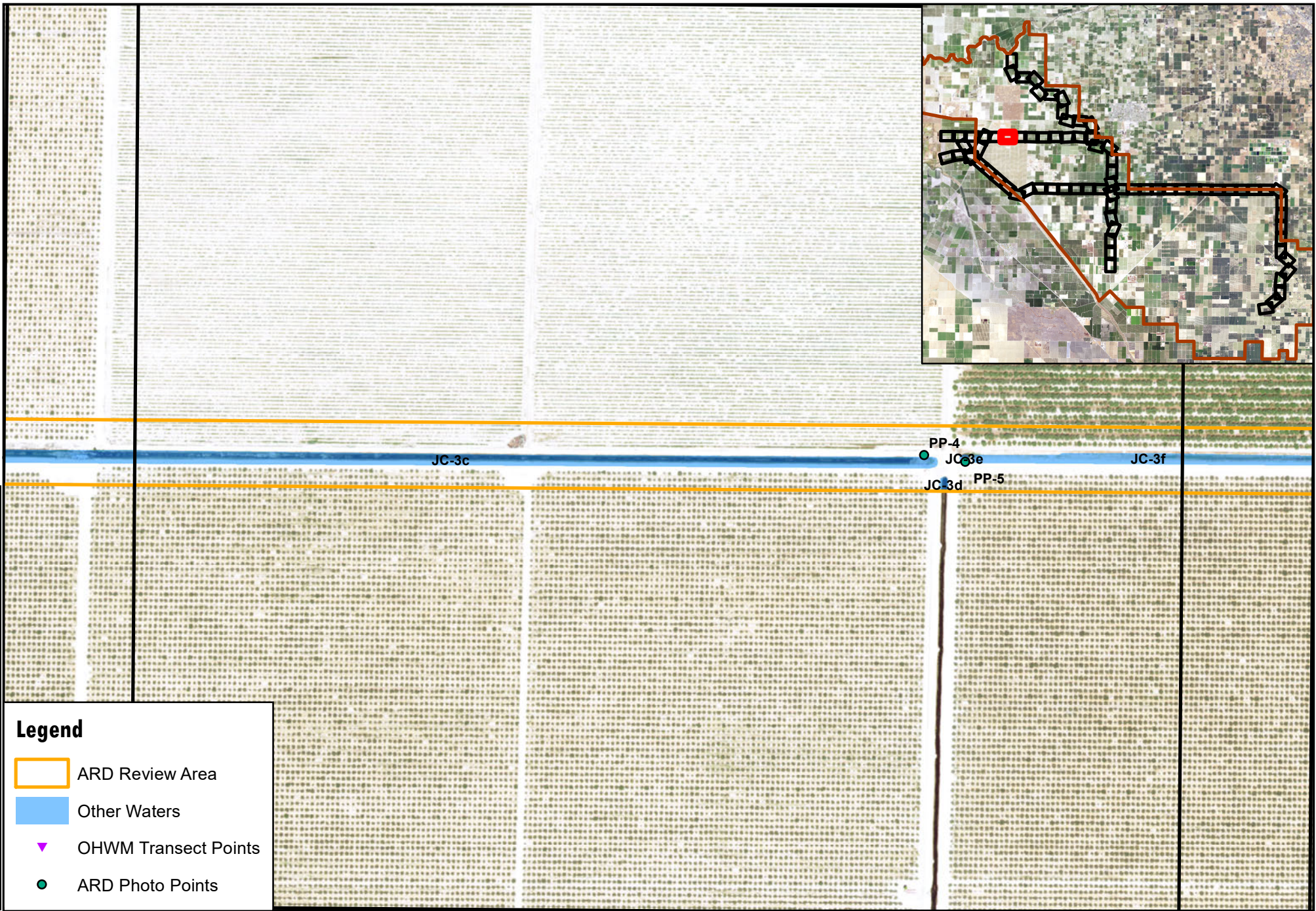
ARD Map Figure No. 4 (revised)





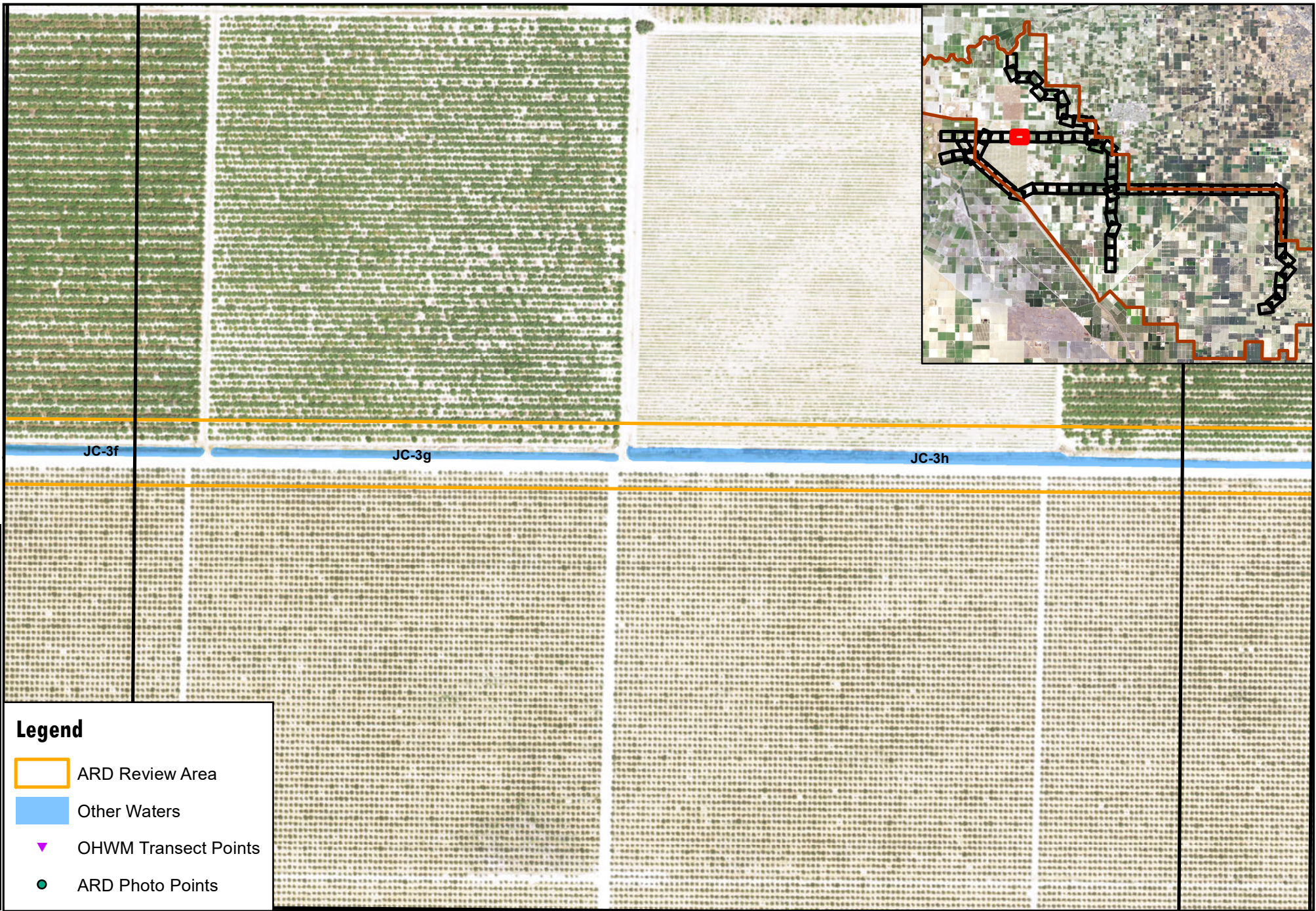
**ARD Map Figure No.5**





**ARD Map Figure No.6**





ARD Map Figure No.7





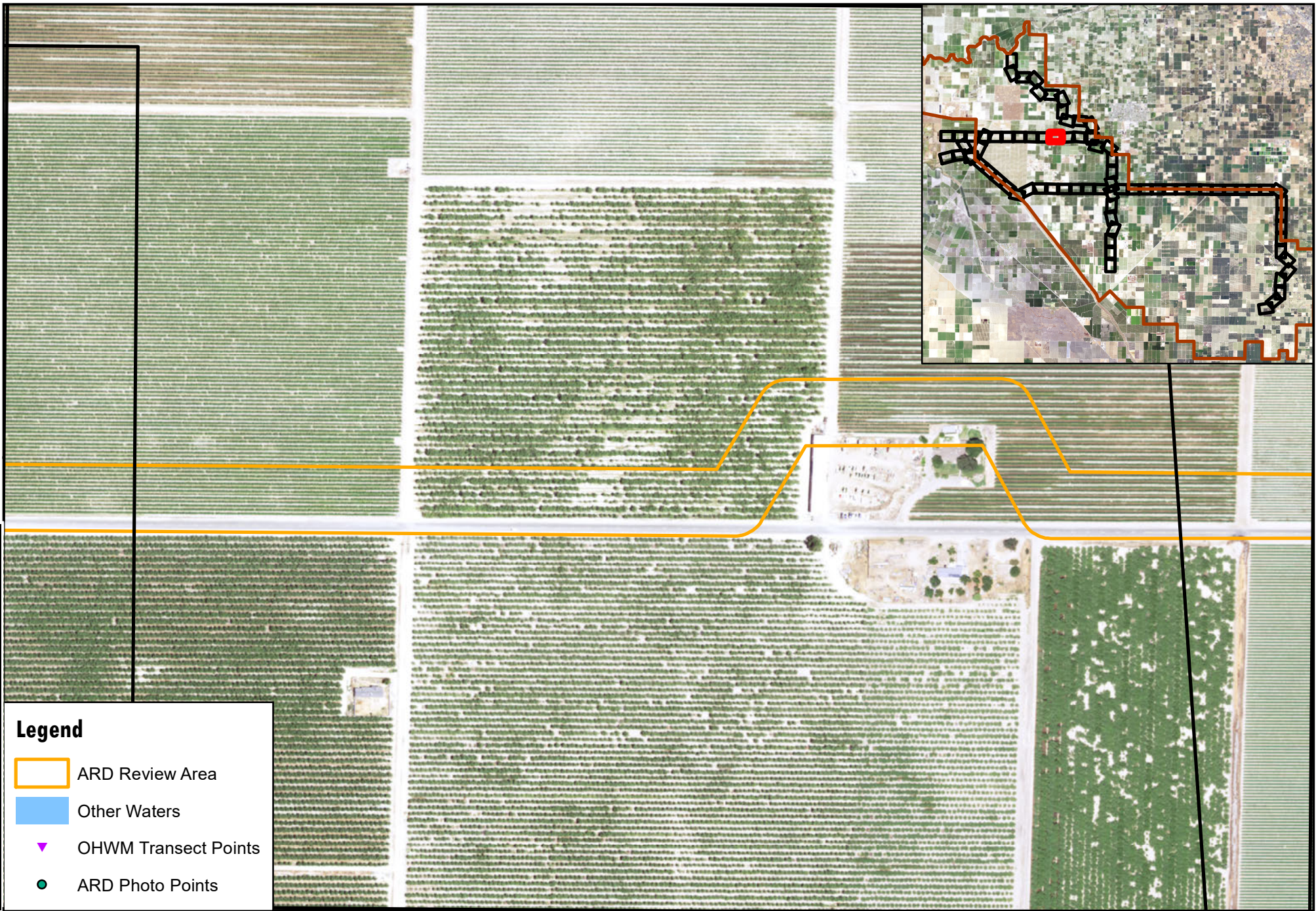
**ARD Map Figure No.8**





**ARD Map Figure No.9**





## Legend

- ARD Review Area
- Other Waters
- OHWM Transect Points
- ARD Photo Points



1 inch = 400 feet

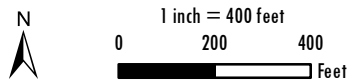
0 200 400 Feet

Date: 5/23/2022

ARD Map Figure No.10

MAGSA Aquaterra Waterbank Project





Date: 5/23/2022

**ARD Map Figure No.11**

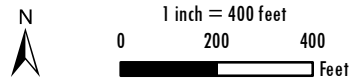
MAGSA Aquaterra Waterbank Project





**ARD Map Figure No.12**



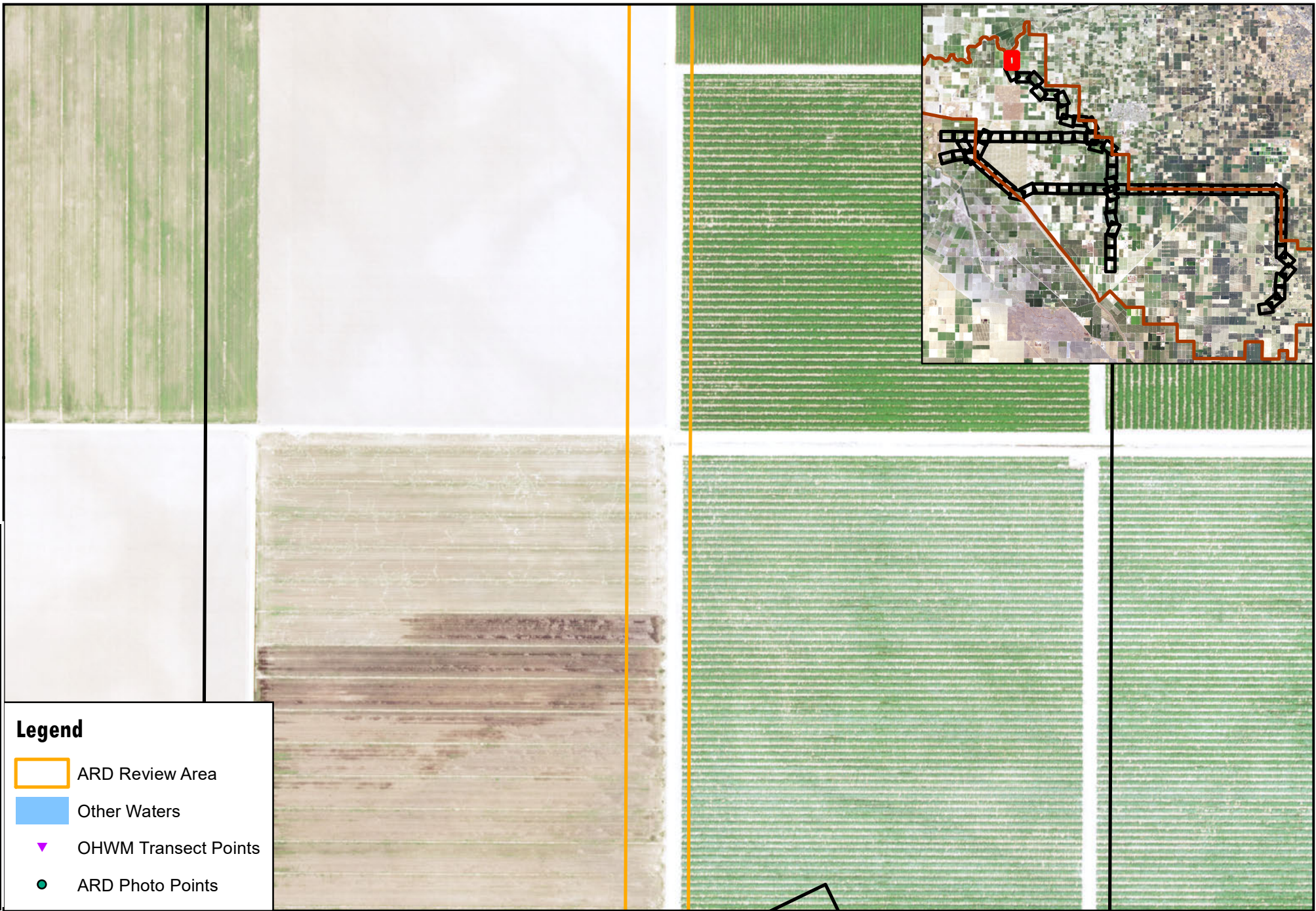


Date: 5/23/2022





**ARD Map Figure No.13**

MAGSA Aquaterra Waterbank Project





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022





**ARD Map Figure No.14**

MAGSA Aquaterra Waterbank Project





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



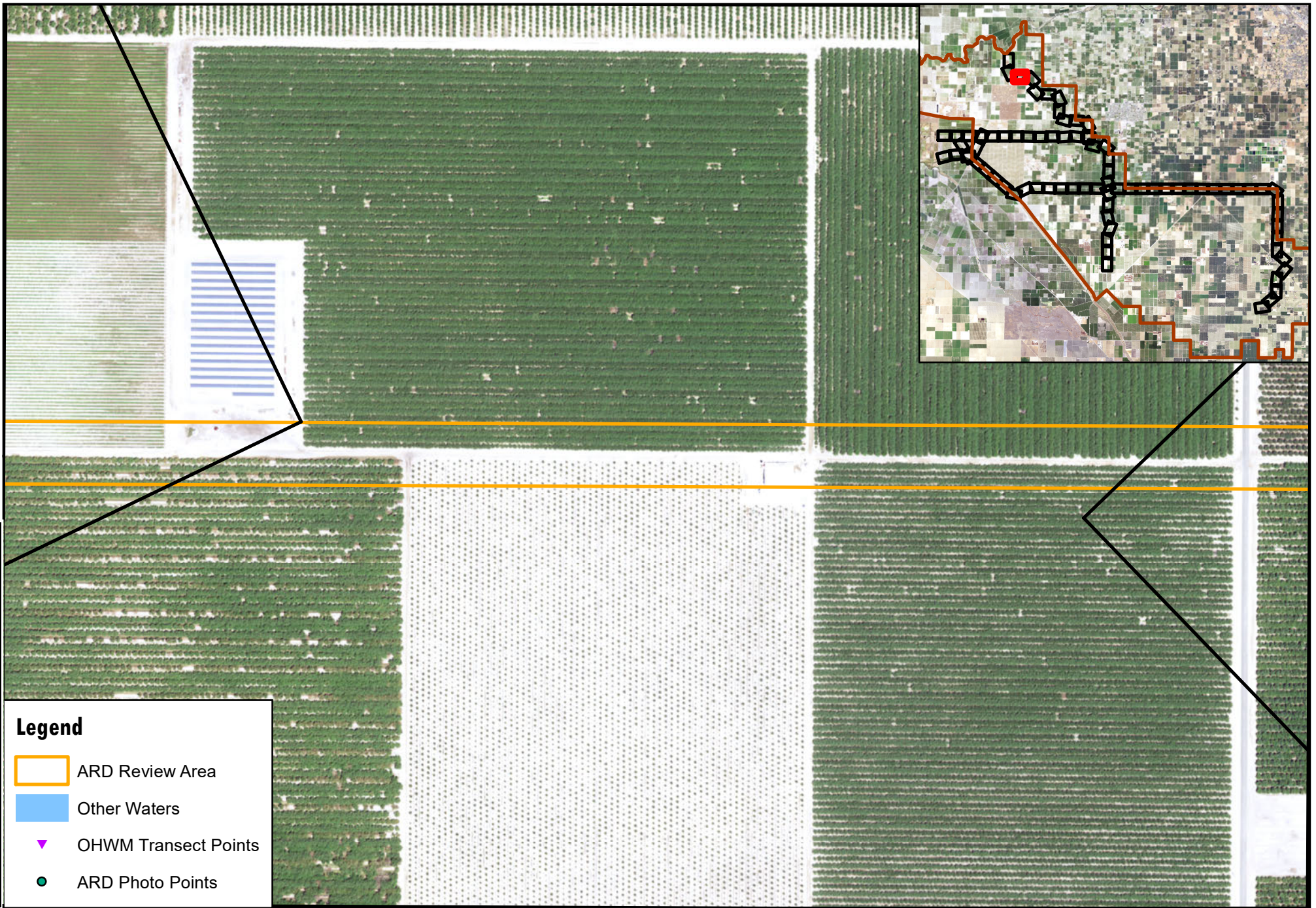
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.15**

