

Table 1. Preliminary Drill Sites - Lower Yakima Valley GWMA

Rank	Lower Yakima Valley Vicinity	Location Description	Estimated Depth to Water (feet)	Estimated Well Depth (feet)	Distance Moved from General Well Location (feet)	Direction Moved	Movement Rationale
1	East outskirts of Sunnyside	Van DeGraff Blvd just north of E Lincoln Ave	10	30	1013	NW	Moved to nearest ROW intersection approximately 1/4-mile from Sulfur Creek Wasteway.
2	Northwest of Sunnyside & Northeast of Outlook	South side of Arrowsmith Rd between Maple Grove Rd and Scoon Rd	56	76	2030	E	Moved to ROW 1/4 mile from the SVID Main Canal and Joint Drains 32.0 and 33.4.
3	Northwest of Grandview	East side of N Forsell Rd about 770 feet north of Stover Rd	18	38	1226	NE	Moved to nearest ROW 1/4 mile from Joint Drain 43.9
4	South-southwest of Grandview	North side of E Euclid Rd and Riverfront Rd Intersection	37	57	179	W	Moved to nearest ROW intersection
5	West-southwest of Sunnyside	West side of S Lester Rd about 430 feet south of Gap Rd	44	64	654	SW	Moved to ROW and offset from mapped drain line
6	North-northeast of Sunnyside	NW corner of State Route 241 & Arrowsmith Rd	46	66	1505	NW	Moved to nearest ROW intersection
7	South-southwest of Sunnyside	Linderman Rd at Murray Rd	31	51	4676	SW	Moved to nearest ROW intersection that is 1/4 mile from Sunnyside sprayfields and nearby feedlots.
8	North of Outlook	South side of Van Belle Rd between Price Rd and N Outlook Rd	12	32	527	E	Moved to County Fire District No. 5 Station No. 12 parcel
9	East of Sunnyside & North of Grandview	NW corner of Bethany Rd and Sheller Rd	58	78	1594	E	Moved to nearest ROW intersection 1/4-mile from SVID Main Canal
10	North of Zillah	East side of Roza Dr between Gilbert Rd and Highlan Dr	88	108	422	NW	Moved to ROW
11	East-northeast of Zillah	West side of Eagle Peak Rd between Lamb Rd and E Zillah Dr	145	165	2541	W	Moved to nearest ROW 1/4-mile from SVID Main Canal
12	In Grandview	Intersection of King St and Velma Ave	61	81	879	N	Moved to ROW intersection 1/4 mile from Joint Drain 2, at city park and Grandview Water Tower
13	North-northwest of Sunnyside	SW corner of W Merz Rd and N Fordyce Rd	115	135	1781	NE	Moved to nearest ROW intersection
14	North of Grandview	NE corner of Harrison Rd and Alexander Ext	62	82	3517	NE	Moved to nearest ROW intersection 1/4-mile from SVID Main Canal
15	North of Sunnyside	East side of Scoon Rd between Williamson Rd and Phipps Rd	105	125	640	S	Moved to ROW 1/4-mile from Roza Canal
16	East of Granger	North side of Van Belle Rd between Liberty Rd and Arms Rd	19	39	2301	S	Moved to nearest ROW 1/4-mile from SVID Joint Drain 27.5 and 28.0
17	Northeast of Donald	Brooks Rd east of Konnowac Pass Rd	127	147	1421	E	Moved to nearest ROW intersection 1/4-mile from Union Gap Canal
18	South of Grandview, East-southeast of Mabton	South side of State Route 22 near 27990 SR 22 (between Byron Rd and Bus Rd)	50	70	1176	E	Moved to nearest ROW intersection (pullout to side road). South of WDFW Byron Unit and City of Grandview Wastewater Treatment Plant.
19	Northeast of Buena	NE corner of Darby Rd and Blue Goose Rd	44	64	1925	SE	Moved to nearest ROW intersection 1/4-mile from Union Gap Canal and SVID Main Canal
20	North of Sunnyside	SW corner of Cemetery Rd & E Woodin Rd	23	43	128	W	Moved to nearest ROW intersection

Table 1. Preliminary Drill Sites - Lower Yakima Valley GWMA (Continued)

Rank	Lower Yakima Valley Vicinity	Location Description	Estimated Depth to Water (feet)	Estimated Well Depth (feet)	Distance Moved from General Well Location (feet)	Direction Moved	Movement Rationale
21	West-southwest of Grandview	South side of Belma Rd just west of Hornby Rd	47	67	1343	NE	Moved to nearest ROW intersection
22	West of Grandview	South side of Green Valley Rd 150 ft west of Mabton Sunnyside Rd	19	39	2047	W	Moved to nearest ROW intersection
23	North of Granger	North side of Orchardvale Rd just east of N Granger Rd	35	55	3004	W	Moved to nearest ROW intersection 1/4-mile from SVID Main Canal
24	North of Grandview	North side of Olmstead Rd just east of Wilson Hwy	39	59	1979	E	Moved to nearest ROW intersection 1/4-mile from SVID Joint Drain 44.9
25	Northeast of Zillah	East side of Bailey Rd just north of Highland Dr	180*	200*	647	NE	Moved to ROW 1/4-mile from Roza Canal
26	East of Donald	End of Riggins Rd	145	165	2105	NE	Moved to nearest ROW intersection 1/4-mile from Union Gap Canal
27	Southeast of Sunnyside	West side of Braden Rd just south of Tear Rd	18	38	4050	E	Moved to nearest ROW intersection 1/4-mile from Sulfur Creek Wasteway and Joint Drain 40.2
28	Southeast of Mabton	East side of S Phillips Rd just north of Rusk Rd	33	53	704	N	Moved to nearest ROW intersection
29	South of Snipes Mountain	Southwest corner of Emerald Rd and S Emerald Rd intersection	10	30	4500	SE	Moved to ROW intersection south of Snipes Mountain
30	North of Sunnyside	South side of Reeves Rd just west of Cemetery Rd	60	80	1032	N	Moved to nearest ROW intersection

ROW = Right of Way; SVID = Sunnyside Valley Irrigation District

*Estimated depths to water at preliminary drill sites 15 and 25 were modified based on professional judgement since data from local monitoring wells suggest that depths to water based on USGS analyses alone appear to be over estimates in these areas. Using USGS data alone, preliminary drill site 15 has a predicted depth to water of 145 feet, while site 25 has a predicted depth to water of 283 feet.

Table 2. Soil and Irrigated Agriculture Land Use Categories

Category*	NRCS Nitrate Leaching Class	Irrigation type	Primary crops (similar rooting depth)
1	0.34-0.66	sprinkler	Corn, grapes, pasture, wheat, grass hay, sudangrass, triticale
2	0.34-0.66	sprinkler	Tree fruit, alfalfa, hops, asparagus
3	0.67-1.0	sprinkler	Tree fruit, alfalfa, hops, asparagus
4	0.34-0.66	surface	Corn, grapes, pasture, wheat, grass hay, sudangrass, triticale
5	0.67-1.0	sprinkler	Corn, grapes, pasture, wheat, grass hay, sudangrass, triticale
6	0.34-0.66	drip	Tree fruit, alfalfa, hops, asparagus
7	0.34-0.66	drip	Corn, grapes, pasture, wheat, grass hay, sudangrass, triticale
8	0.67-1.0	surface	Corn, grapes, pasture, wheat, grass hay, sudangrass, triticale
9	0.67-1.0	drip	Corn, grapes, pasture, wheat, grass hay, sudangrass, triticale
10	0.34-0.66	surface	Tree fruit, alfalfa, hops, asparagus

*These 10 categories account for 96 percent of the GWMA irrigated agricultural lands (fields with unknown crop type or unknown irrigation type are not included in this total). See PGG (2014b) for more information on the derivation of categories.