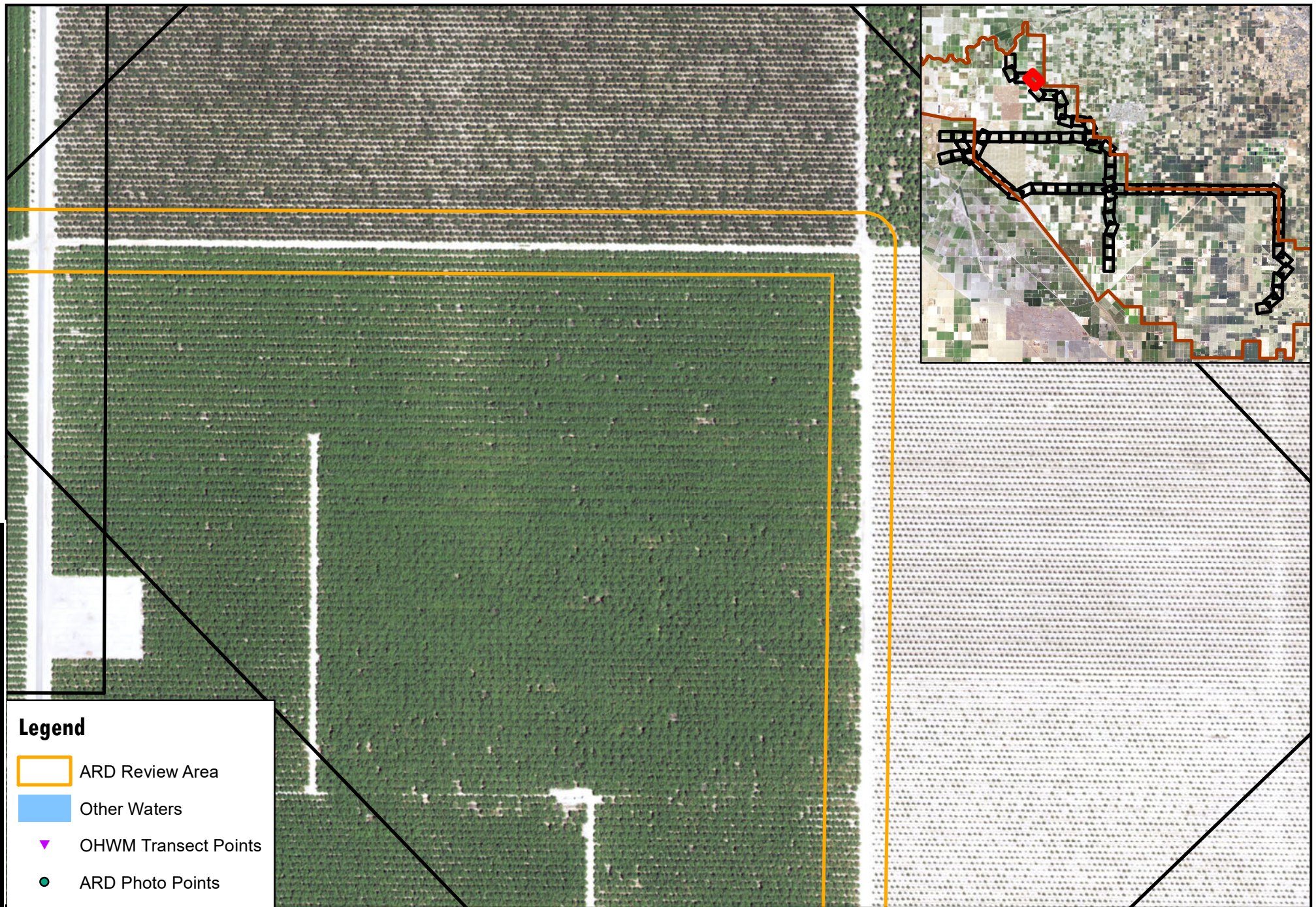
MAGSA Aquaterra Waterbank Project





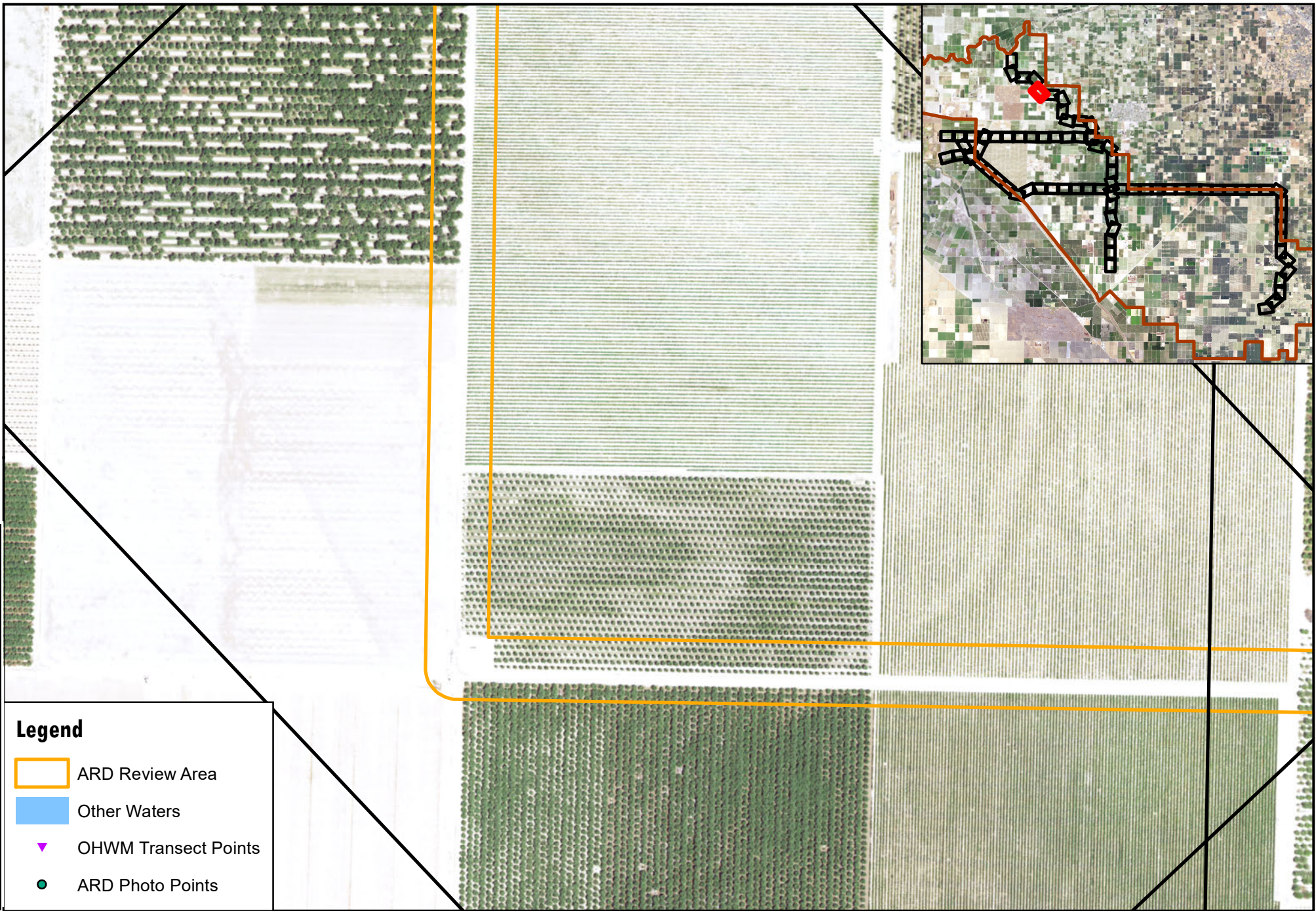
**ARD Map Figure No.16**





**ARD Map Figure No.17**





Date: 5/23/2022

**ARD Map Figure No.18**



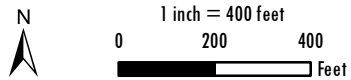


ARD Map Figure No.19

Date: 5/23/2022

MAGSA Aquaterra Waterbank Project









Date: 5/23/2022

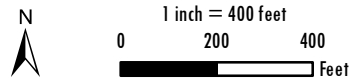
**ARD Map Figure No.20**





**Legend**

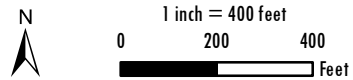
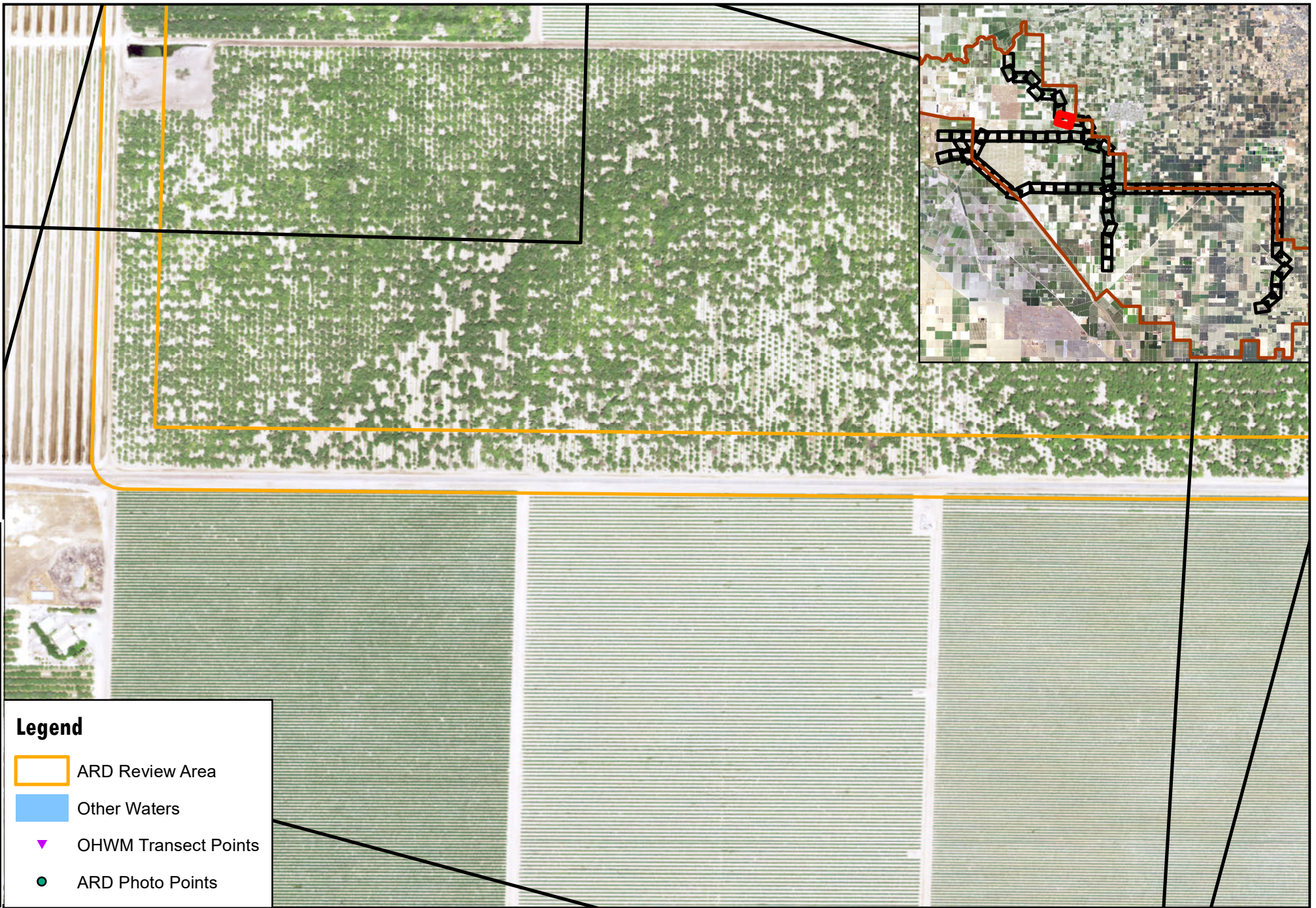
-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



Date: 5/23/2022

**ARD Map Figure No.21**



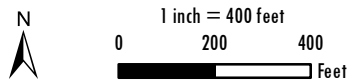


Date: 5/23/2022

**ARD Map Figure No.22**

MAGSA Aquaterra Waterbank Project



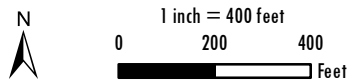
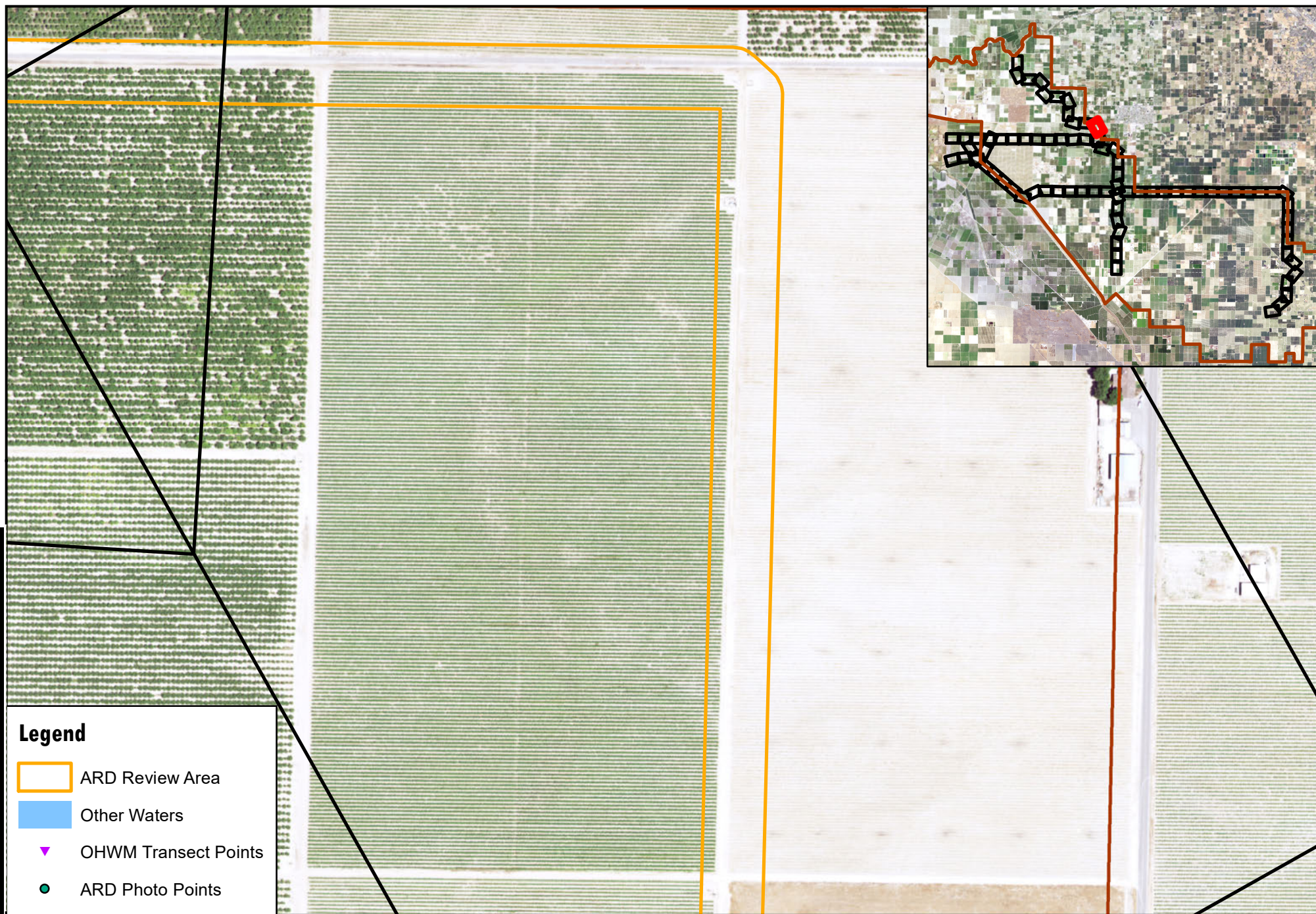


Date: 5/23/2022

**ARD Map Figure No.23**

MAGSA Aquaterra Waterbank Project





Date: 5/23/2022

**ARD Map Figure No.24**



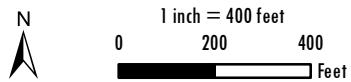


Date: 5/23/2022

**ARD Map Figure No.25**

MAGSA Aquaterra Waterbank Project



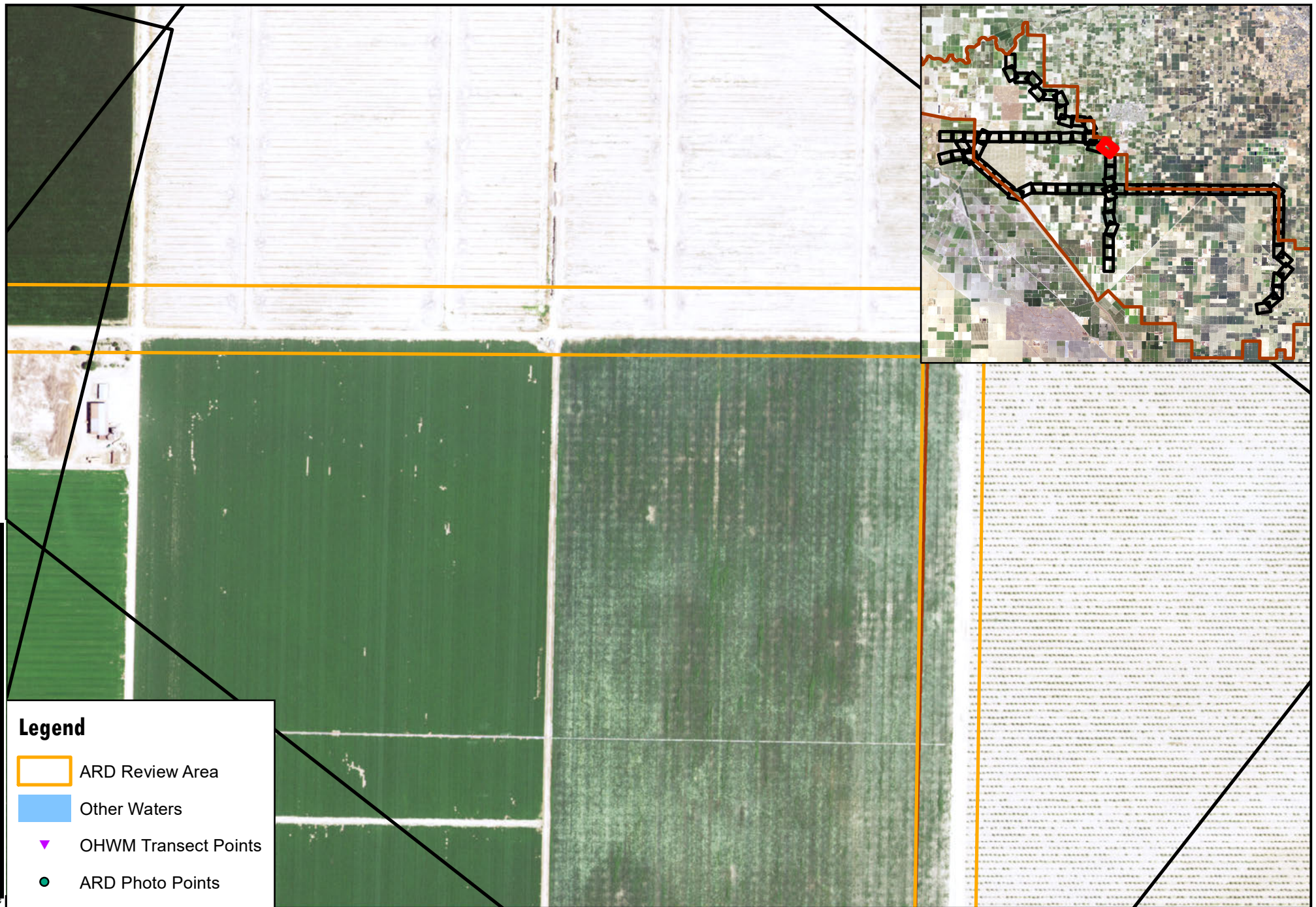


Date: 5/23/2022

**ARD Map Figure No.26**

MAGSA Aquaterra Waterbank Project

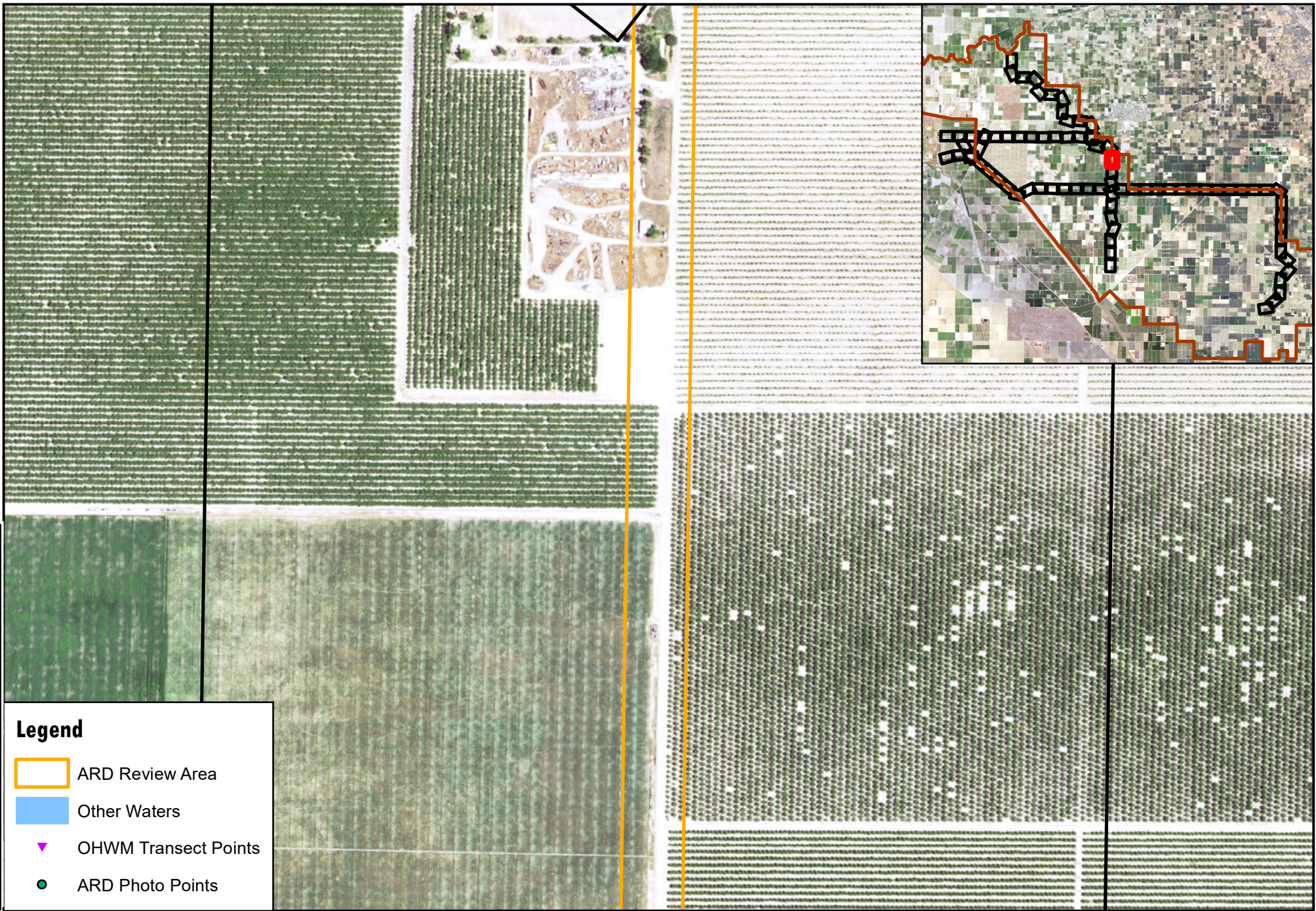








**ARD Map Figure No.27**

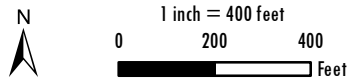
**MAGSA Aquaterra Waterbank Project**





**Legend**

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



Date: 5/23/2022





**ARD Map Figure No.28**

MAGSA Aquaterra Waterbank Project





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



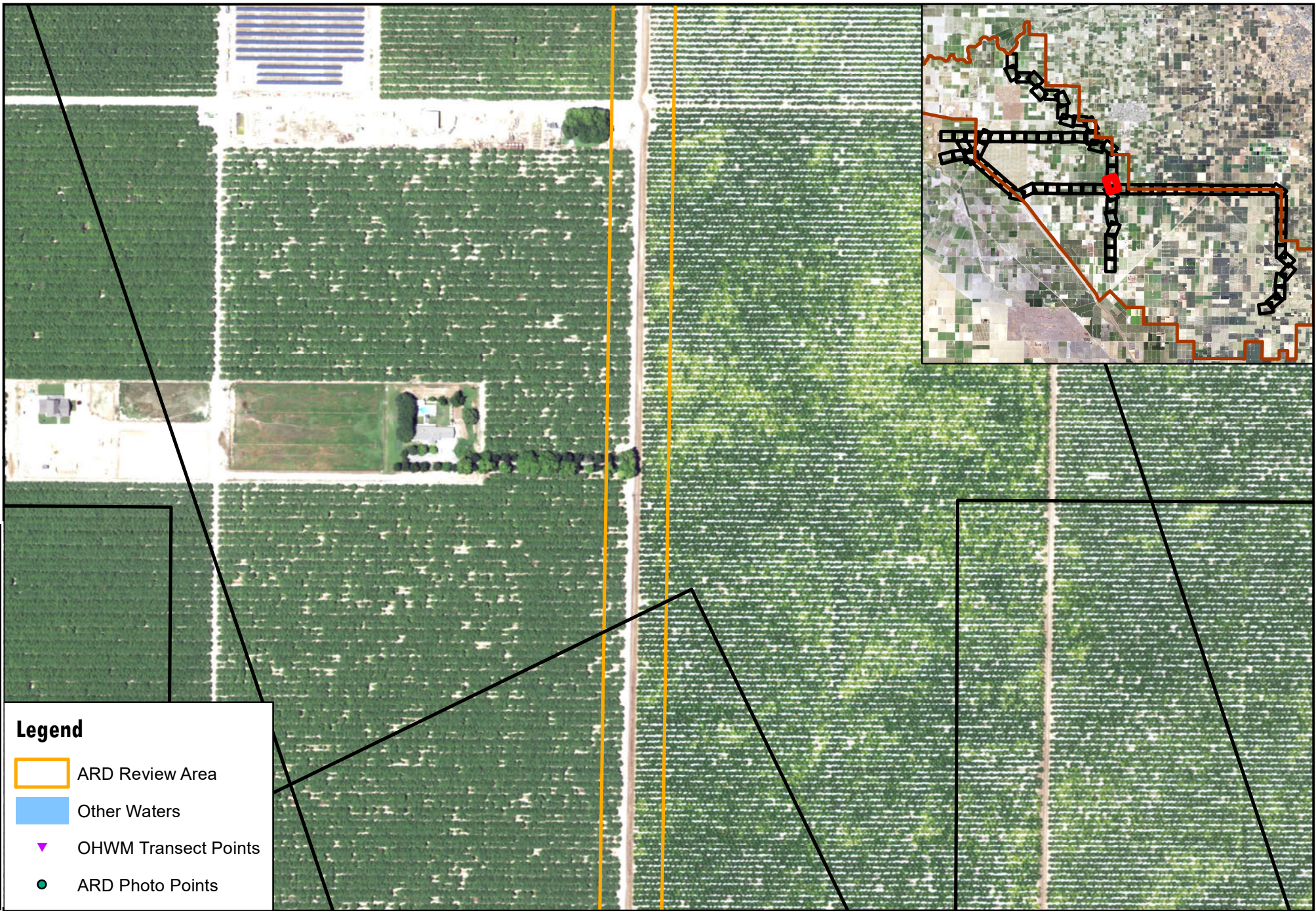
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.29**

MAGSA Aquaterra Waterbank Project





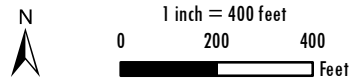
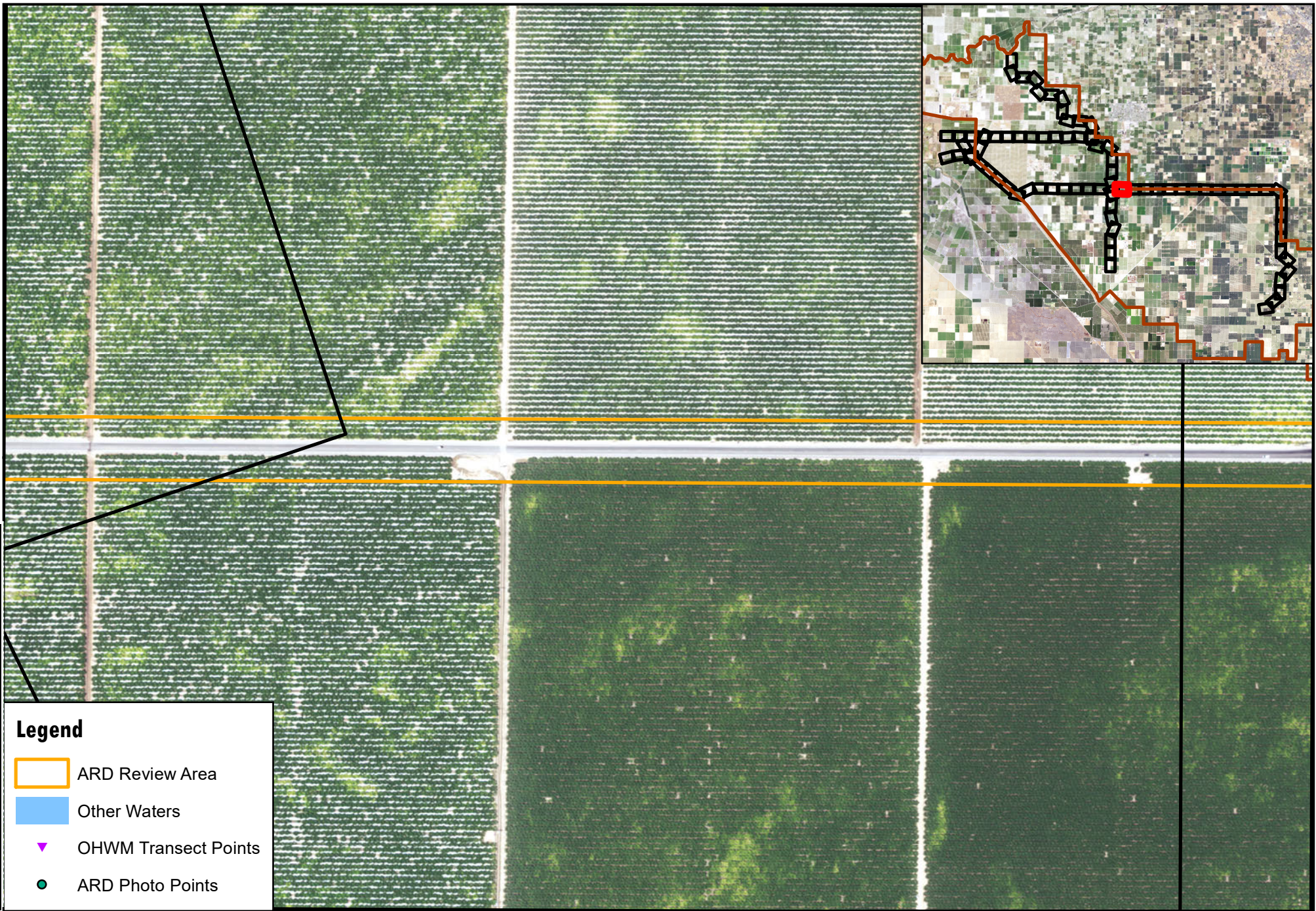
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.30**

MAGSA Aquaterra Waterbank Project



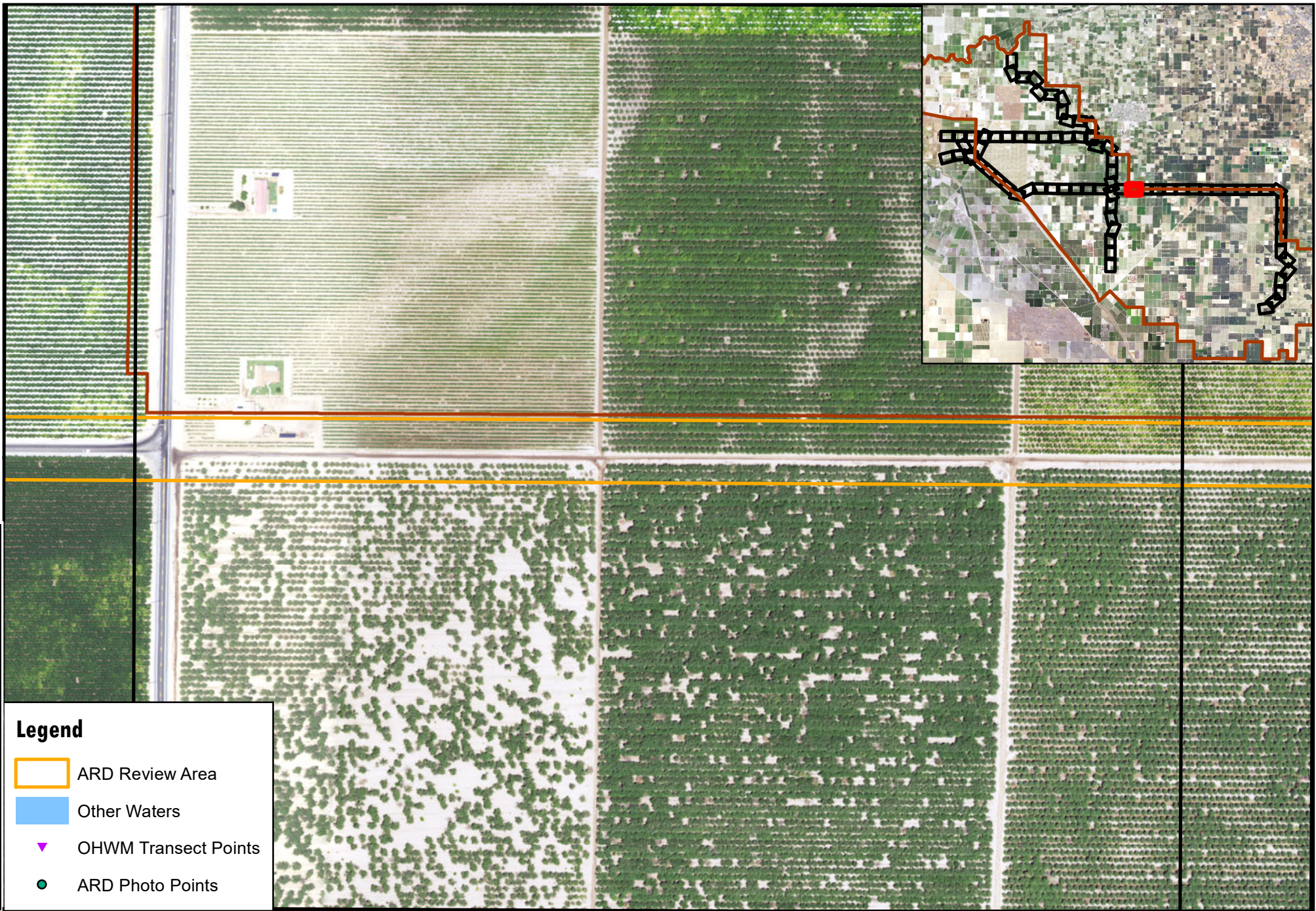


Date: 5/23/2022

**ARD Map Figure No.31**

MAGSA Aquaterra Waterbank Project





### Legend

- ARD Review Area
- Other Waters
- OHWM Transect Points
- ARD Photo Points

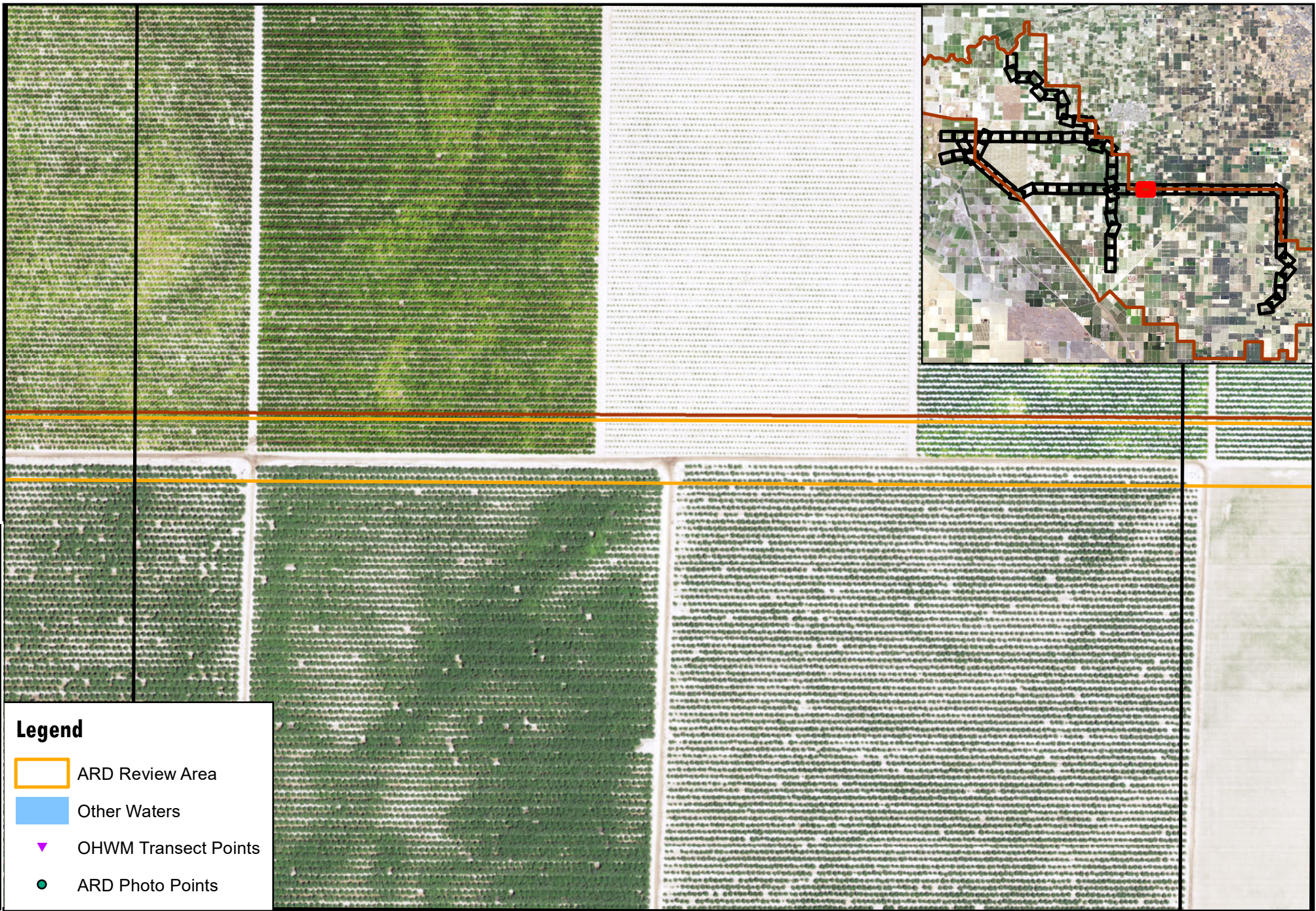


1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

ARD Map Figure No.32





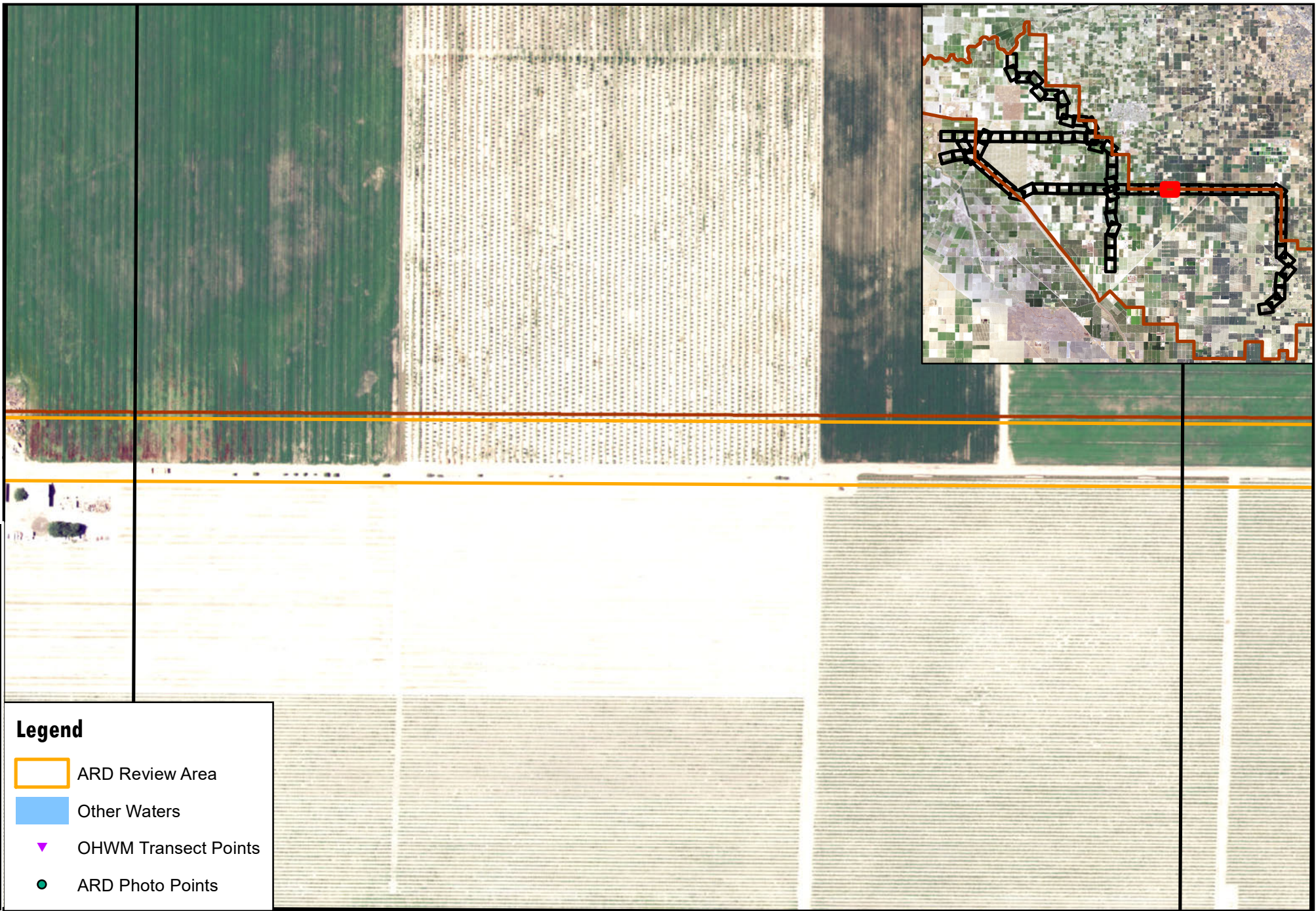
**ARD Map Figure No.33**





**ARD Map Figure No.34**





### Legend

- ARD Review Area
- Other Waters
- OHHM Transect Points
- ARD Photo Points



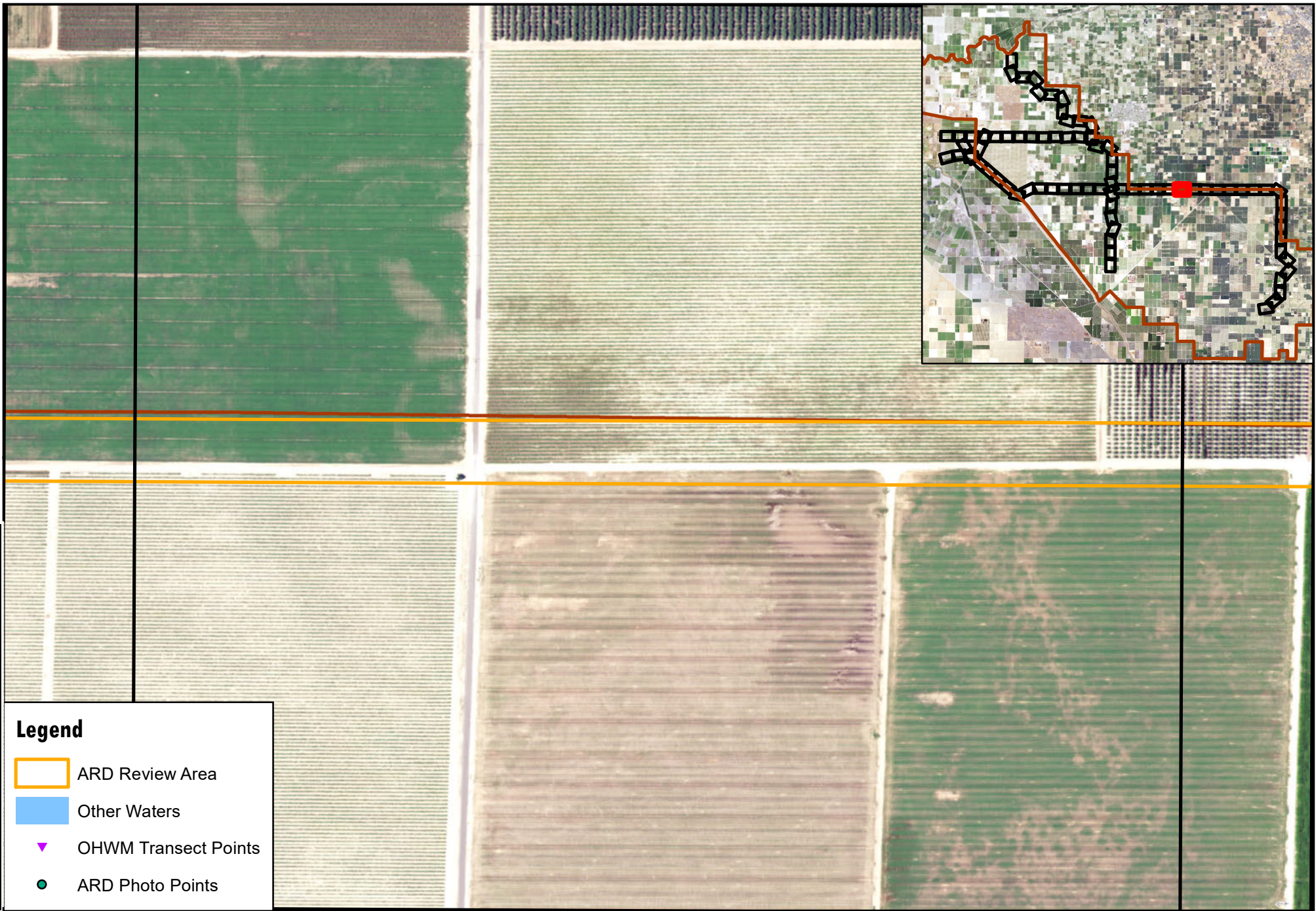
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022