Table 3. Preliminary Drain Sampling Stations -Lower Yakima Valley GWMA

Drain Station Number	Lower Yakima Valley Vicinity	Latitude	Longitude	Location Description	Drain Sampled	Has Historical Nitrate Data?	Notes/Comments
1	Between Donald & Buena	46.46093054	-120.3684576	Roza Canal Wasteway #3 at Yakima Valley Highway	Roza Canal Wasteway #3	N	
2	Southeast of Buena	46.41417682	-120.3024766	Buena Drain on Westbound I-82 by Exit 50 to SR97 Sign	Buena Irrigation District Drain	N	Possible alternative access by red Golf Club barn accessed through Zillah Lakes housing development on Yakima Valley Highway
3	Zillah	46.40412261	-120.2768151	Manhole at SE corner of Chevron Station Property, I-82 Exit 52	Joint Drain 14.6	Y	Historical samples have been obtained from this location, unclear if current access feasible.
4	Granger	46.34273273	-120.2006477	Outfall pipe on cliff behind house at 307 W. Blvd in Granger	Drain 27	Y	Unclear if current access is possible
5	Granger	46.34317058	-120.1880148	Granger Drain at Mouth (E Avenue)	Joint Drain 26.6	Y	
6	Northeast of Granger	46.34728695	-120.1776299	Joint Drain 26.6 at Yakima Valley Highway & Schneider Ln	Joint Drain 26.6	Y	Additional upstream sampling could be pursued if winter flow is present
7	East of Granger	46.33953601	-120.1565564	Joint Drain 27.5 at Yakima Valley Highway	Joint Drain 27.5	Y	Location is immediately north of the Yakima Valley Highway. Additional upstream sampling could be pursued if winter flow is present
8	Between Granger & Outlook	46.33965613	-120.1413834	Joint Drain 28 immediately North of Yakima Valley Highway	Joint Drain 28	Y	Additional upstream sampling could be pursued if winter flow is present
9	Between Granger & Outlook	46.33899521	-120.1325244	Drain 2 at Yakima Valley Highway	Drain 2	Y	Sampling recommended north of the road where RSBOJC flume present. Additional upstream sampling could be pursued if winter flow is present
10	West of Outlook	46.33156352	-120.1045882	Joint Drain 32 at Outlook Road	Joint Drain 32	Y	Additional upstream sampling could be pursued if winter flow is present
11	South of Snipes Mountain	46.25878634	-120.0653944	DID7 at Green Valley Rd	Drainage Improvement District 7 Drain	Y	Historical samples have been collected at the culvert nearest to the drain mouth in the WDFW Sunnyside Wildlife Area. If accessible, this sampling location is preferred to the proposed Green Valley Rd location.
12	South of Sunnyside	46.25117068	-120.0201977	Sulphur Creek Wasteway at Holaday Rd	Sulphur Creek Wasteway	Y	
13	South of Sunnyside	46.28206839	-120.0096429	Joint Drain 33.4 South of Duffy Rd	Joint Drain 33.4	Y	
14	West Sunnyside	46.32867671	-120.0252698	Joint Drain 33.4 at Yakima Valley Highway	Joint Drain 33.4	Y	Historical samples have been collected behind a warehouse near 1st St, unclear if access to this location still exists.
15	Northwest of Sunnyside	46.33378121	-120.0333092	Joint Drain 33.4 accessed from Rougk Lane	Joint Drain 33.4	N	Additional upstream sampling could be pursued if winter flow is present
16	Northwest of Sunnyside	46.33835633	-120.0232698	Joint Drain 34.2 at E Woodin Rd	Joint Drain 34.2	N	Additional upstream sampling could be pursued if winter flow is present
17	South of Sunnyside	46.28332189	-119.9992253	Joint Drain 43.9 at Sunnyside-Mabton Rd	Joint Drain 43.9	Y	Additional upstream sampling could be pursued if winter flow is present
18	South of Sunnyside	46.28746282	-119.9974738	Joint Drain 40.2 mouth along Tear Rd	Joint Drain 40.2	Y	Additional upstream sampling could be pursued if winter flow is present

Table 3. Preliminary Drain Sampling Stations -Lower Yakima Valley GWMA (Continued)

Drain Station Number	Lower Yakima Valley Vicinity	Latitude	Longitude	Location Description	Drain Sampled	Has Historical Nitrate Data?	Notes/Comments
19	Southeast Sunnyside	46.30940881	-119.9914319	Joint Drain 35.4 at Allen Rd	Joint Drain 35.4	Y	Additional upstream sampling could be pursued if winter flow is present
20	East of Sunnyside	46.32450288	-119.9781487	Joint Drain 37.9 at Hanford Rd	Joint Drain 37.9	Y	Additional upstream sampling could be pursued if winter flow is present
21	East of Sunnyside	46.33163342	-119.9799318	Sulphur Creek Wasteway at Sheller Rd	Sulphur Creek Wasteway	N	East wasteway channel should be sampled. Additional upstream sampling could be pursued if winter flow is present
22	North of Mabton	46.24010344	-119.9992304	Drain 31 at West Charvet Rd	Drain 31	Y	Located at West Charvet Rd and Sunnyside-Mabton Rd intersection
23	Southwest of Grandview	46.2364516	-119.9629096	Drain 35 off of Charvet Rd	Drain 35	Y	Historical sampling location was at a broken pipe at the south end of a hops field at 1701 Charvet Rd. Uncertain if sampling access currently possible.
24	SSW of Grandview	46.22924162	-119.925942	Joint Drain 2 (Grandview Drain) at Chase Rd	Joint Drain 2	Y	Historical sampling location was at a private pond at 862 Chase Rd, near the mouth of the joint drain.
25	East of Mabton	46.19769036	-119.9184388	Joint Drain 1 at Bus Rd	Joint Drain 1	N	Downstream sampling between Byron Ponds in the WDFW Byron Unit may not be representative of groundwater concentrations due to water fowl usage of the wetlands.

Note:

-Historical nitrate data were queried from Ecology's EIM database to assess if data exist for the proposed sampling locations. Other data sources (such as USGS or RSBOJC) may exist that are not in the EIM database.