**ARD Map Figure No.35**

MAGSA Aquaterra Waterbank Project





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.36**

MAGSA Aquaterra Waterbank Project





**ARD Map Figure No.37**





**ARD Map Figure No.38**





0 200 400  
Feet

ARD Map Figure No. 39 (revised)





Date Saved: 2/1/2024 9:26 AM

MAGSA Aquaterra Waterbank Project





**Legend**

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.40**

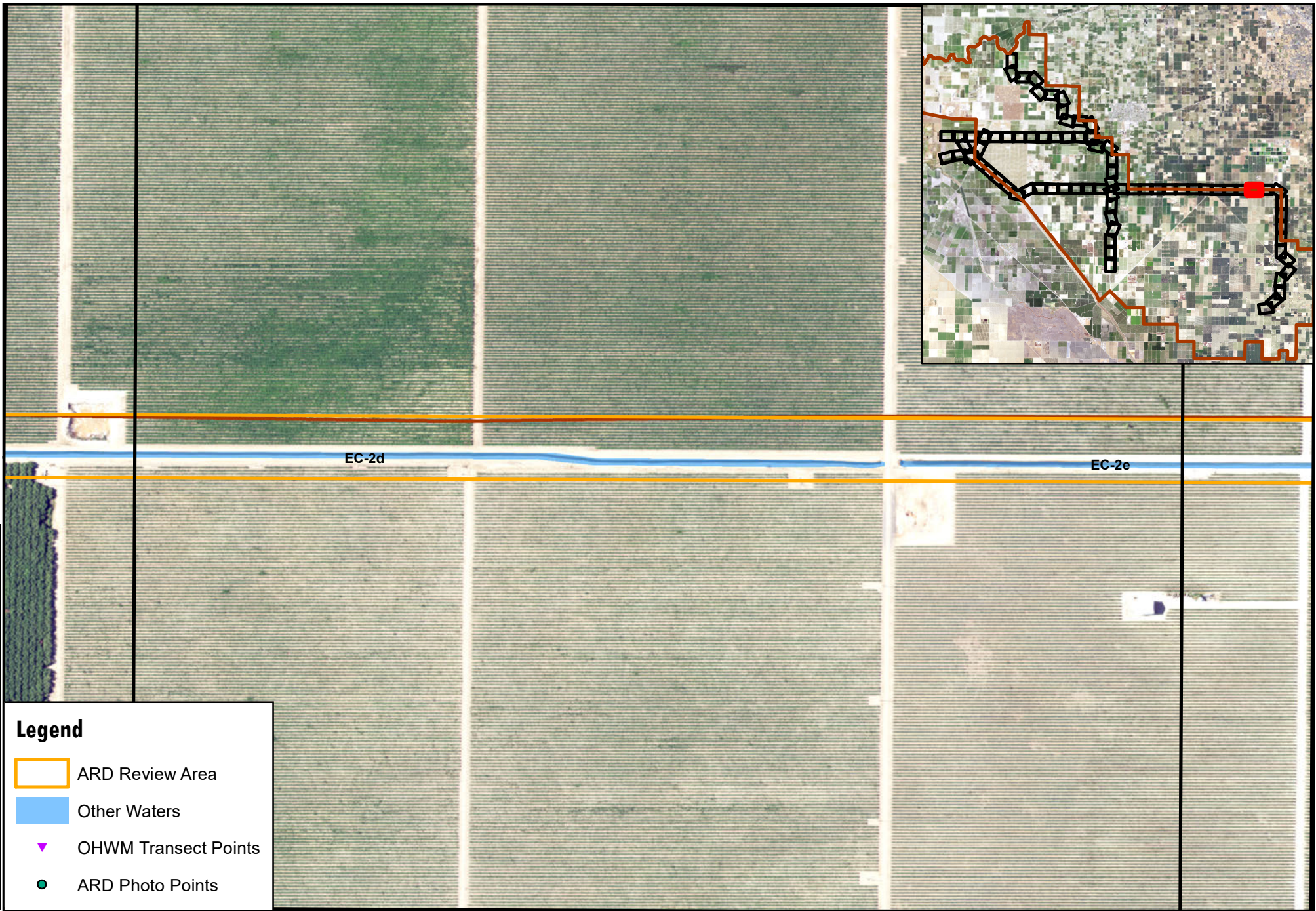
MAGSA Aquaterra Waterbank Project









**ARD Map Figure No.41**





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



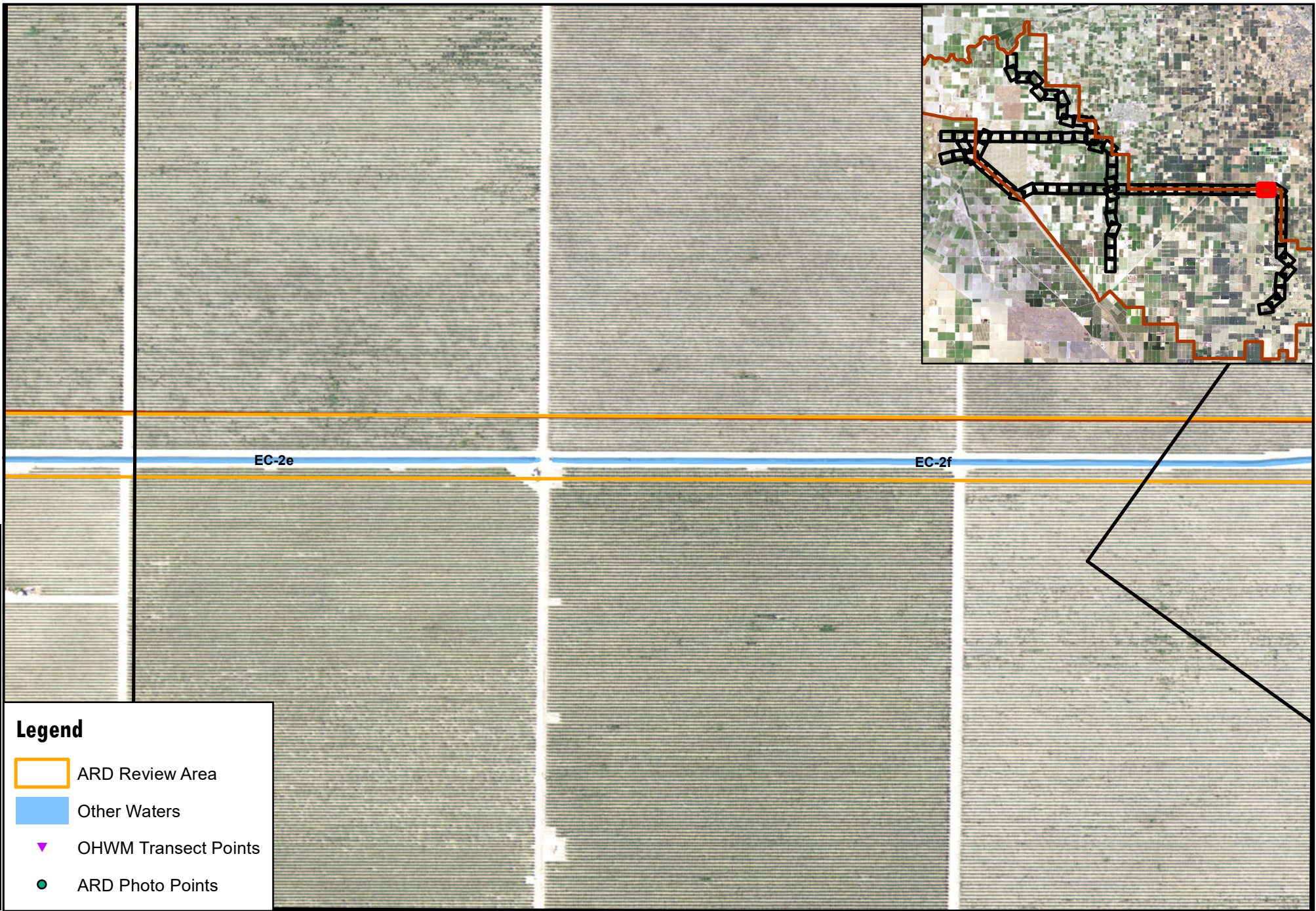
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.42**

MAGSA Aquaterra Waterbank Project



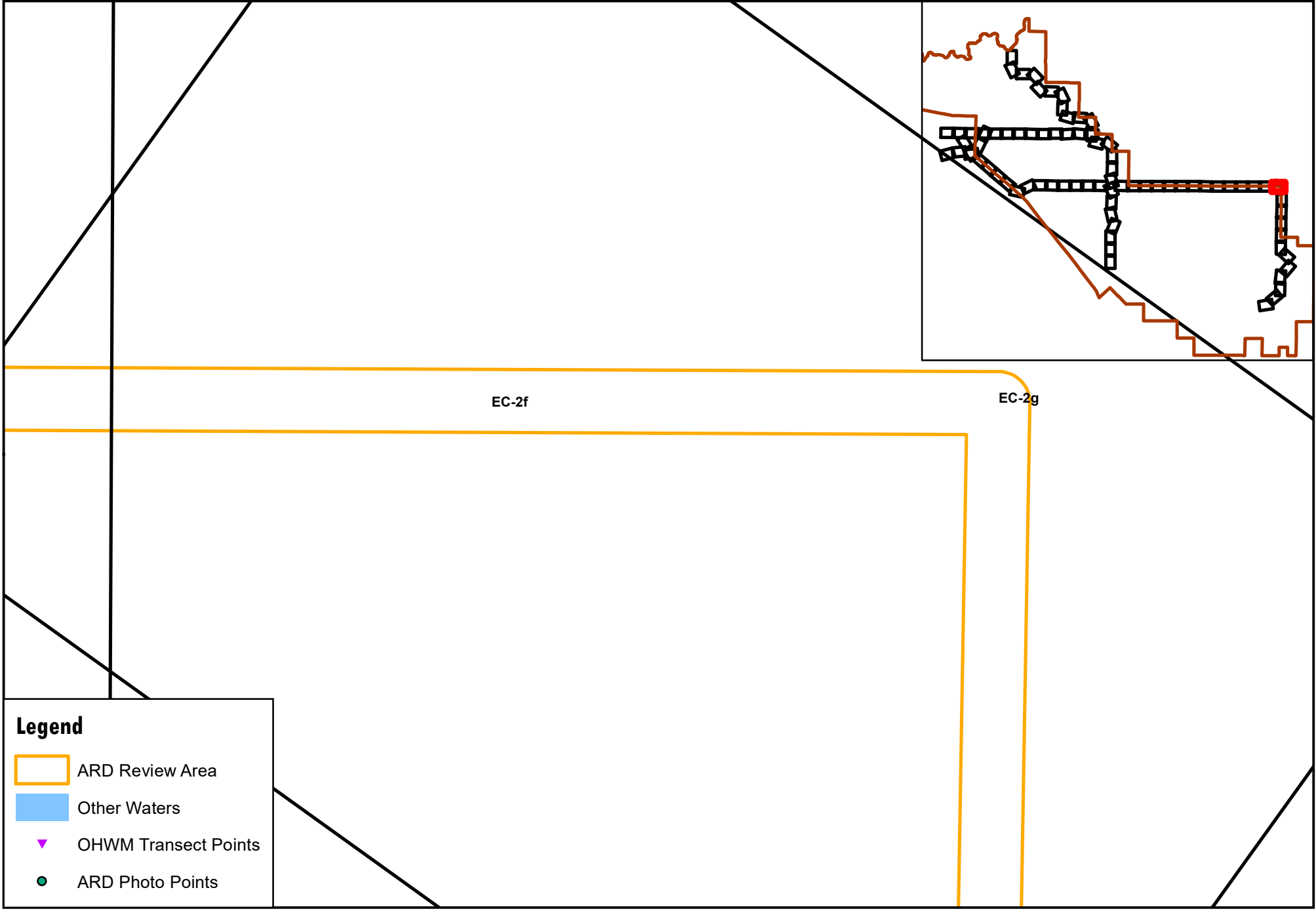


**ARD Map Figure No.43**





Date: 5/23/2022

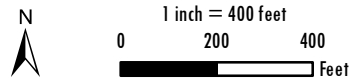
MAGSA Aquaterra Waterbank Project





**Legend**

-  ARD Review Area
-  Other Waters
-  OHWL Transect Points
-  ARD Photo Points







Date: 5/26/2022

**ARD Map Figure No.44**





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



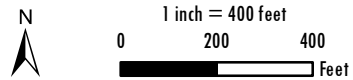
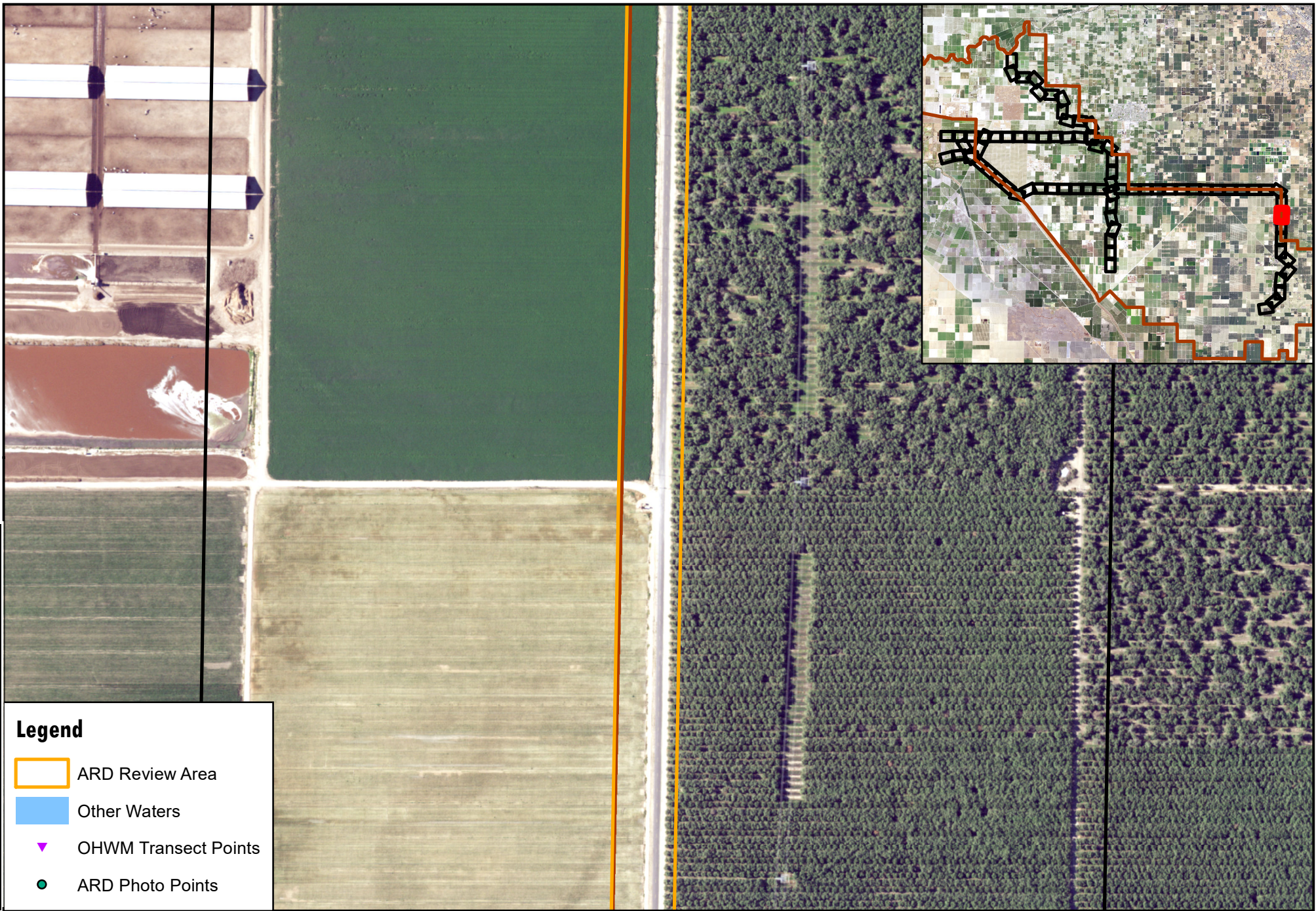
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.45**

MAGSA Aquaterra Waterbank Project



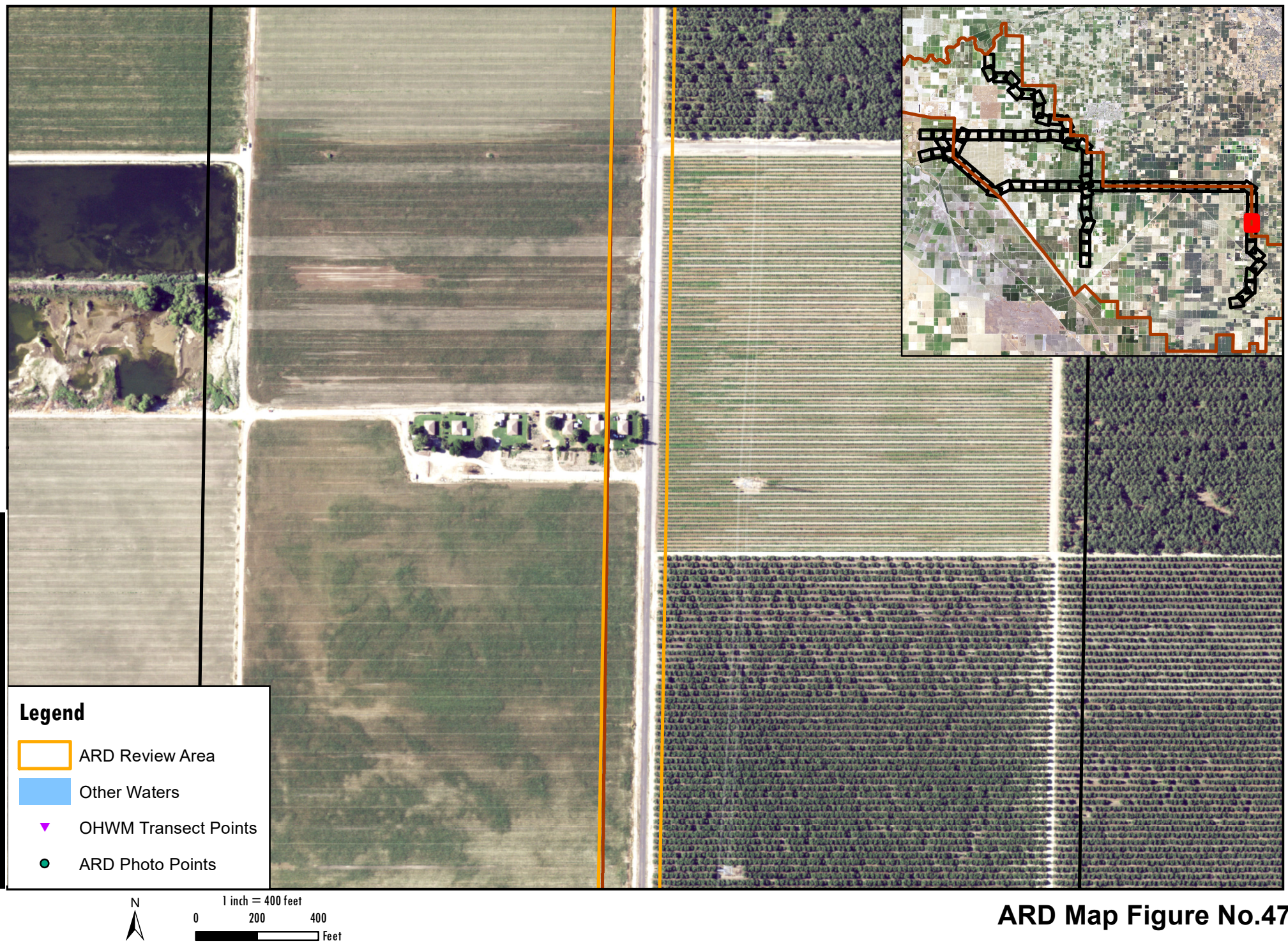


Date: 5/23/2022

**ARD Map Figure No.46**

MAGSA Aquaterra Waterbank Project

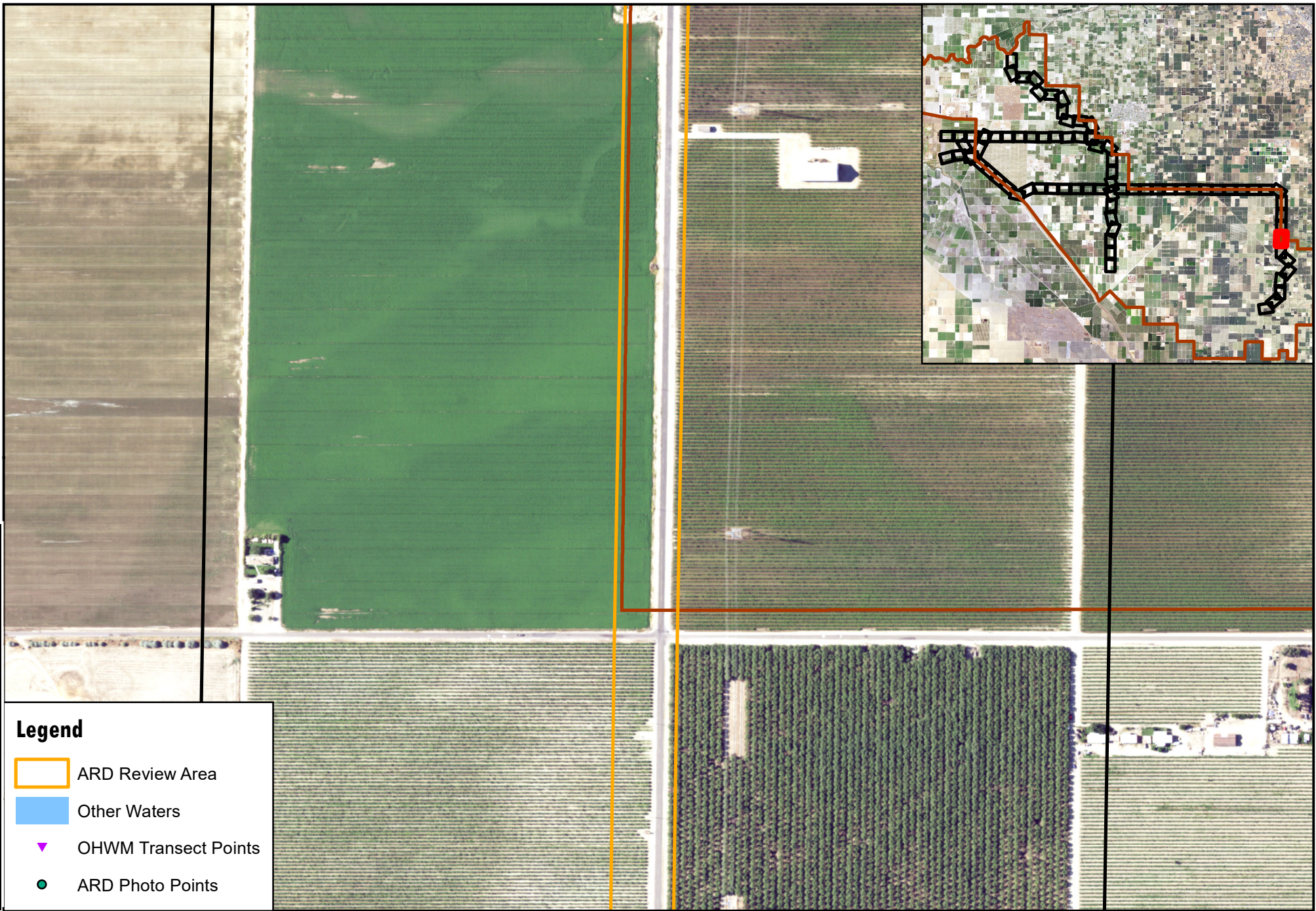








**ARD Map Figure No.47**

MAGSA Aquaterra Waterbank Project





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



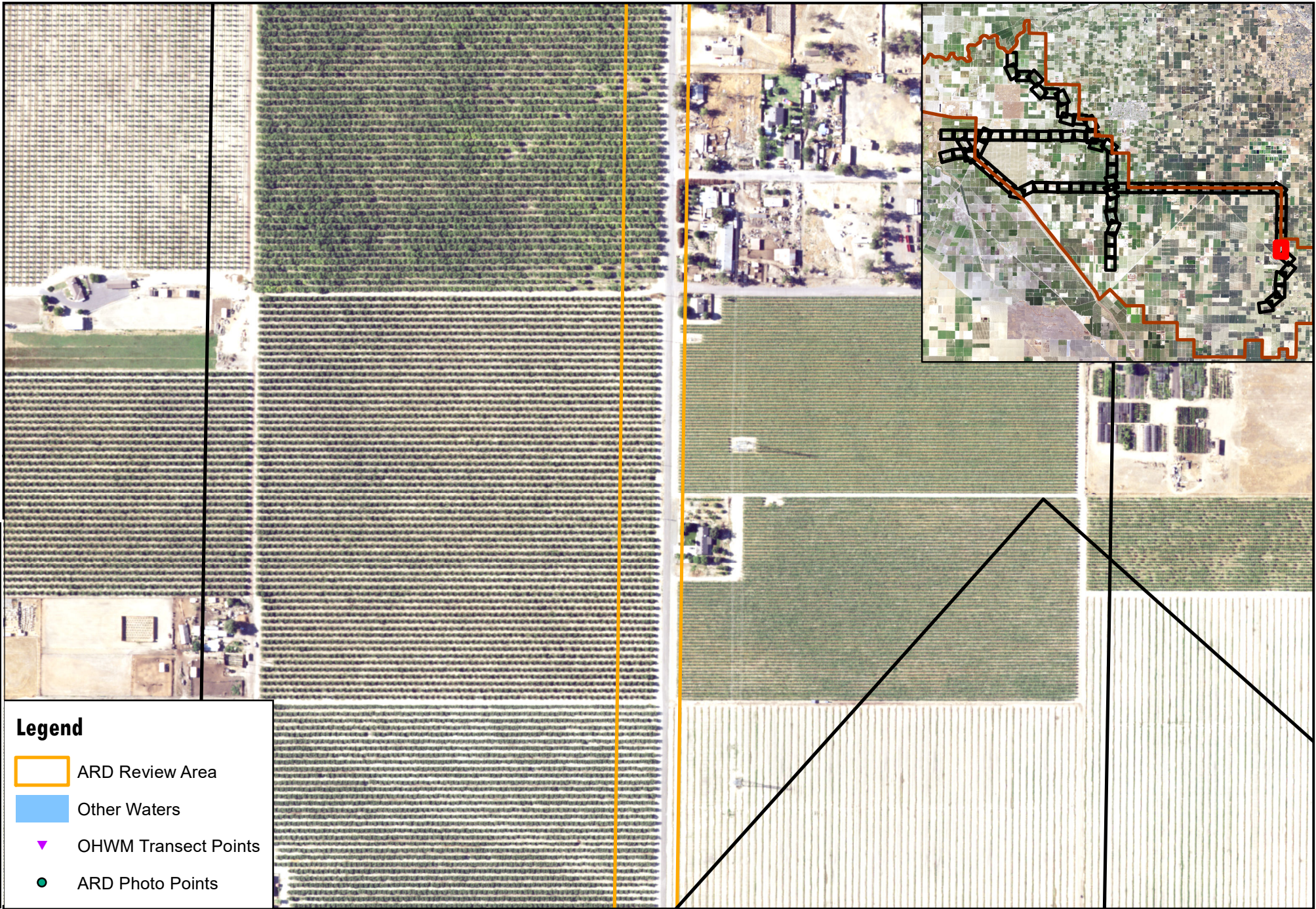
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.48**

MAGSA Aquaterra Waterbank Project





### Legend

- ARD Review Area
- Other Waters
- OHWM Transect Points
- ARD Photo Points



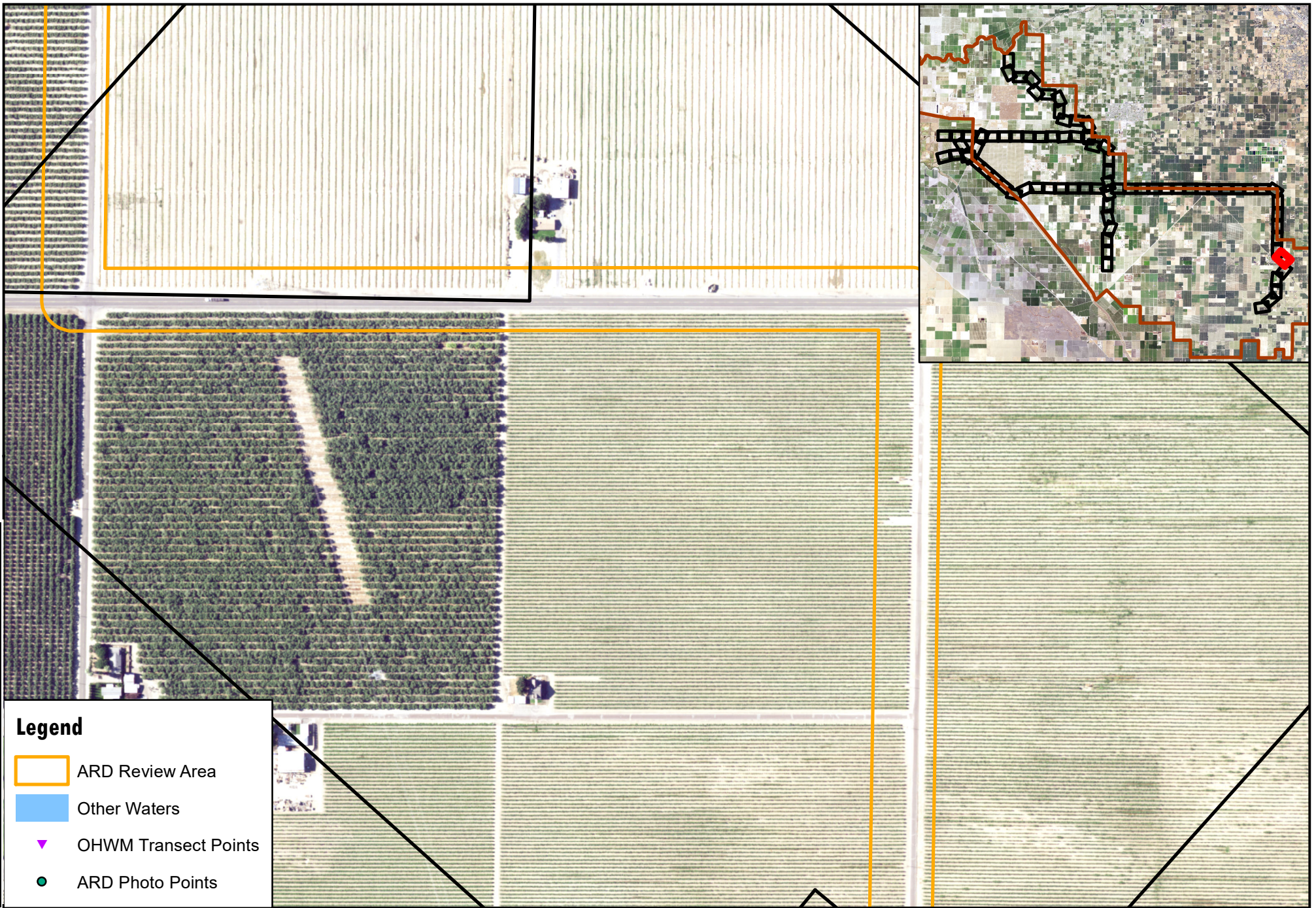
1 inch = 400 feet  
0 200 400 Feet

Date: 5/23/2022





ARD Map Figure No.49

MAGSA Aquaterra Waterbank Project





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



1 inch = 400 feet

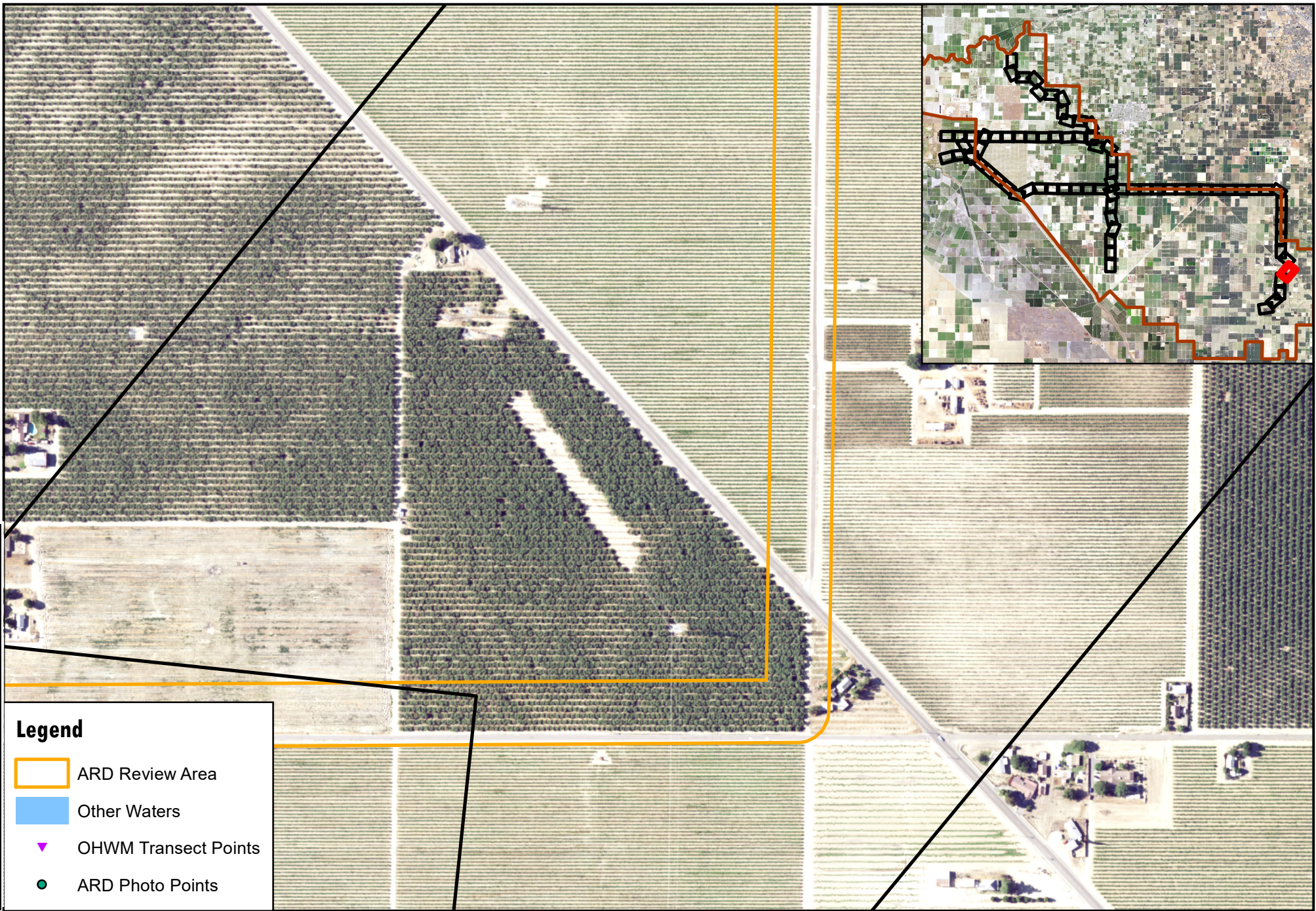
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.50**

MAGSA Aquaterra Waterbank Project





**ARD Map Figure No.51**





### Legend

- ARD Review Area
- Other Waters
- OHWM Transect Points
- ARD Photo Points



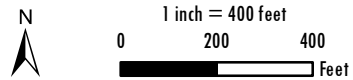
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.52**