Table 4. Well Installation and Annual Monitoring Cost Estimate

Wells	Estimated Drilling Costs	Estimated Lab Costs, Wells¹	Passive Sampling Devices²	Total Well Sampling Costs	Total Cost³
1 - 5	\$24,580	\$900	\$2,750	\$3,650	\$28,230
1 - 10	\$56,802	\$1,650	\$5,071	\$6,721	\$63,523
1 - 15	\$114,426	\$2,550	\$7,821	\$10,371	\$124,797
1 - 20	\$148,442	\$3,300	\$10,142	\$13,442	\$161,884
1 - 25	\$188,861	\$4,200	\$12,892	\$17,092	\$205,953
1 - 30	\$232,043	\$4,950	\$15,213	\$20,163	\$252,206

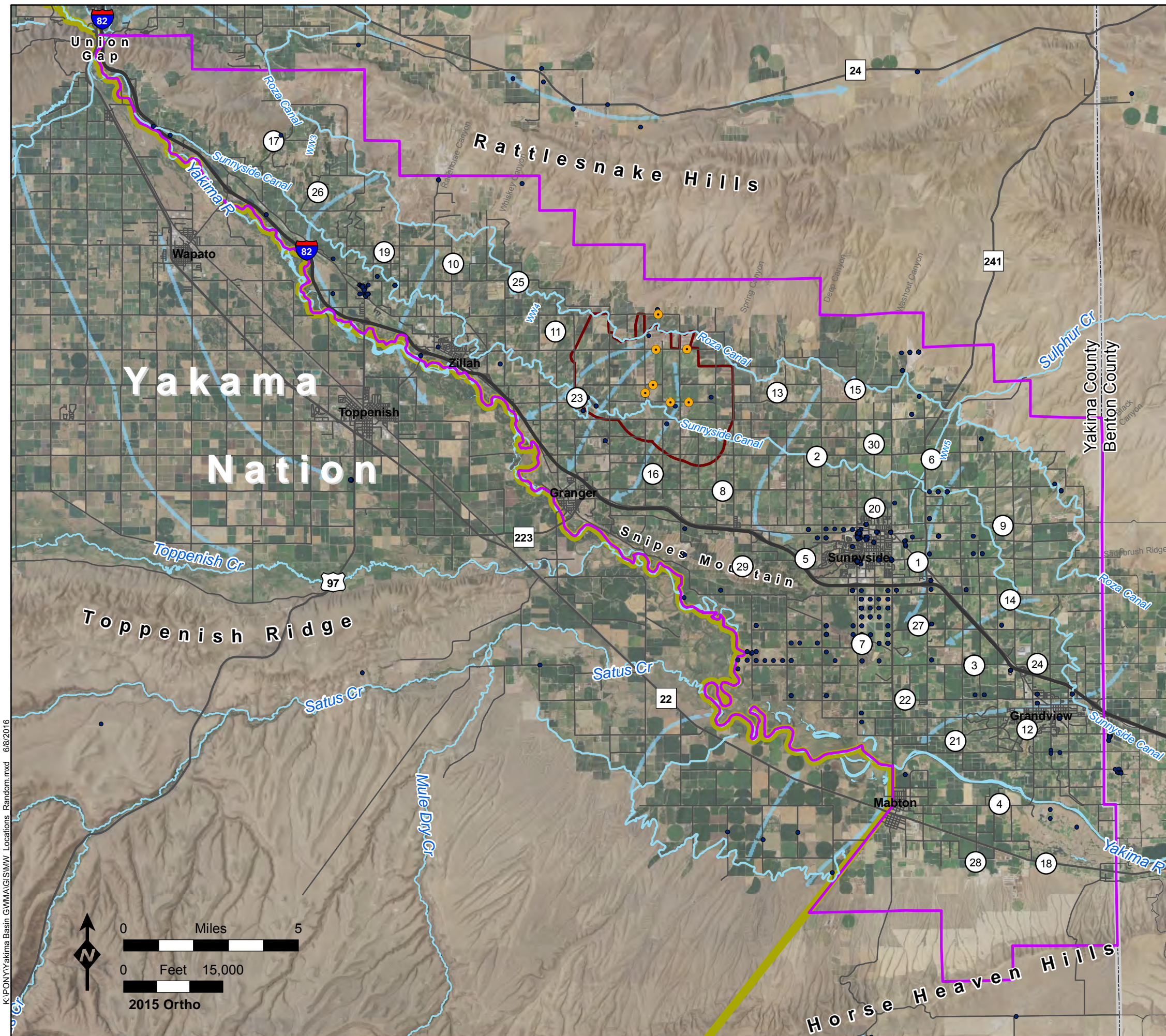
Drain Sampling Locations	Estimated Lab Costs, Drains¹
1 - 25	\$4,200

¹ Estimated laboratory costs are for one year of sampling with six sampling events. For quality assurance purposes, this estimate includes duplicate sample analyses, and assumes one duplicate is collected every 10 samples.

² Passive sampling device costs are estimated for one year with six sampling events. Passive sampling device costs will be slightly less (roughly 8 percent) following year one since hanging assemblies and weights will not need to be purchased.

³ Total Costs are for well installation and one year of monitoring.

Figure 1
General Well Locations 1 – 30



- General Well Locations
- EPA Monitoring Wells
- Existing Public Monitoring Wells (from EIM and Well Log Databases)
- GWMA Boundary
- EPA Dairy Cluster Buffer Boundary
- Yakama Nation Boundary (from Yakima County)
- General Groundwater Flow Direction (from USGS)