MAGSA Aquaterra Waterbank Project



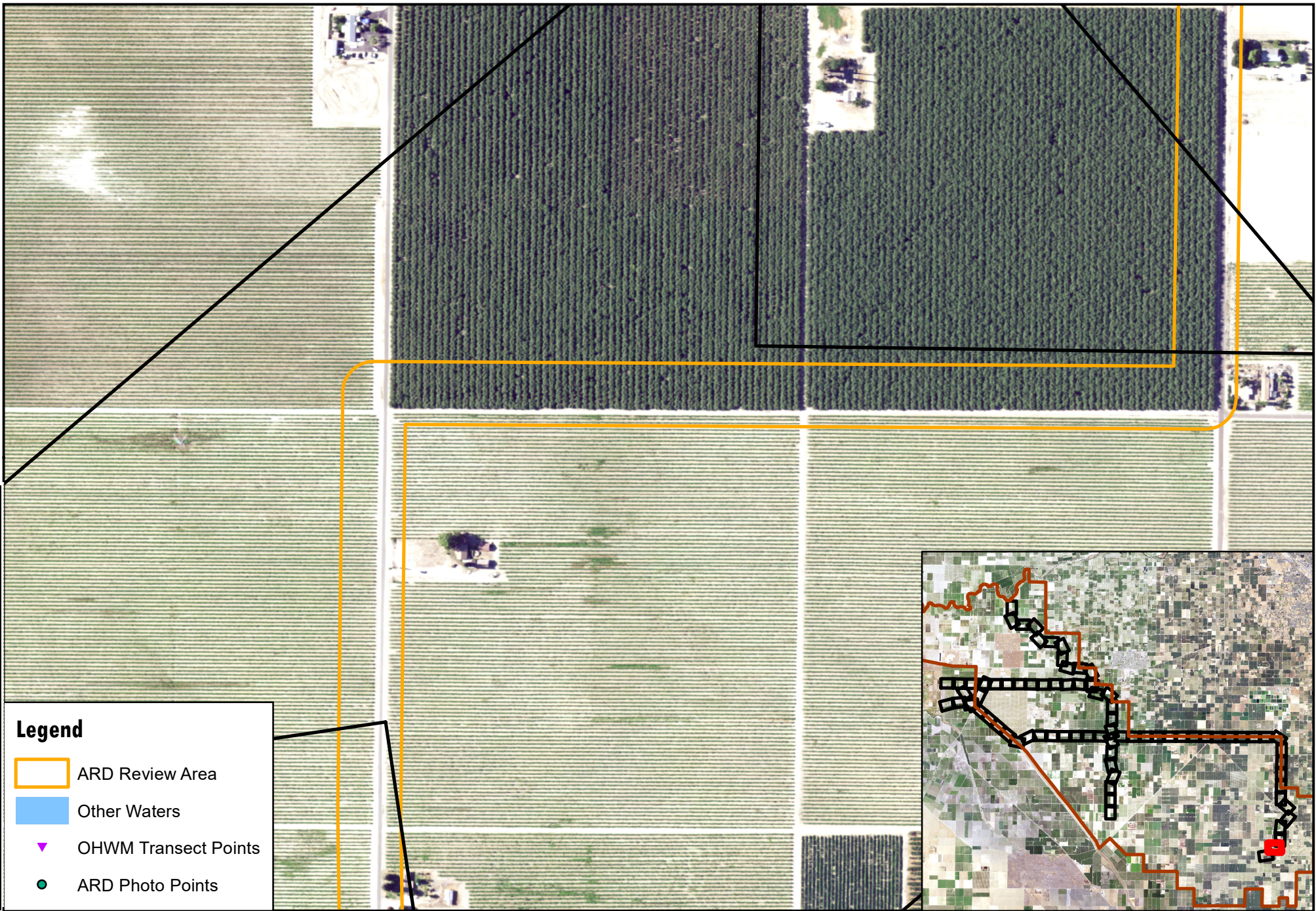


Date: 5/23/2022

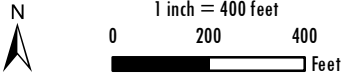
**ARD Map Figure No.53**

MAGSA Aquaterra Waterbank Project



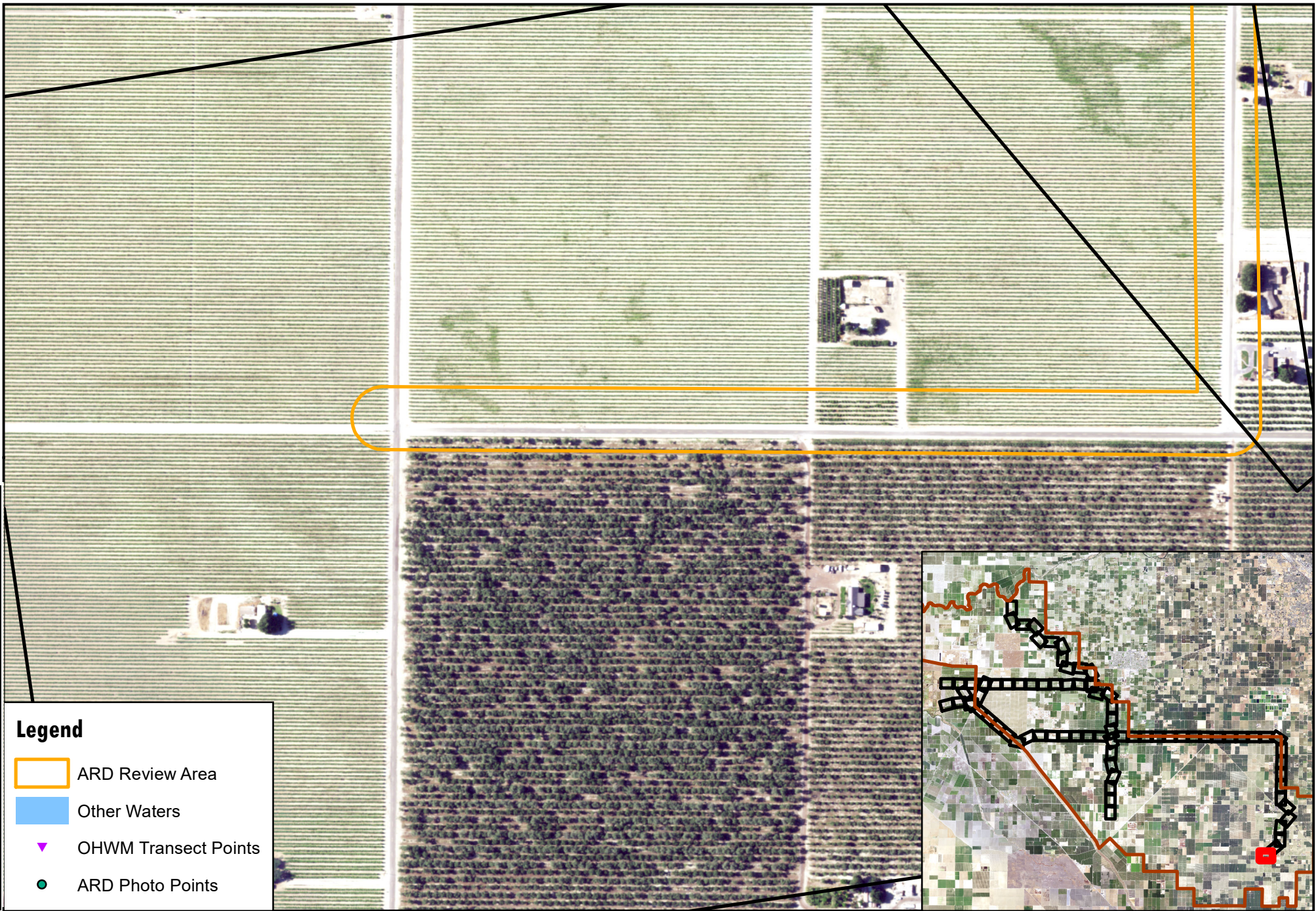


**ARD Map Figure No.54**



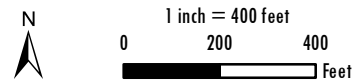
Date: 5/26/2022





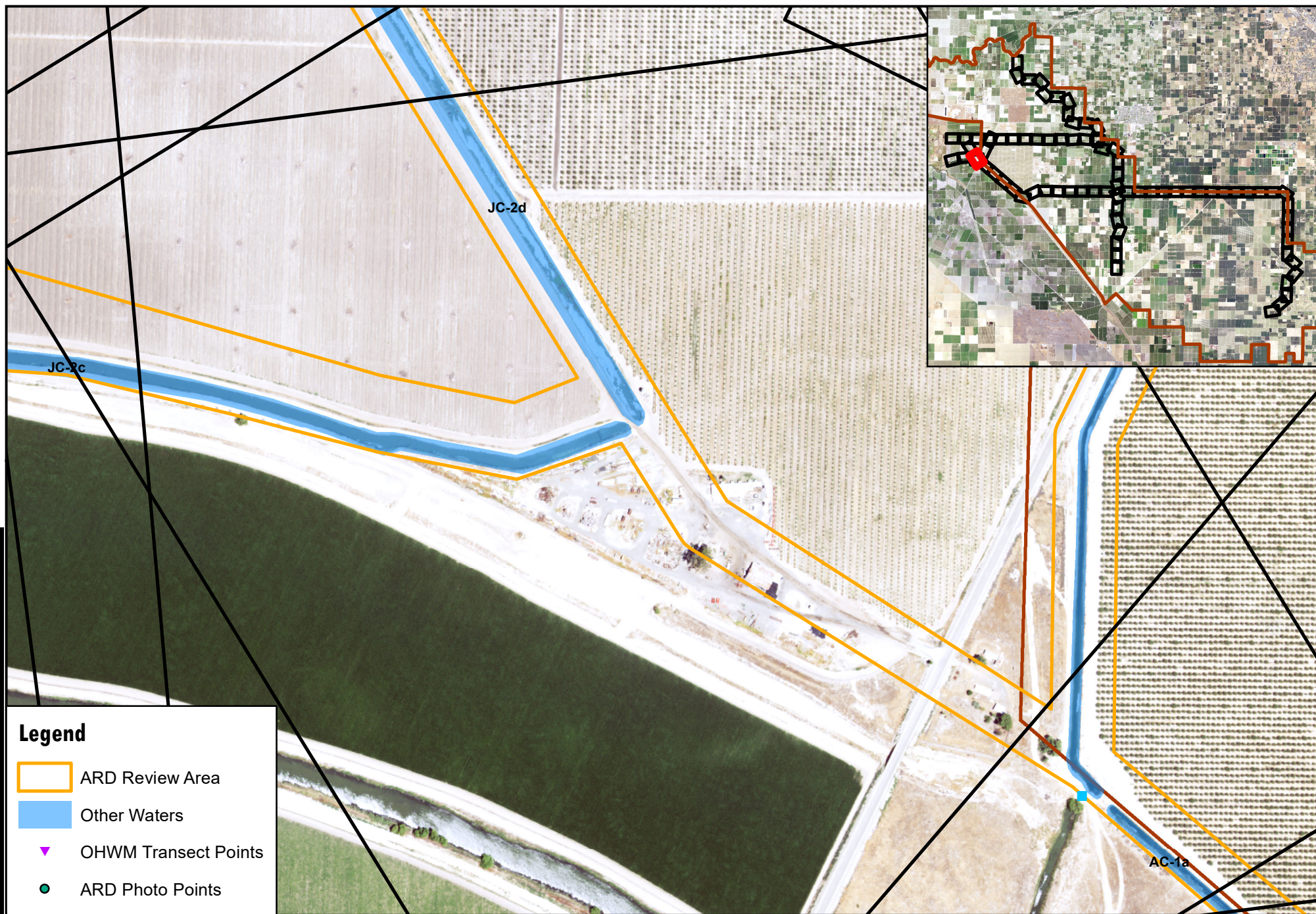
**ARD Map Figure No.55**





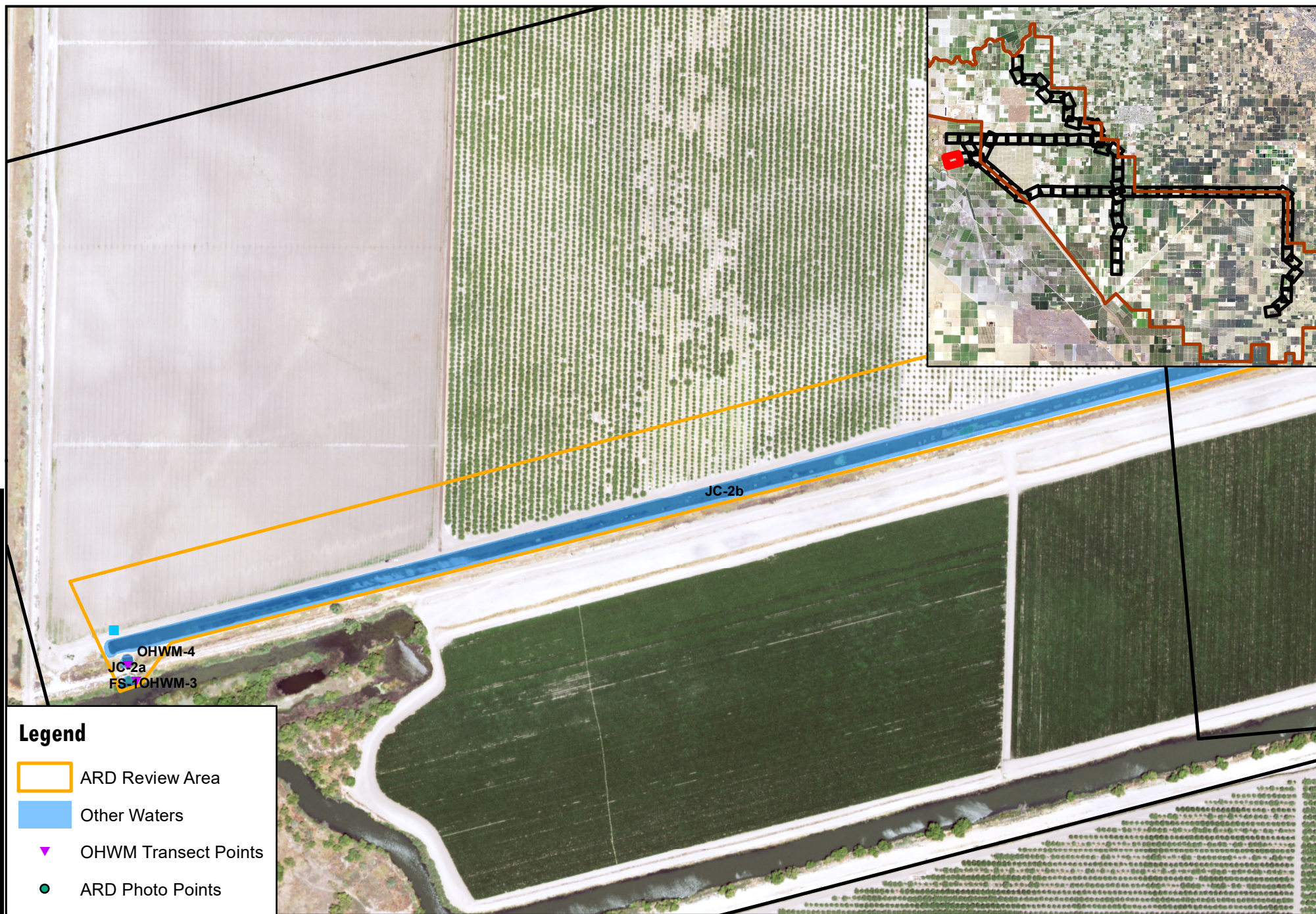
Date: 5/23/2022





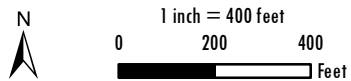
**ARD Map Figure No.57**





### Legend

- ARD Review Area
- Other Waters
- OHWM Transect Points
- ARD Photo Points

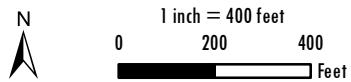
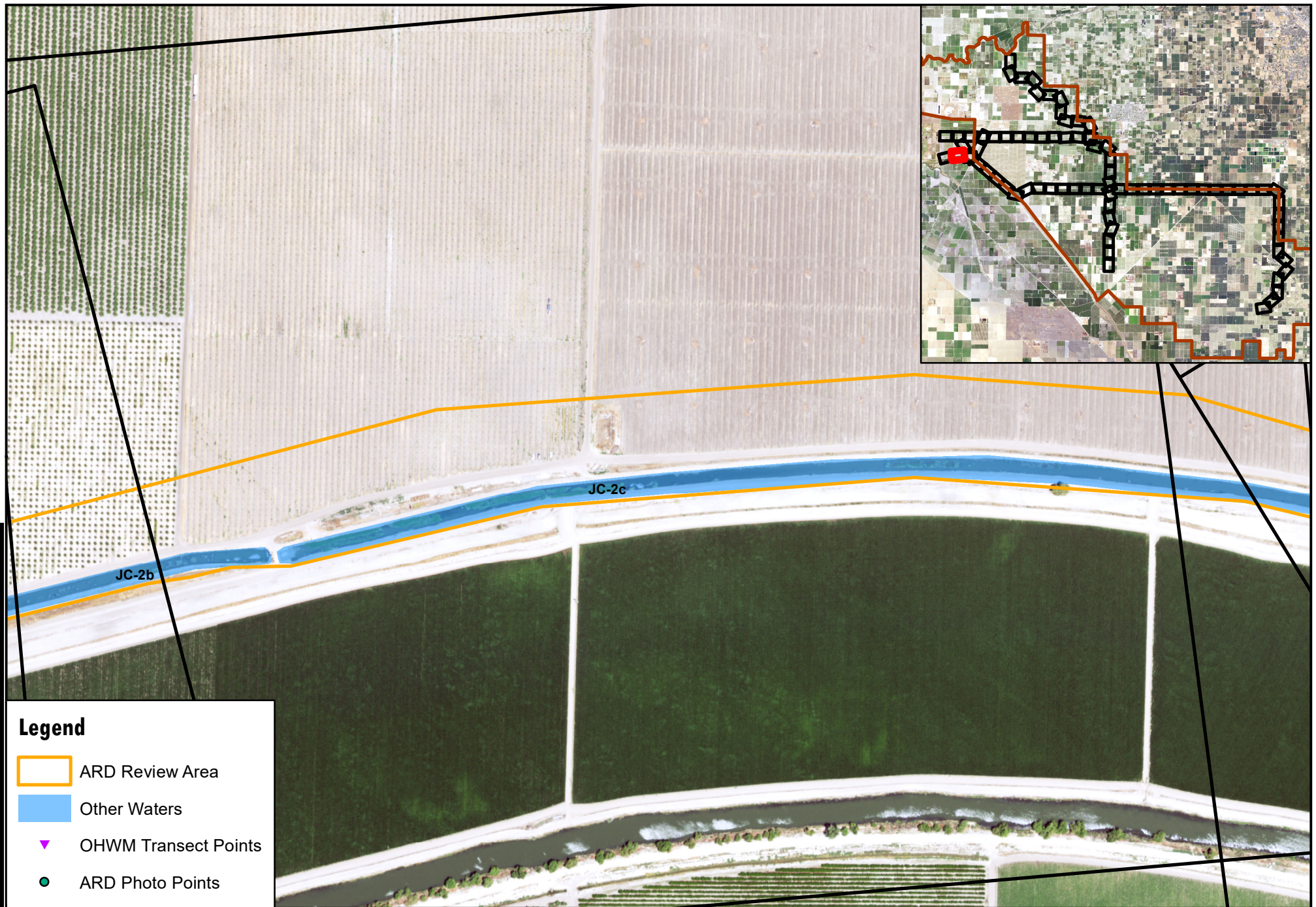