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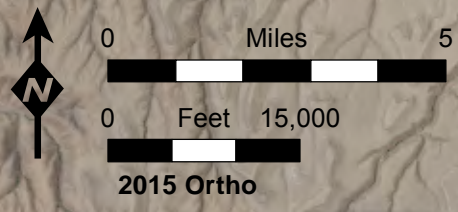
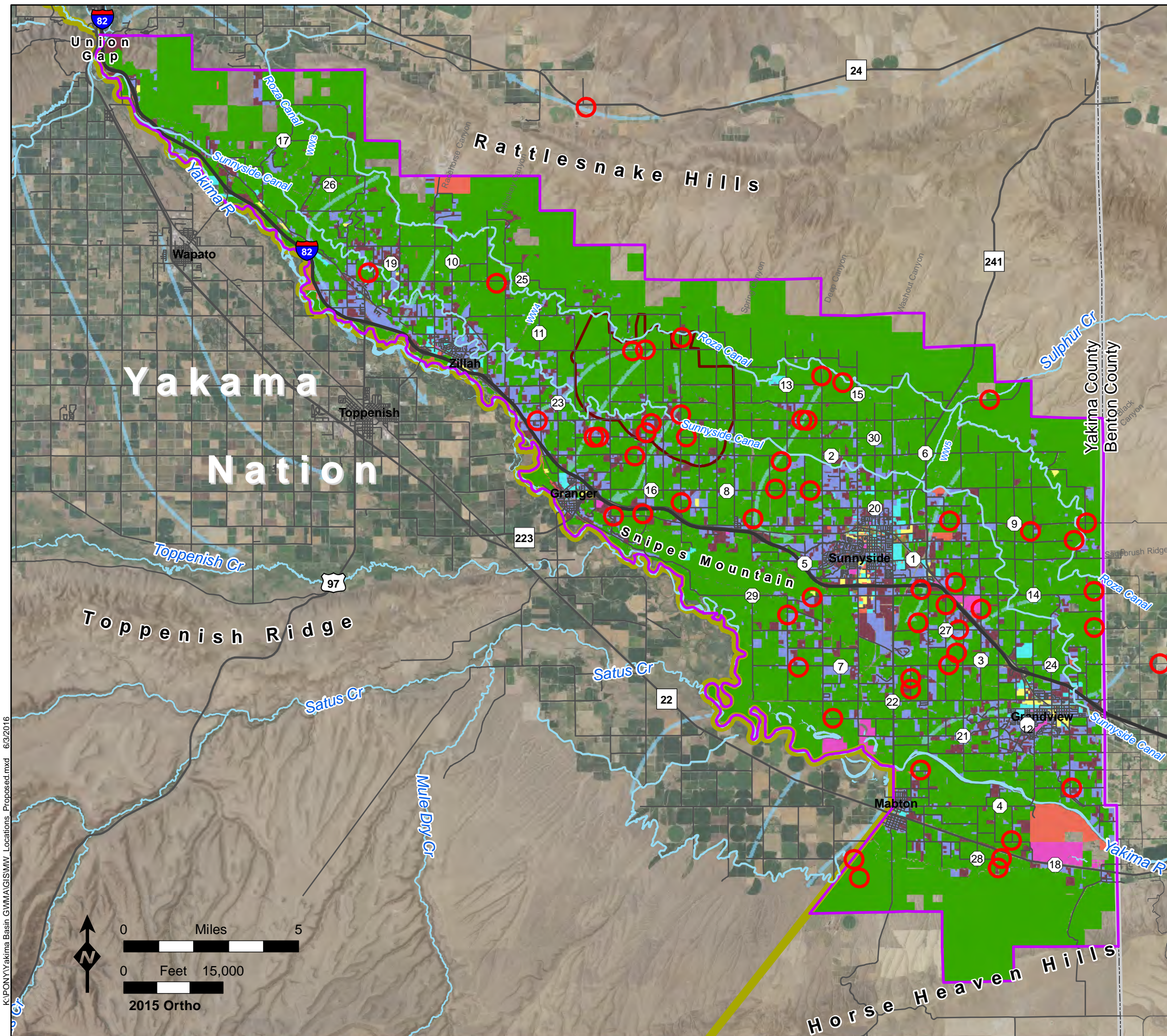
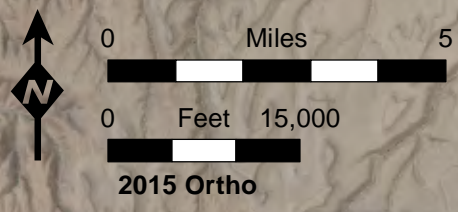


Figure 2
Preliminary Drill Sites and Land Use



- Preliminary Drill Site
 - Dairy (from WADOA 2014)
 - GWMA Boundary
 - EPA Dairy Cluster Buffer Boundary
 - Yakama Nation Boundary (from Yakima County)
- Current Land Use
- Residential
 - Manufacturing
 - Transportation\Utilities
 - Commercial Retail
 - Commercial Services
 - Cultural/Recreation
 - Resource/Agriculture
 - Undeveloped
 - General Groundwater Flow Direction (from USGS)

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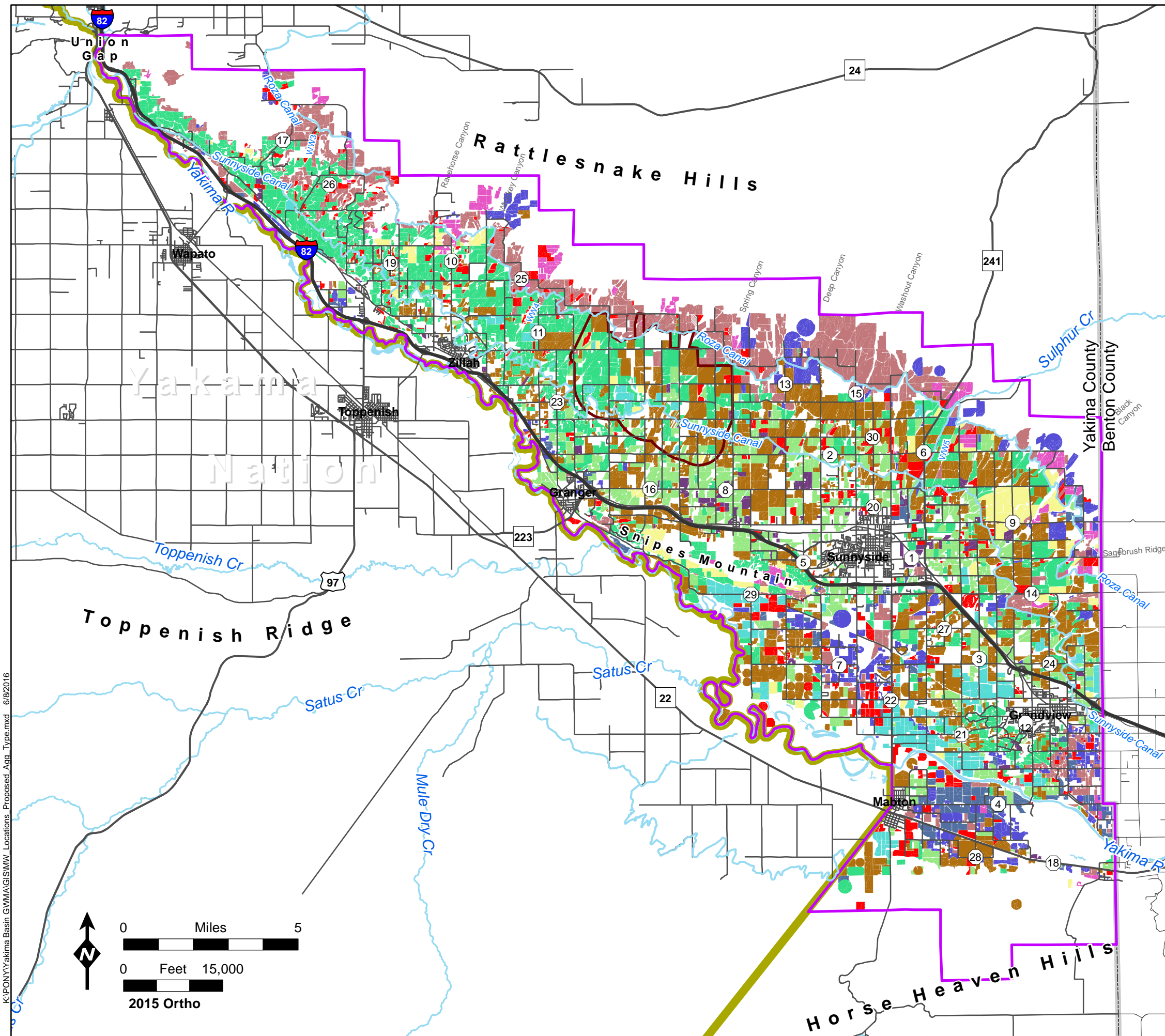
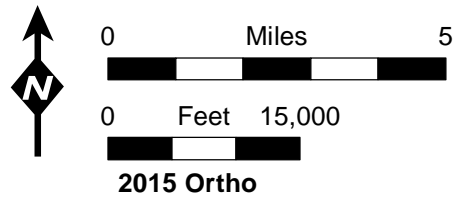


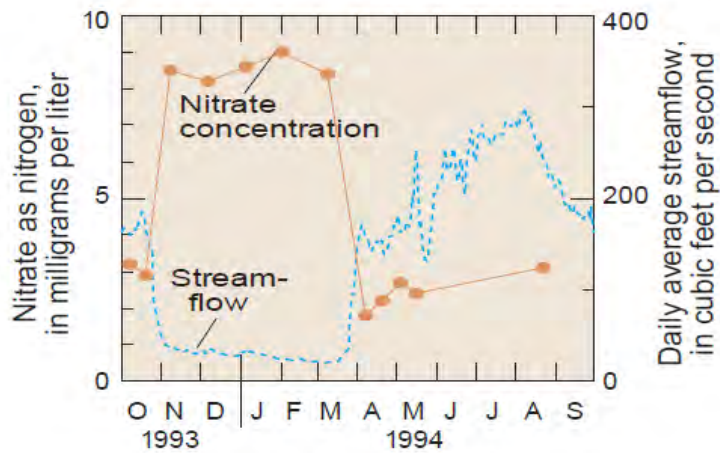
Figure 3
 Preliminary Drill Sites and
 Irrigated Land Categories



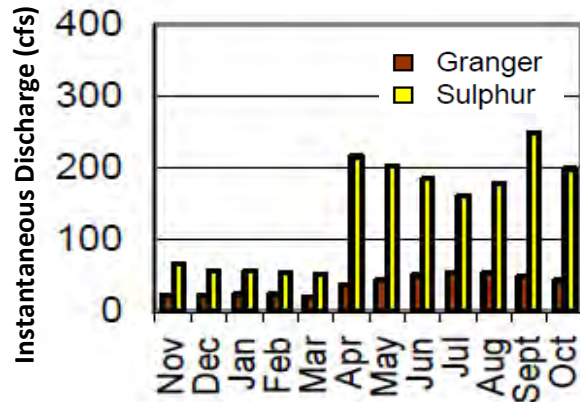
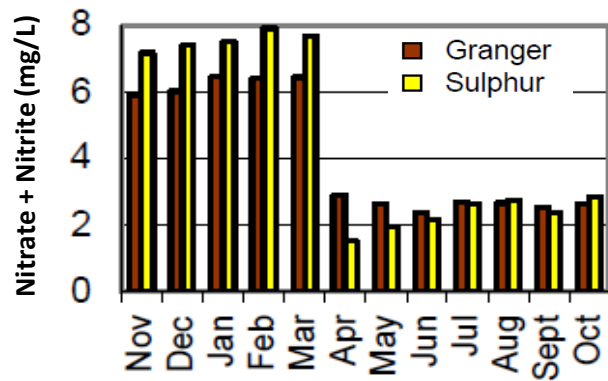
- Preliminary Drill Site
- Irrigated Land Category
 (see Table 2 for Descriptions)
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- Not Ranked
- GWMA Boundary
- EPA Dairy Cluster Buffer Boundary
- Yakama Nation Boundary (from Yakima County)

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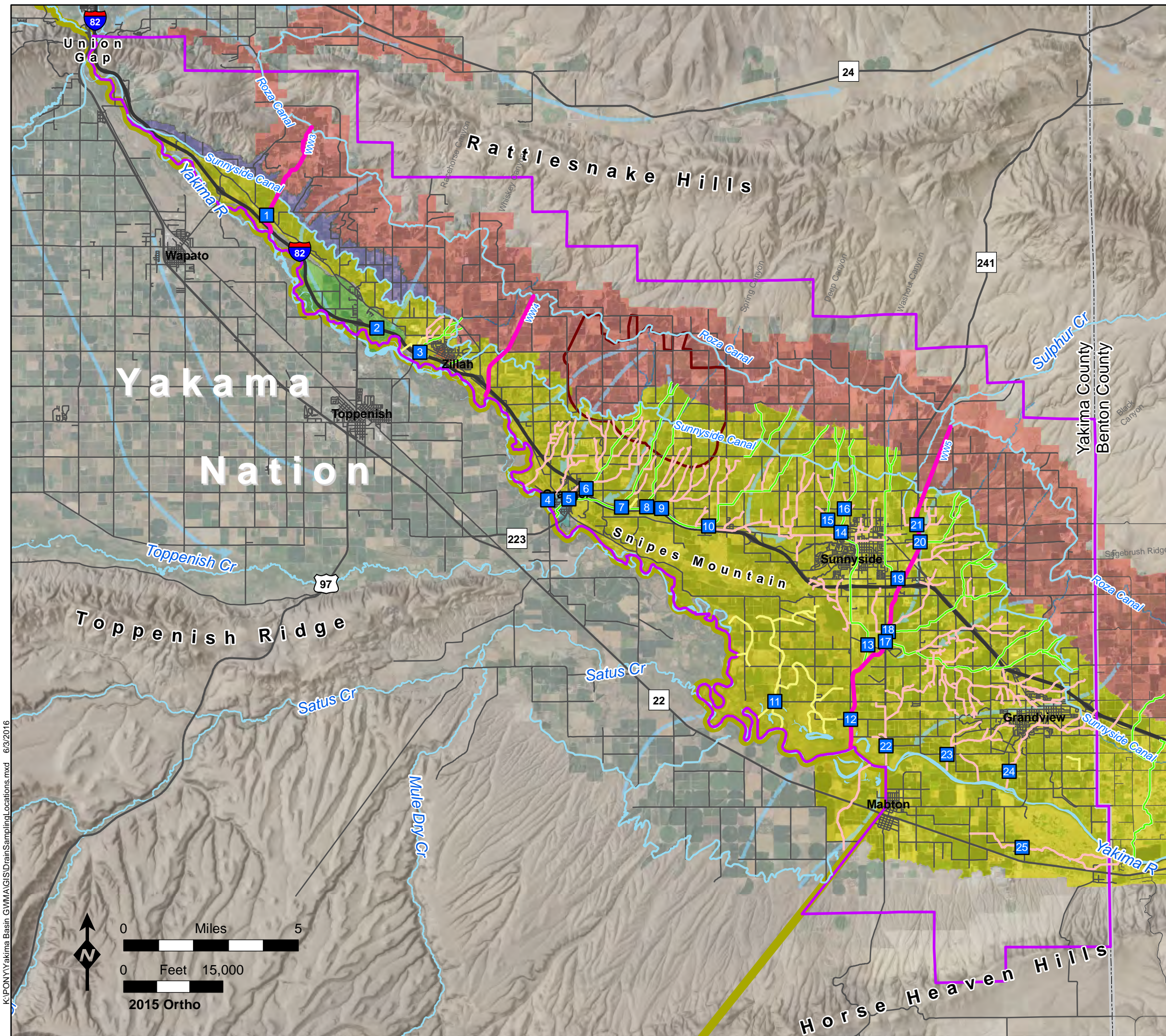
4a) Nitrate concentrations in wasteways are generally highest in the winter when their main source is groundwater discharge and negligible dilution from return flows occurs. Figure from Williamson & others (1998).