Date: 5/26/2022

**ARD Map Figure No.58**

MAGSA Aquaterra Waterbank Project



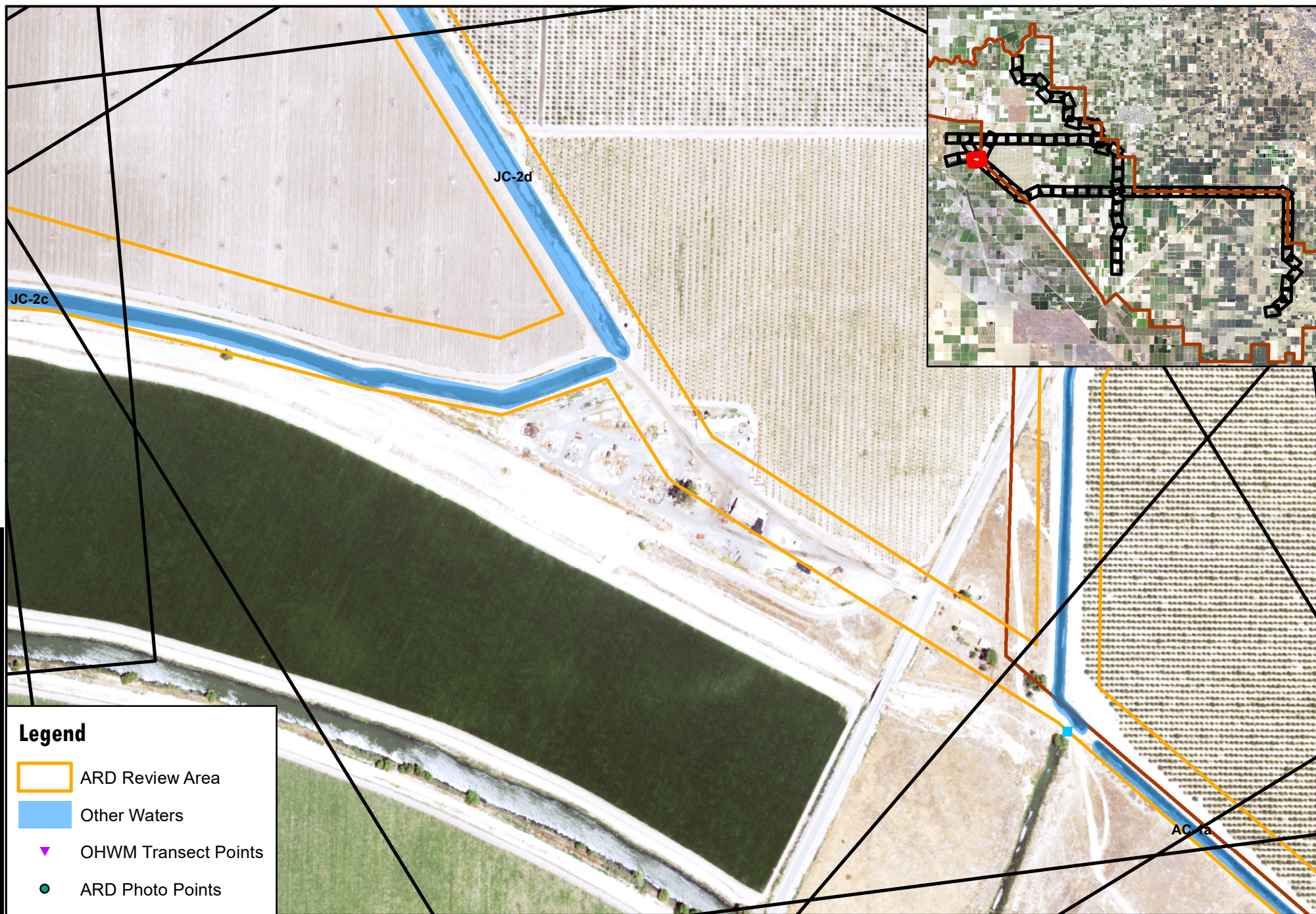


Date: 5/23/2022

**ARD Map Figure No.59**

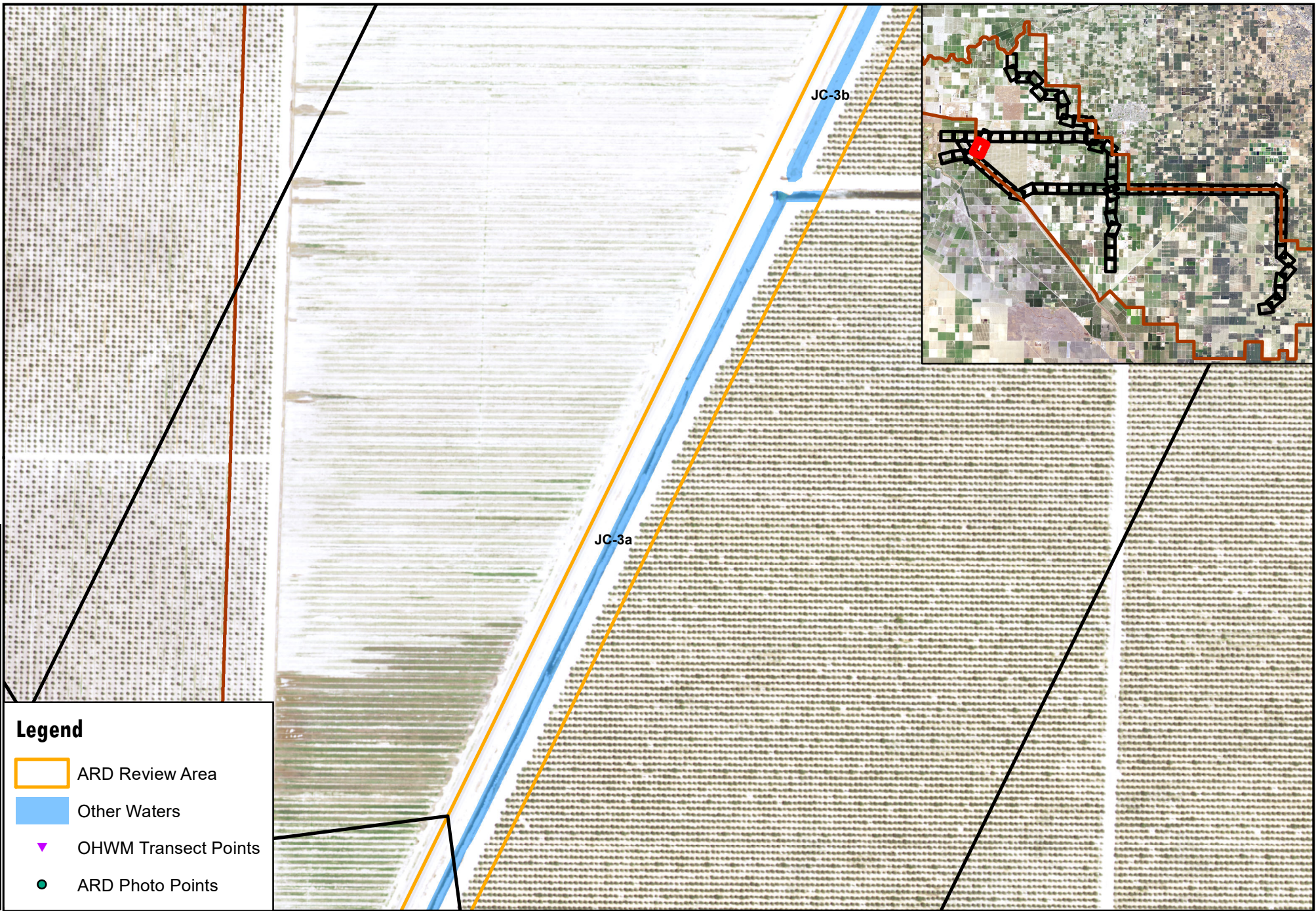
MAGSA Aquaterra Waterbank Project



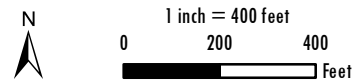


ARD Map Figure No.60

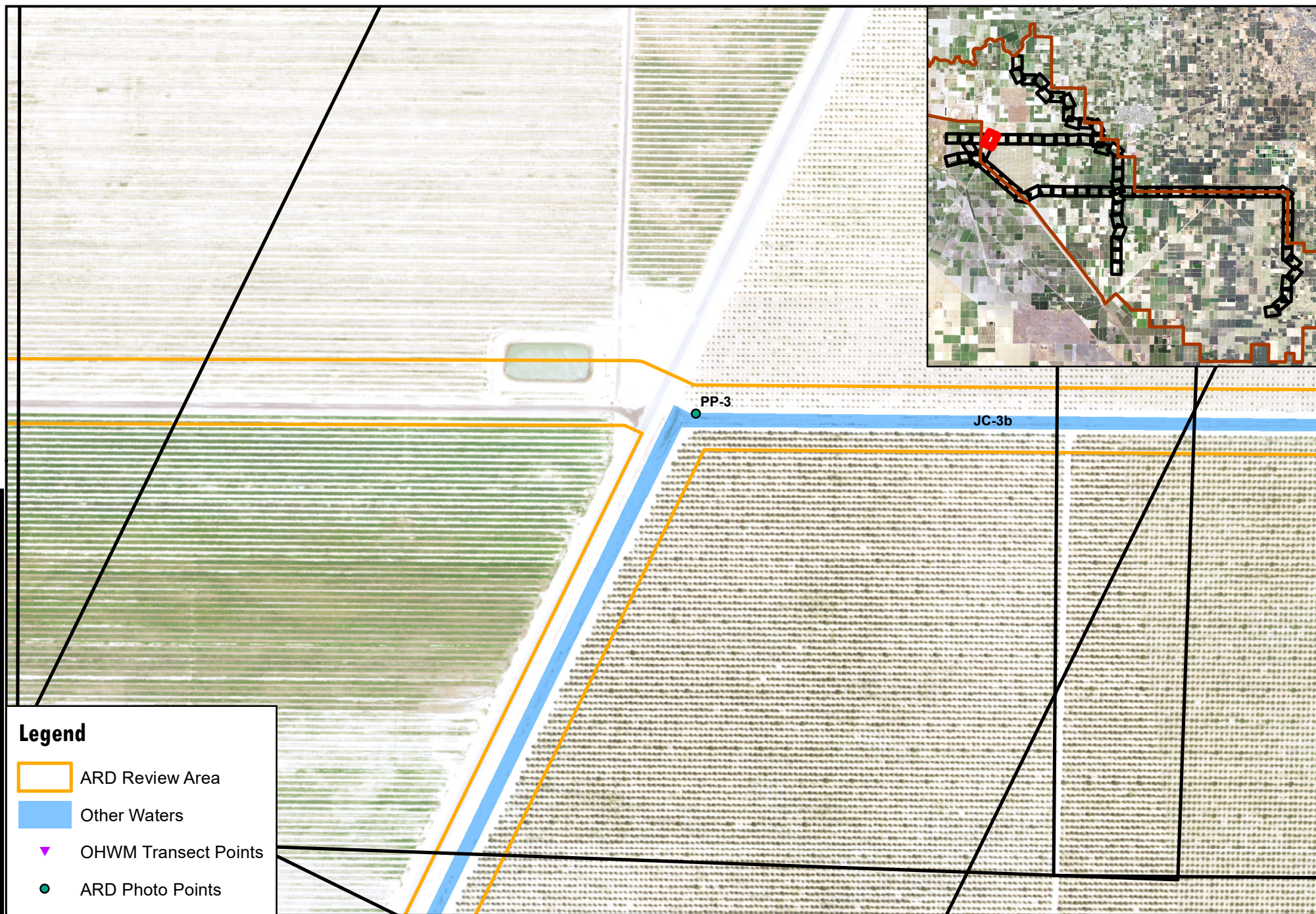




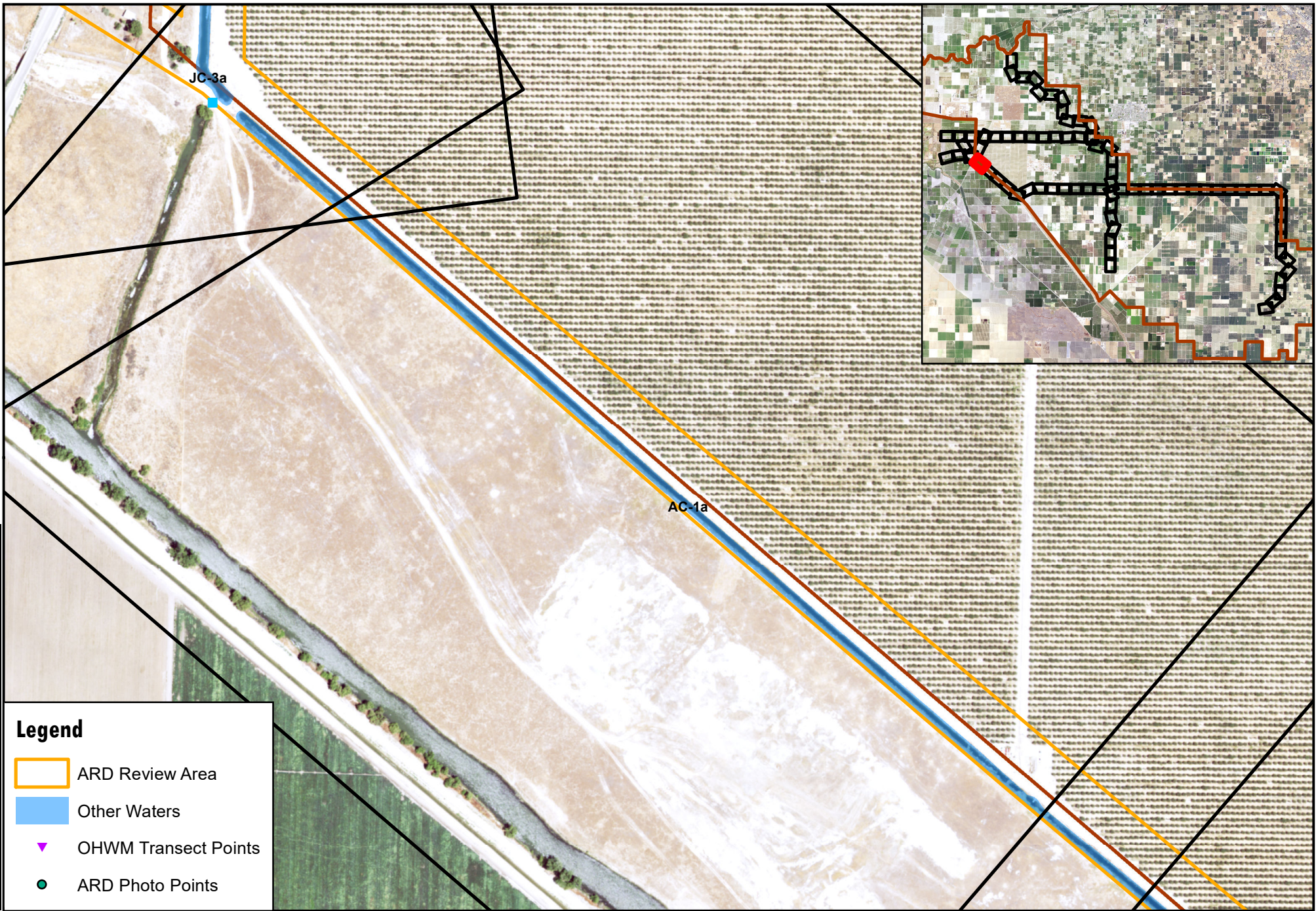
ARD Map Figure No.61





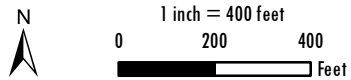
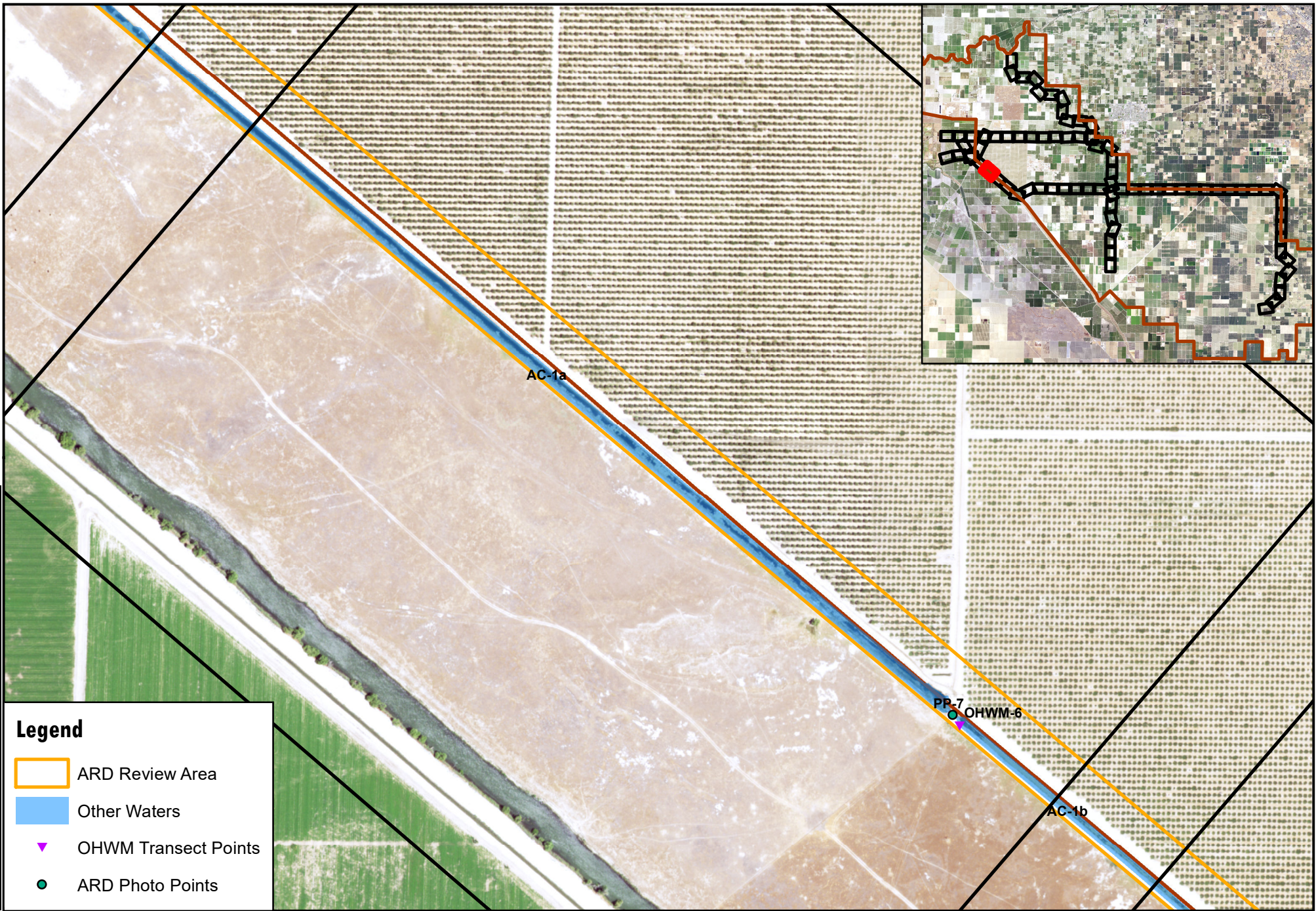






ARD Map Figure No.63



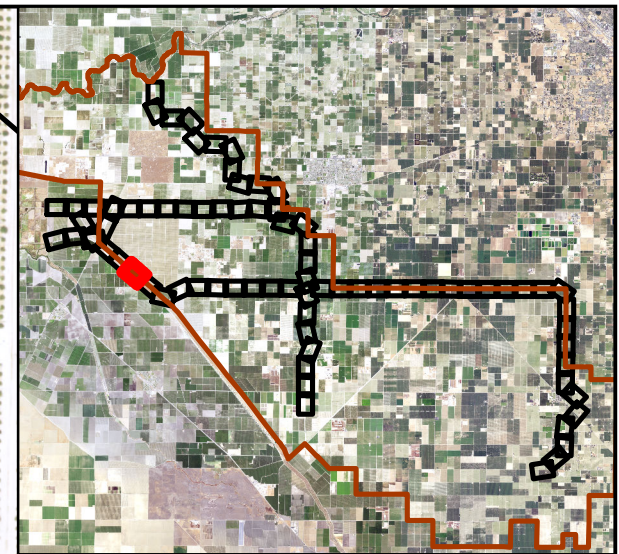


Date: 5/26/2022

**ARD Map Figure No.64**

**MAGSA Aquaterra Waterbank Project**



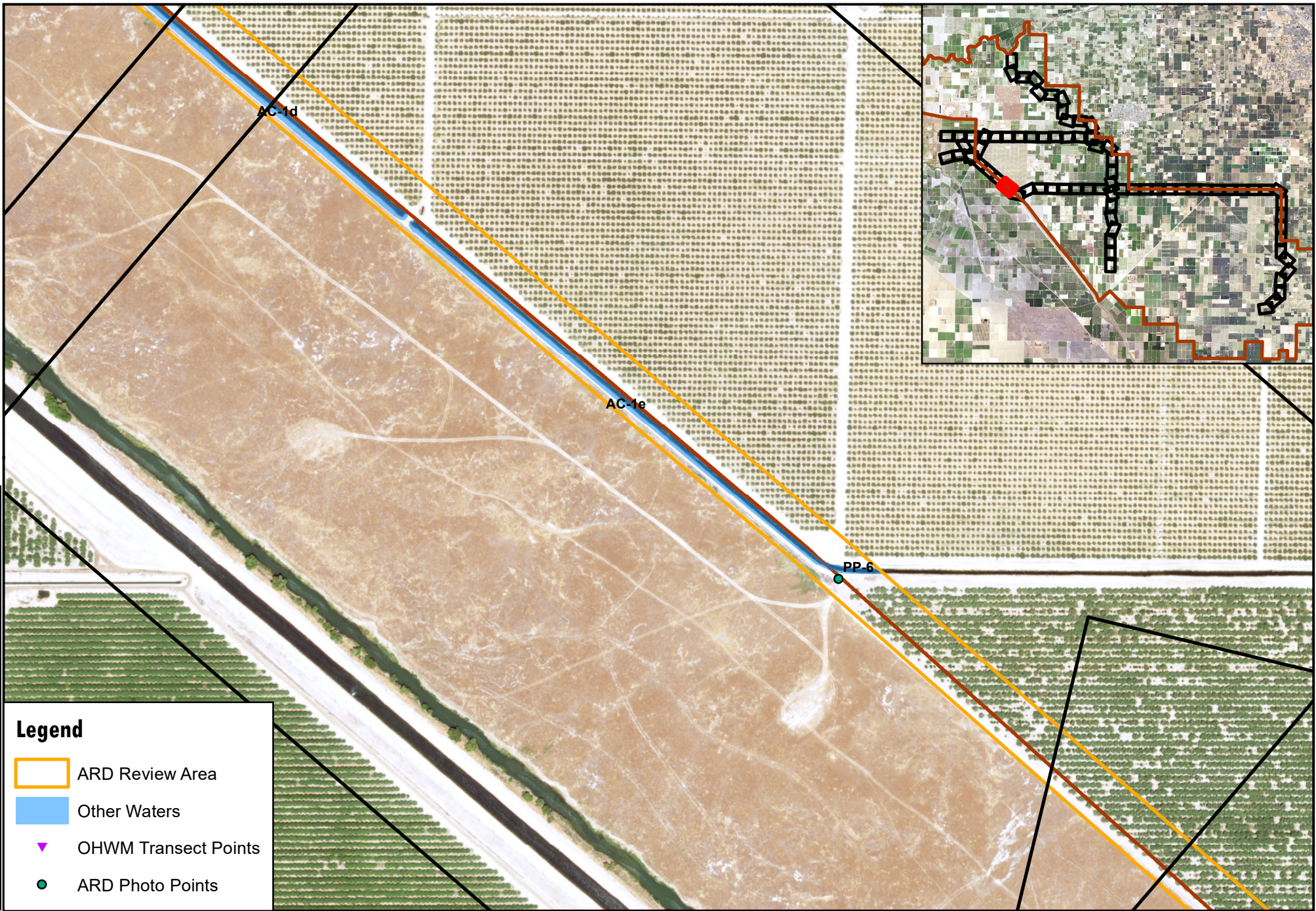


**ARD Map Figure No.65**

MAGSA Aquaterra Waterbank Project

Date: 5/23/2022





ARD Map Figure No.66





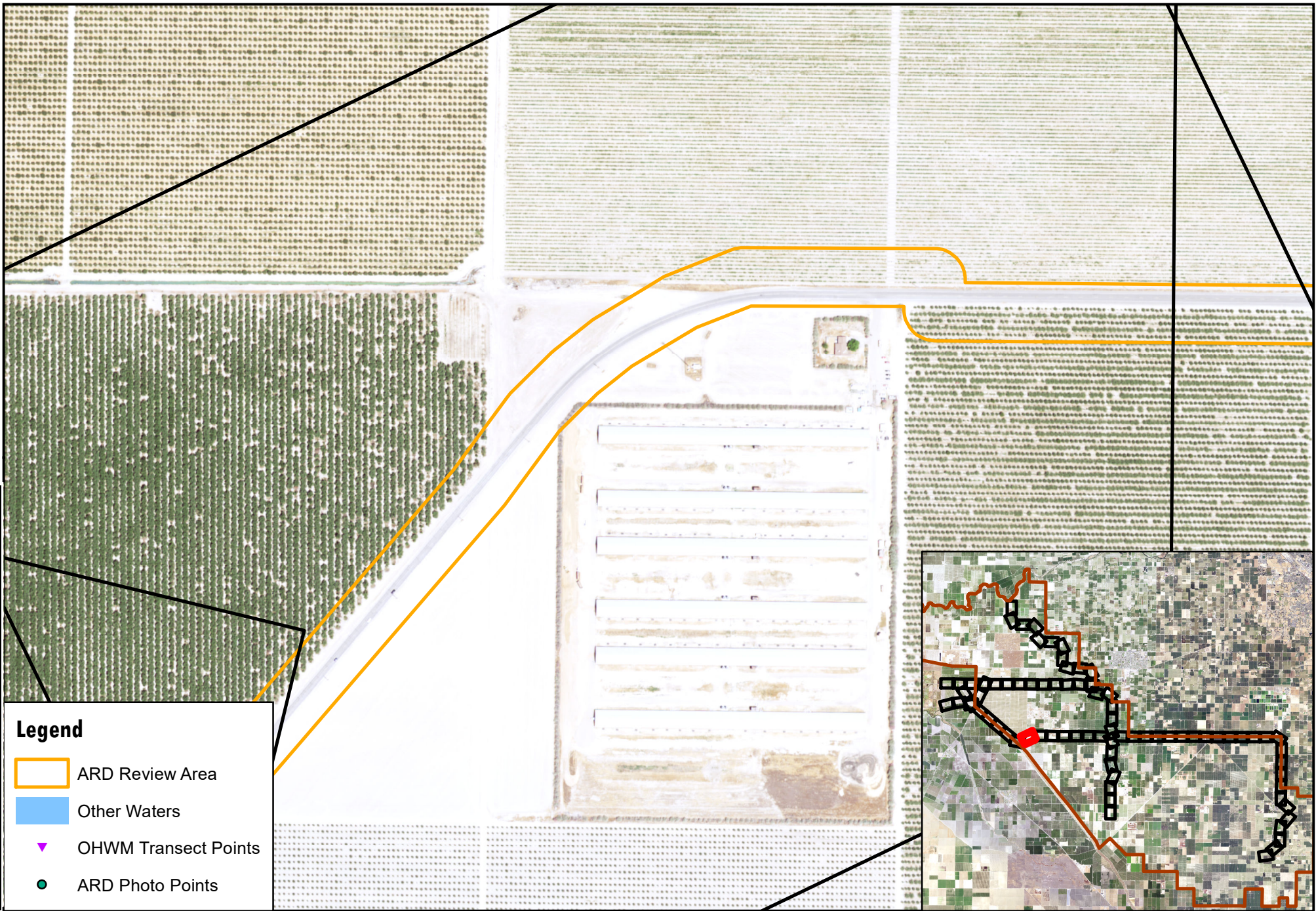
0 200 400  
Feet

ARD Map Figure No. 67 (revised)