4b) Median monthly nitrate and discharge measurements from 2000 - 2008 for Granger Drain and Sulphur Creek Wasteway. Figures from Zuroske (2009).

Figure 4
Comparison of Drain Concentrations to Irrigation Flow

Figure 5
Preliminary Drain Sampling Stations



- Drain Sampling Stations
- GWMA Boundary
- EPA Dairy Cluster Buffer Boundary
- Yakama Nation Boundary (from Yakima County)
- Drainage Improvement Districts Lines (DID_Lines)
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- Wasteway
- Irrigation Districts**
- Buena
- Home
- Union Gap
- Zillah
- Roza
- Sunnyside Valley
- General Groundwater Flow Direction (from USGS)

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APPENDIX A
LOCAL MAPS OF PRELIMINARY DRILL SITES

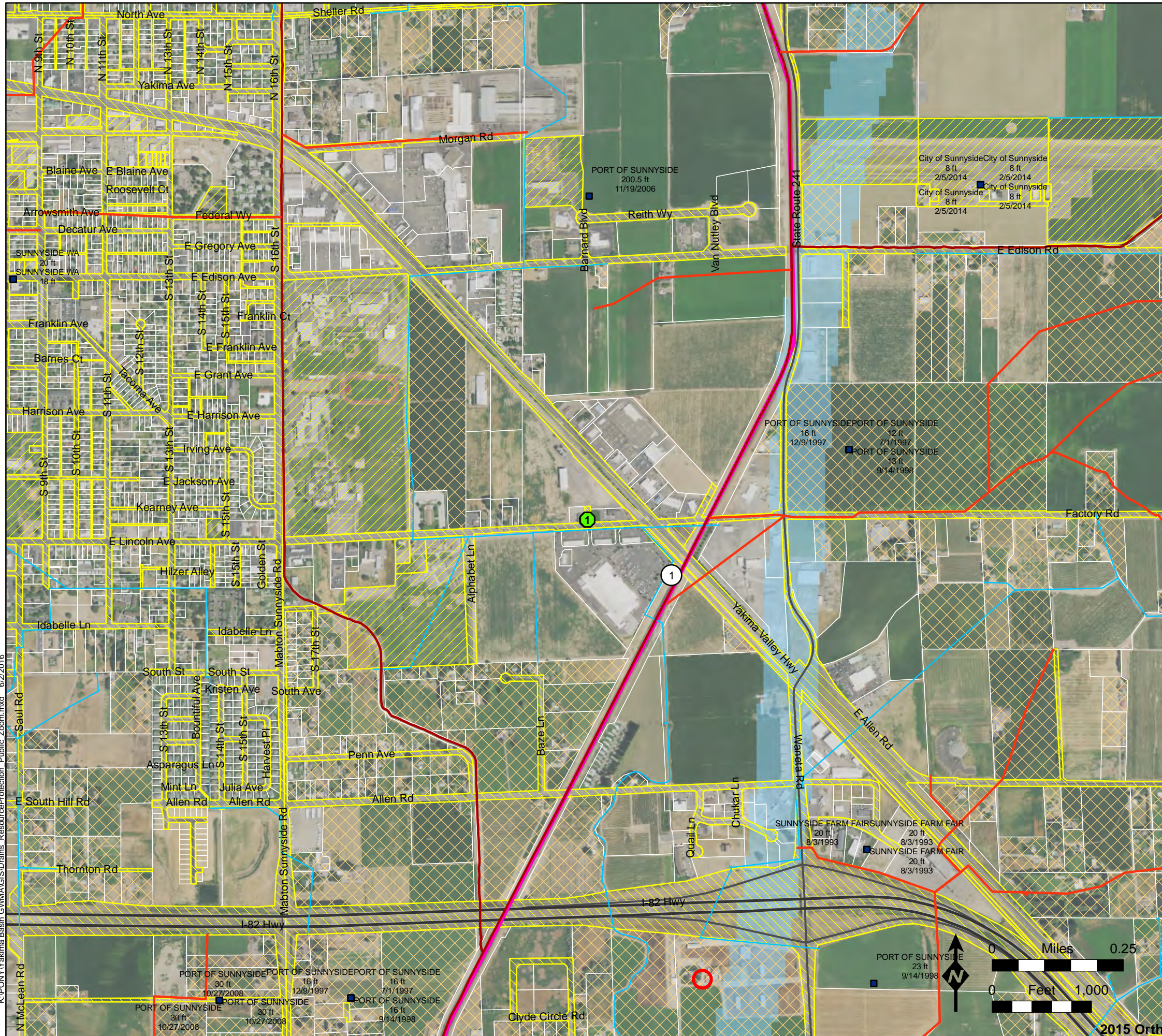
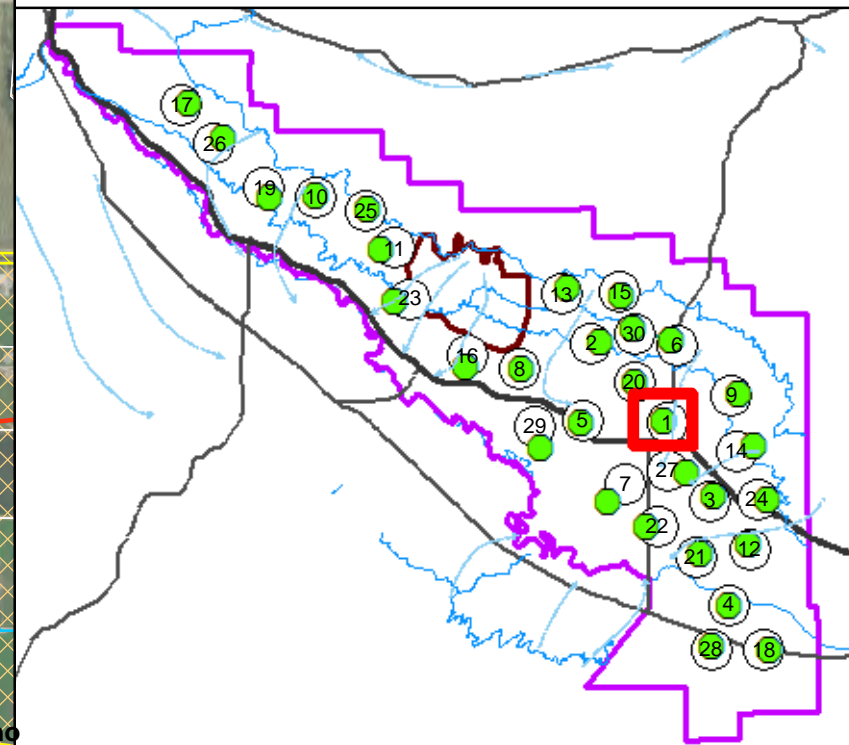


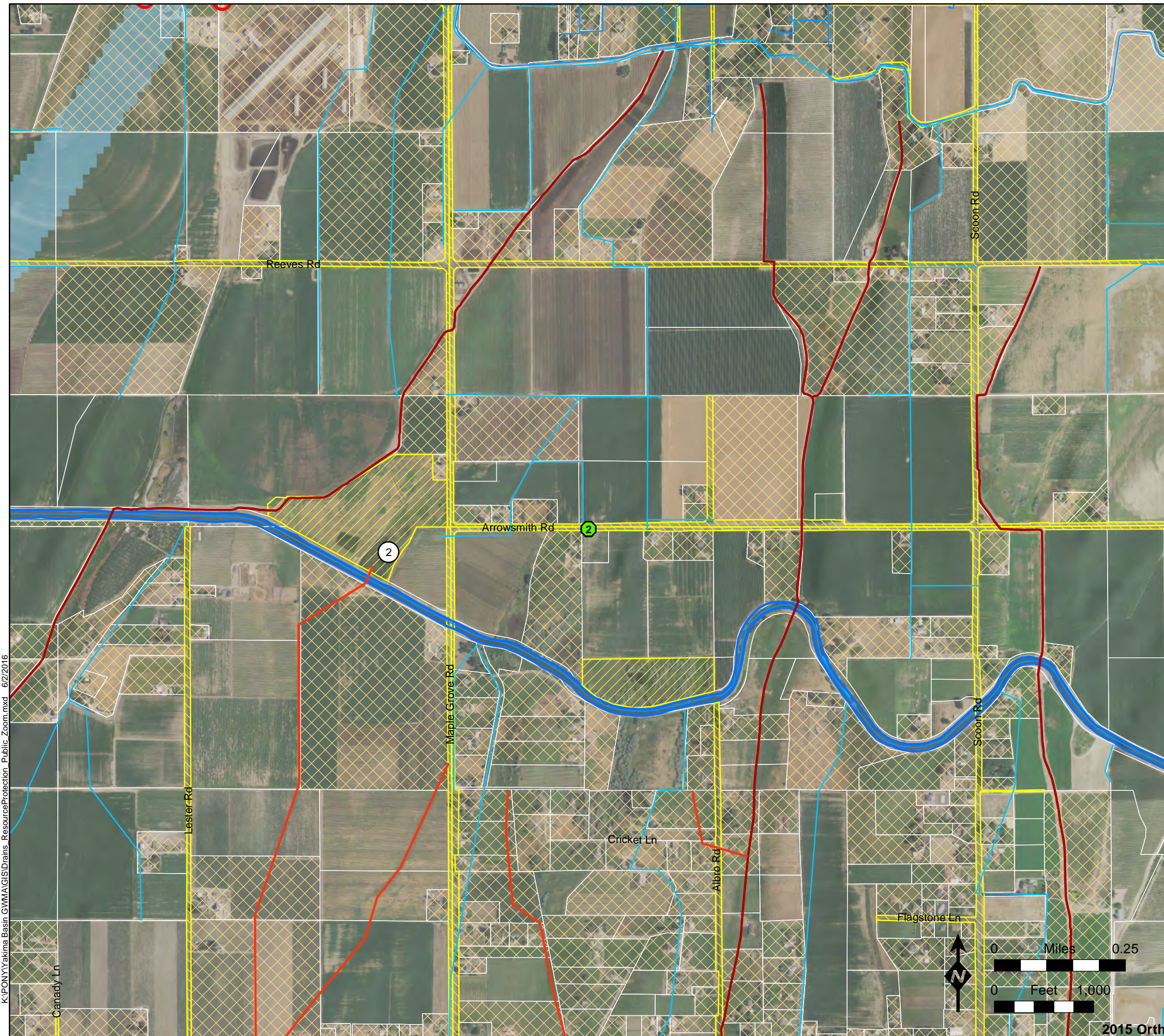
Figure A1
General Well Location and
Preliminary Drill Site 1

- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Wasteway (Roza Irr. Dist)
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014
- Resource Protection Wells with public owner name

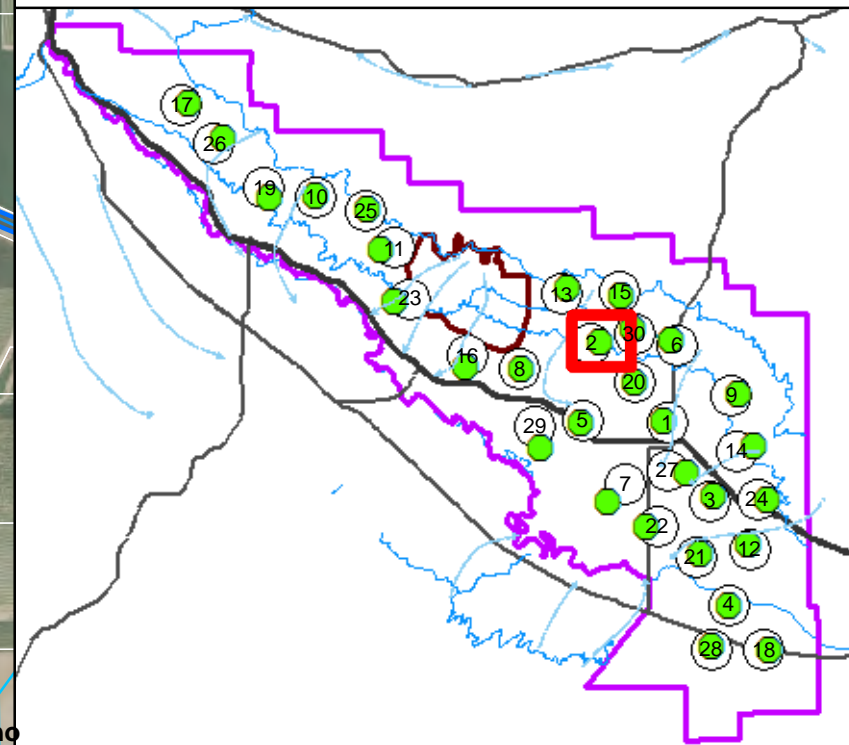


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Figure A2
General Well Location and
Preliminary Drill Site 2