Date Saved: 1/29/2024 3:36 PM

MAGSA Aquaterra Waterbank Project





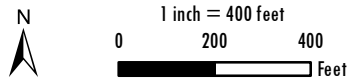
**ARD Map Figure No.68**





## Legend

- ARD Review Area
- Other Waters
- OHWM Transect Points
- ARD Photo Points

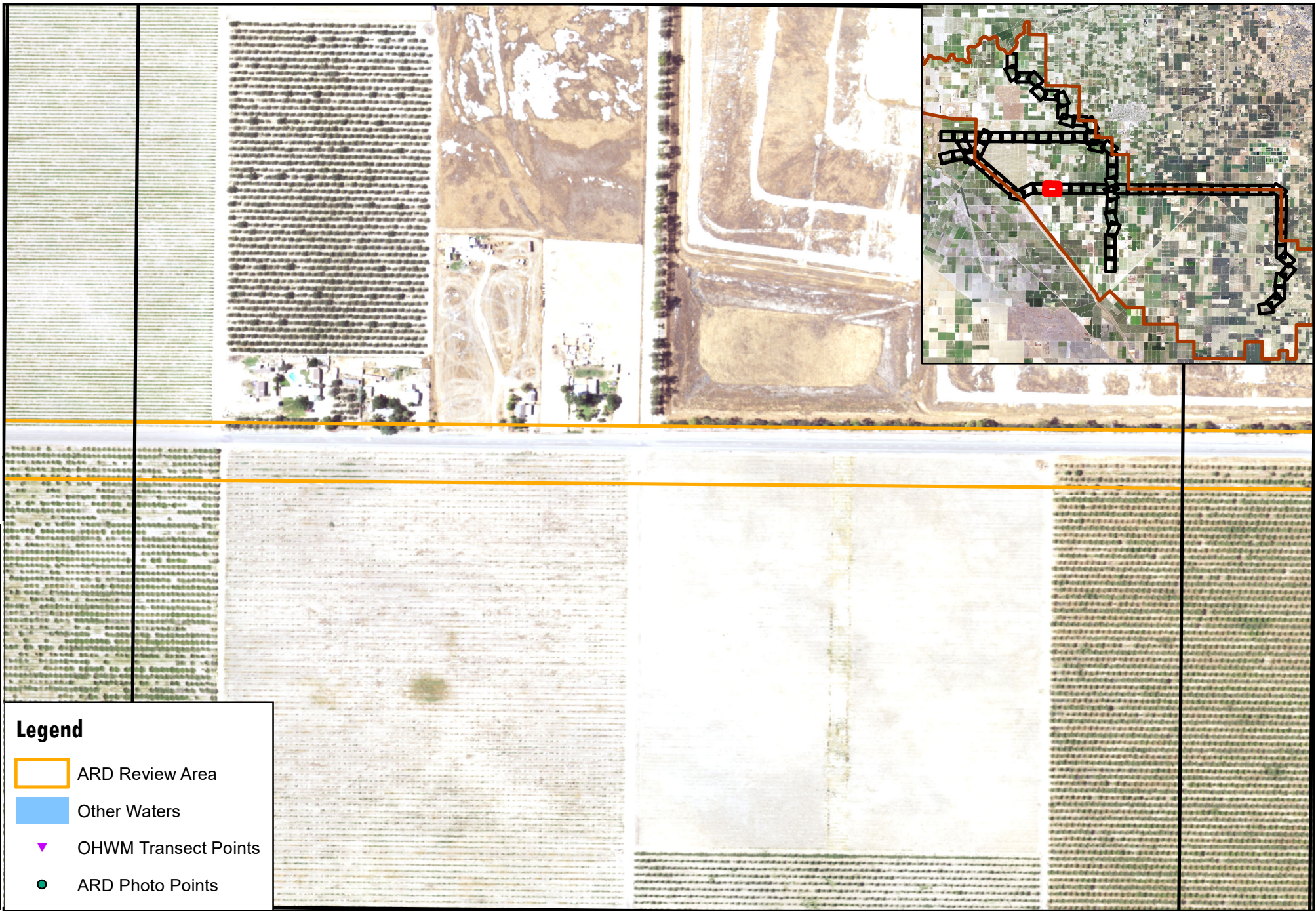


Date: 5/23/2022

ARD Map Figure No.69

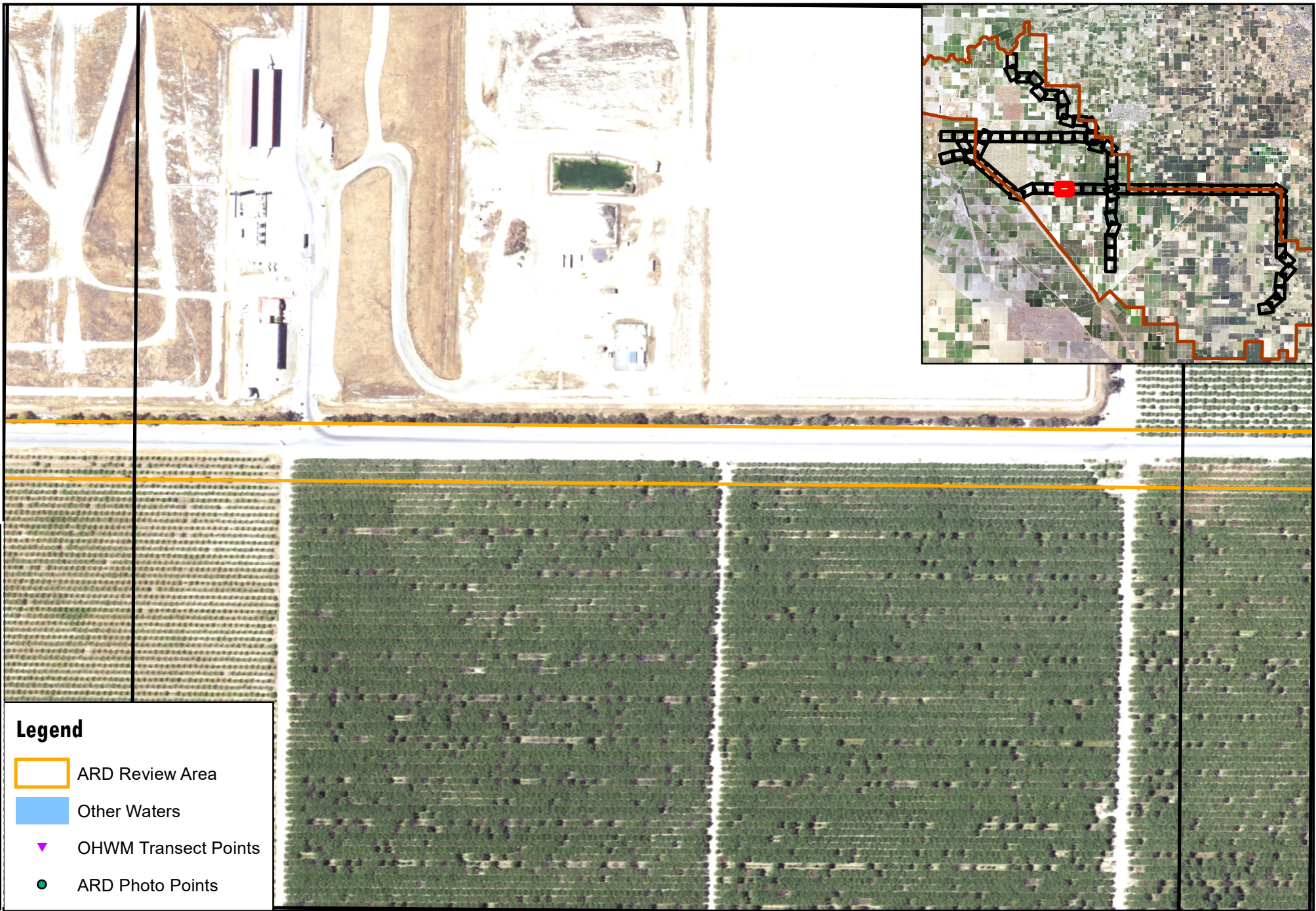
MAGSA Aquaterra Waterbank Project





ARD Map Figure No.70









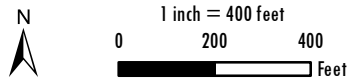
**ARD Map Figure No.71**





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points

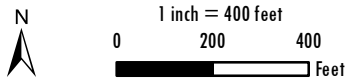
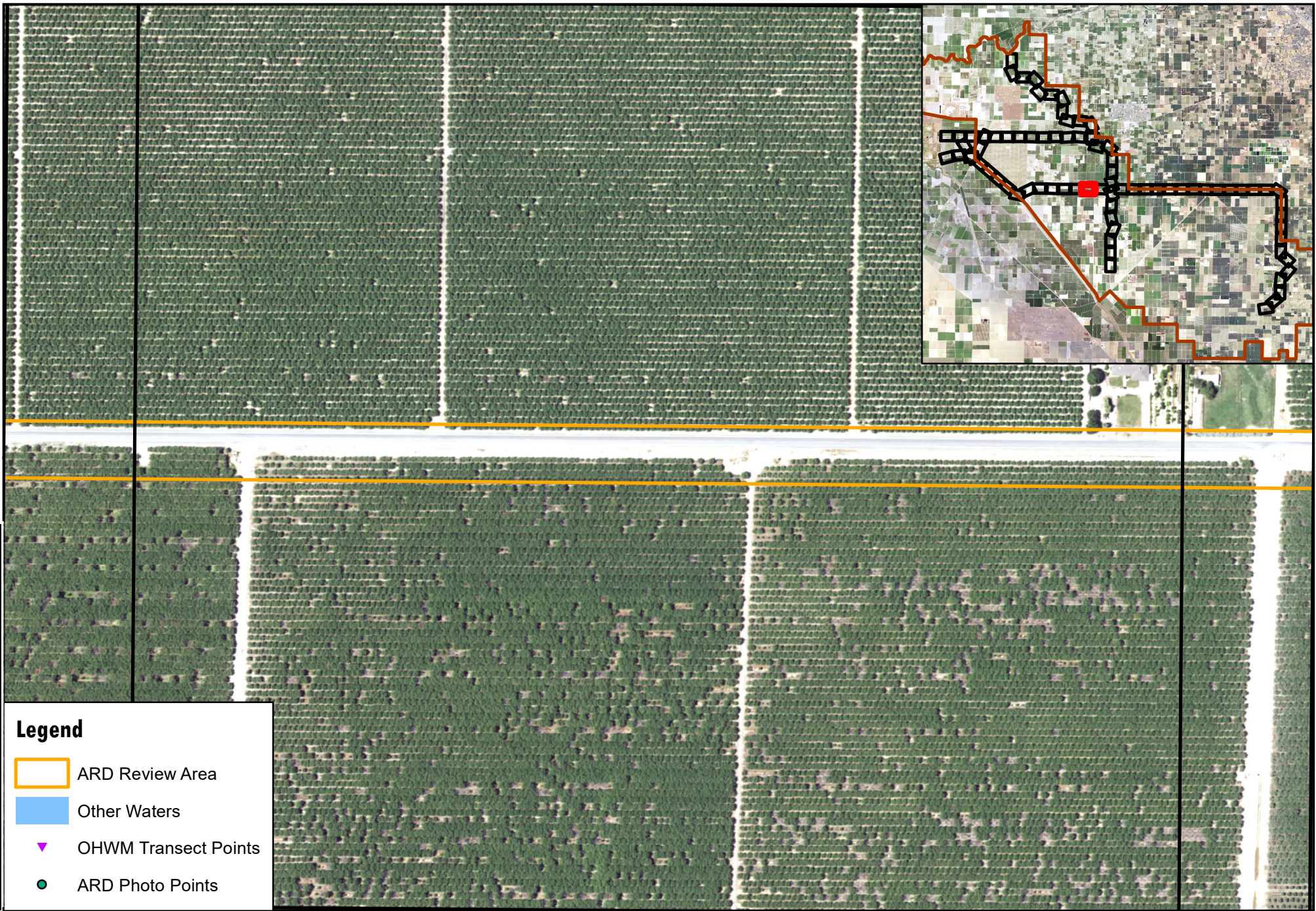


Date: 5/23/2022

ARD Map Figure No.72

MAGSA Aquaterra Waterbank Project



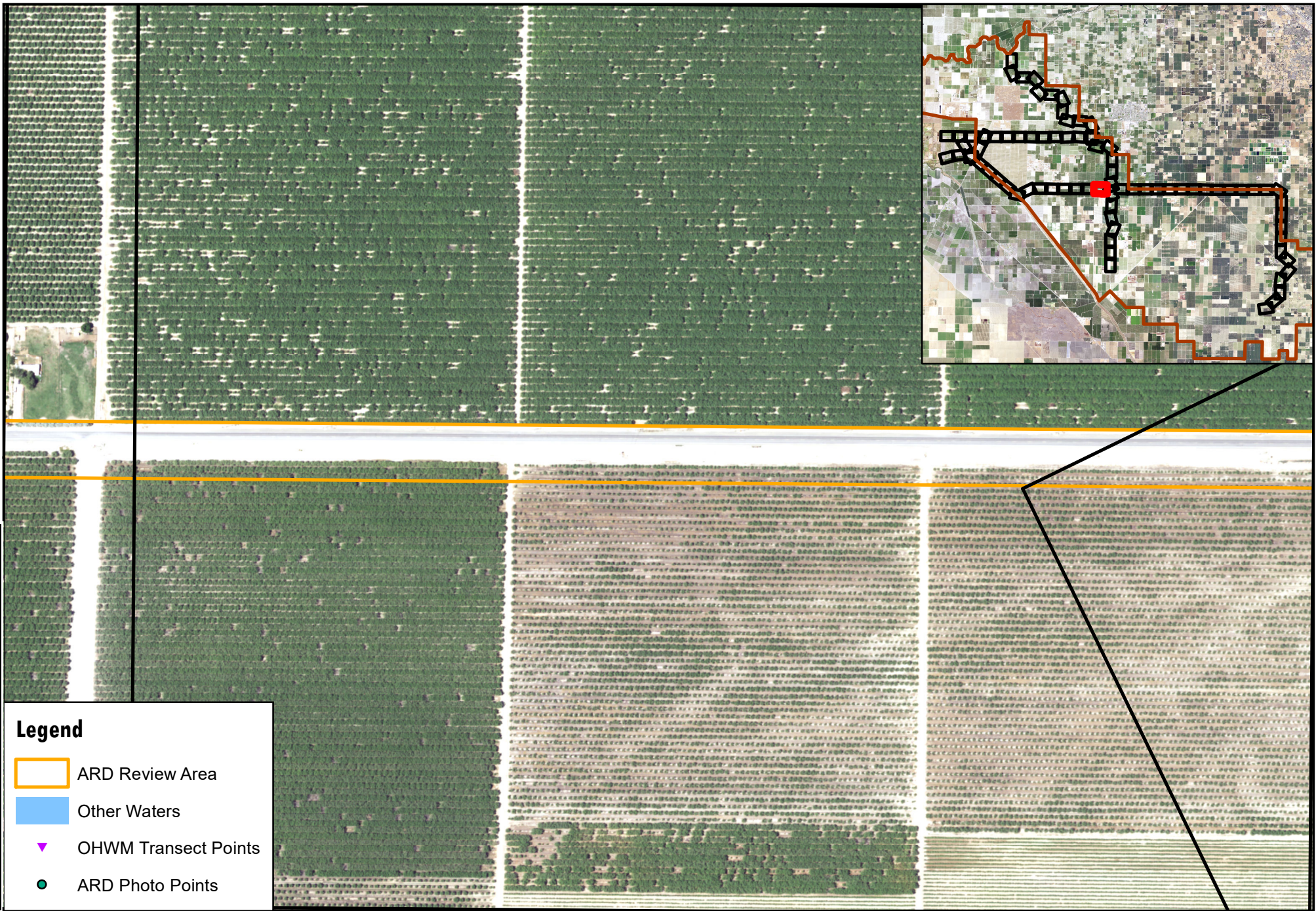


Date: 5/23/2022

**ARD Map Figure No.73**

MAGSA Aquaterra Waterbank Project





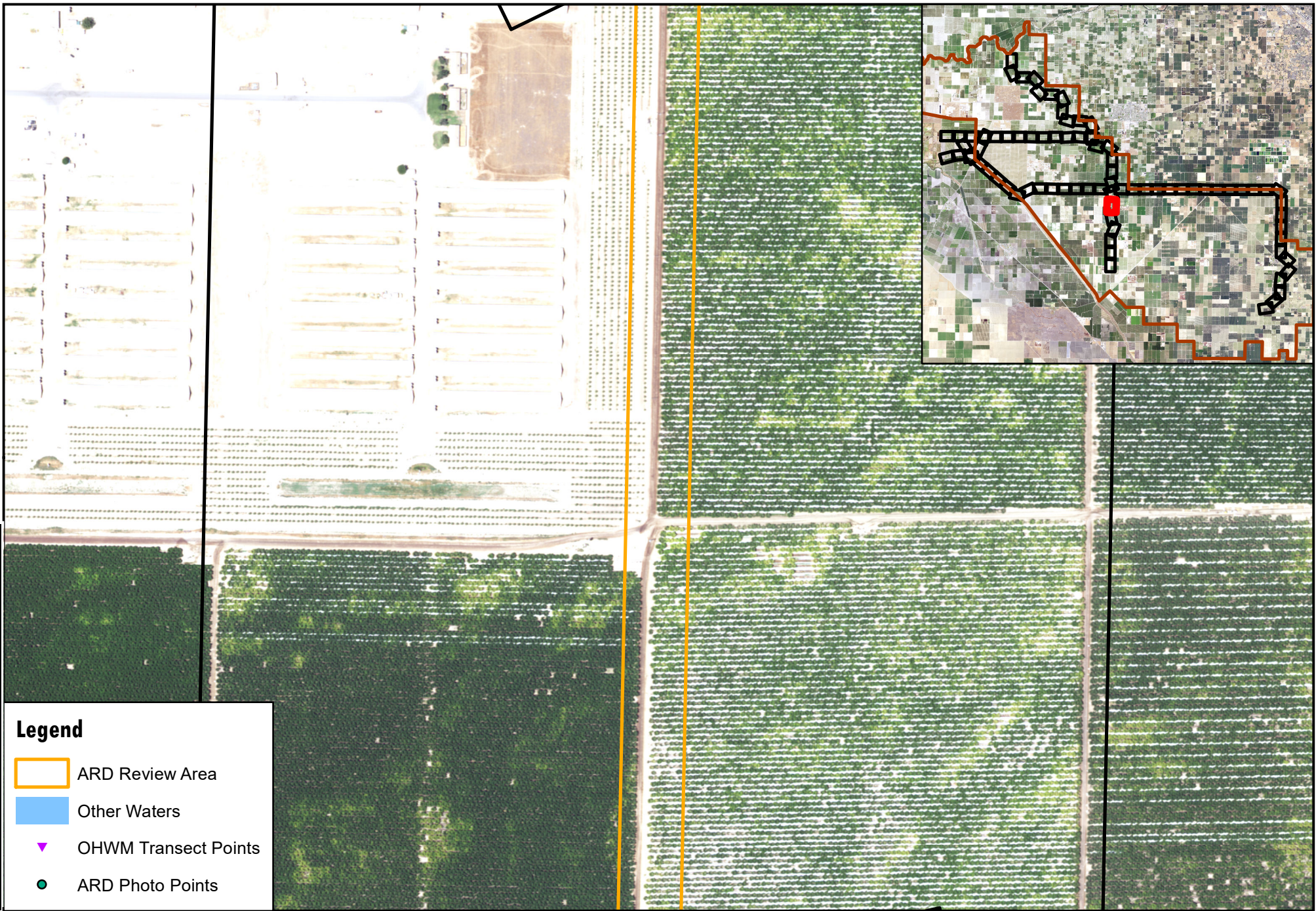
**ARD Map Figure No.74**

MAGSA Aquaterra Waterbank Project









### Legend

- ARD Review Area
- Other Waters
- OHWM Transect Points
- ARD Photo Points

N  
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022





ARD Map Figure No.76

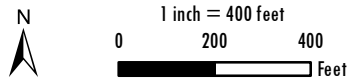
MAGSA Aquaterra Waterbank Project





**Legend**

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points

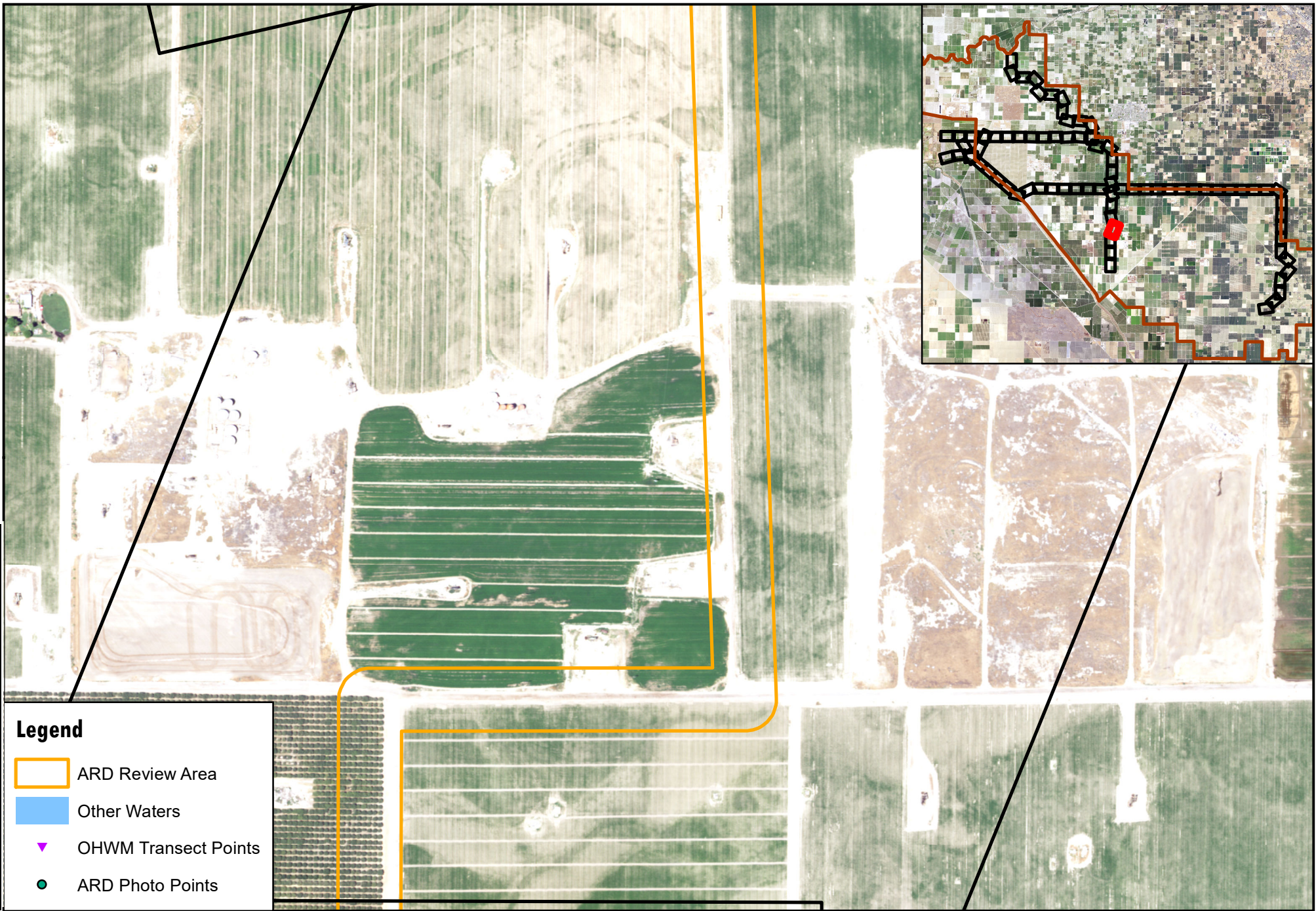


Date: 5/23/2022





**ARD Map Figure No.77**

MAGSA Aquaterra Waterbank Project





### Legend

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



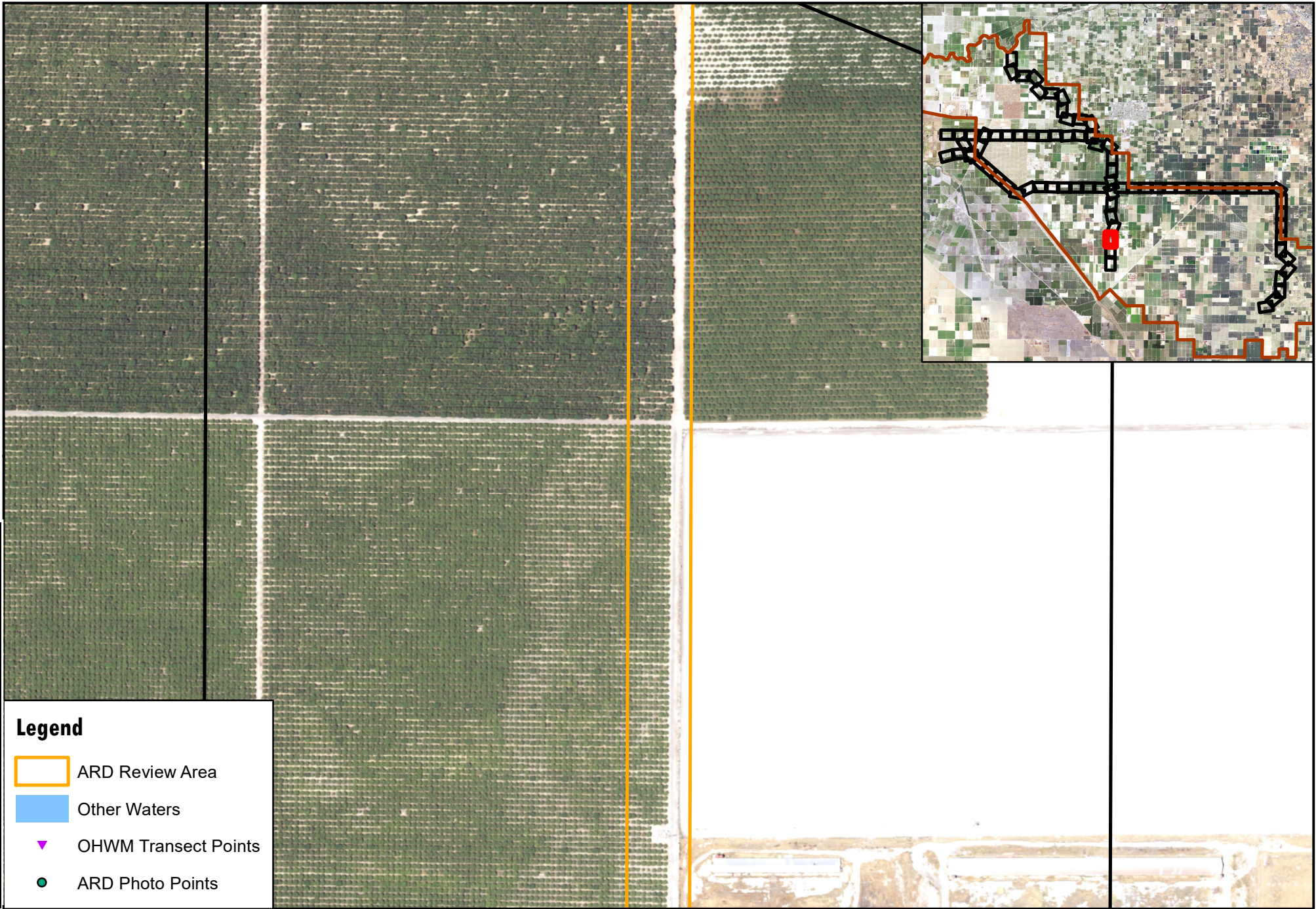
1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.78**

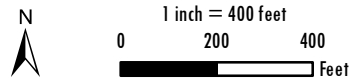
MAGSA Aquaterra Waterbank Project





**Legend**

- ARD Review Area
- Other Waters
- OHWM Transect Points
- ARD Photo Points







Date: 5/23/2022

**ARD Map Figure No.79**





**Legend**

-  ARD Review Area
-  Other Waters
-  OHWM Transect Points
-  ARD Photo Points



1 inch = 400 feet  
0 200 400  
Feet

Date: 5/23/2022

**ARD Map Figure No.80**

**MAGSA Aquaterra Waterbank Project**





**ARD Map Figure No.81**