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014



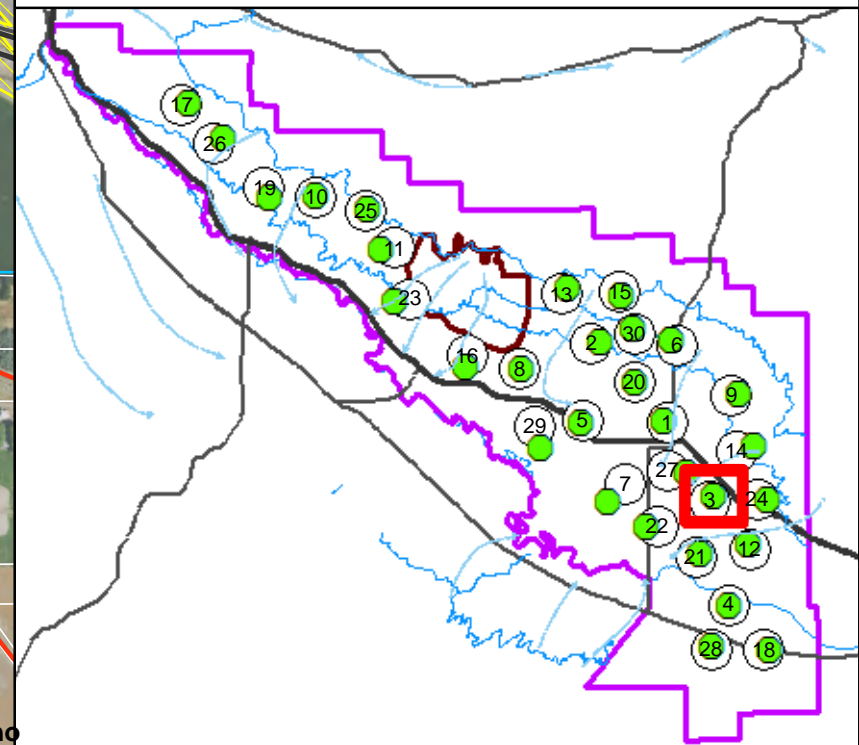
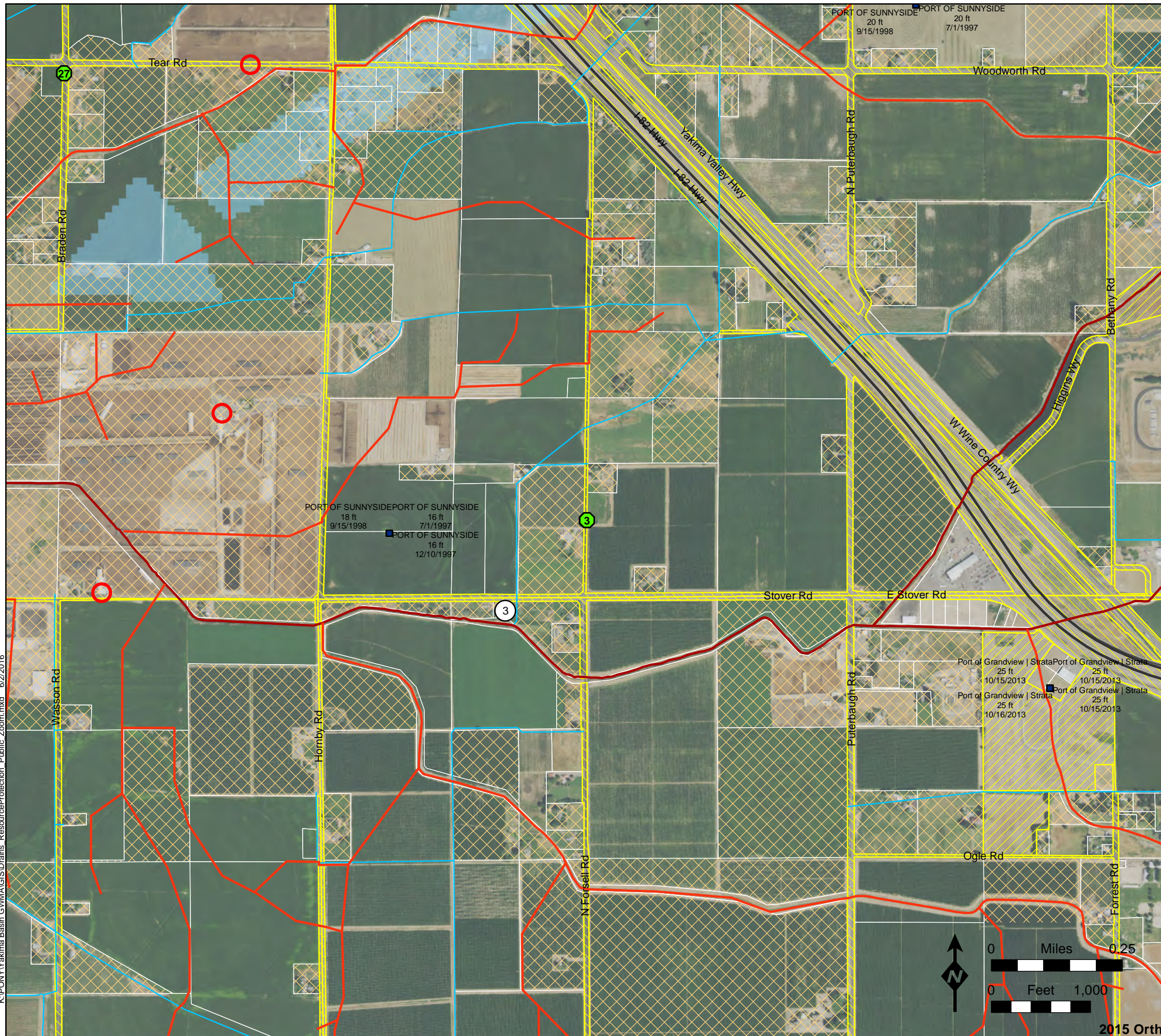
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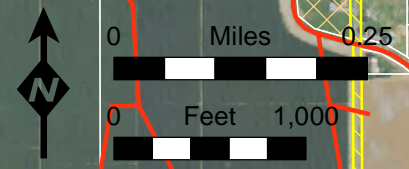
Figure A3
General Well Location and
Preliminary Drill Site 3



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014
- Resource Protection Wells with public owner name



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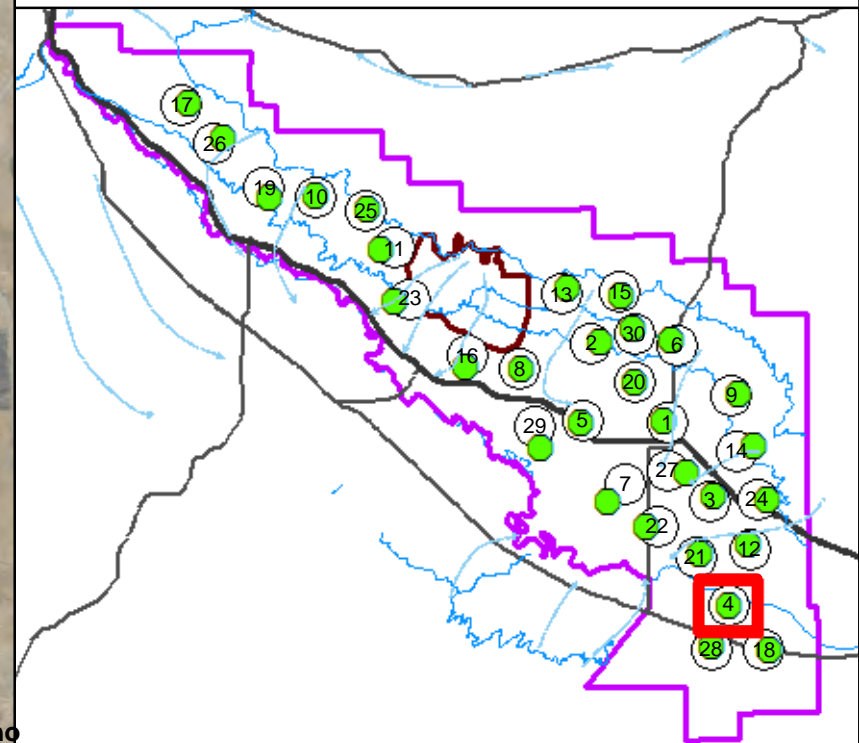
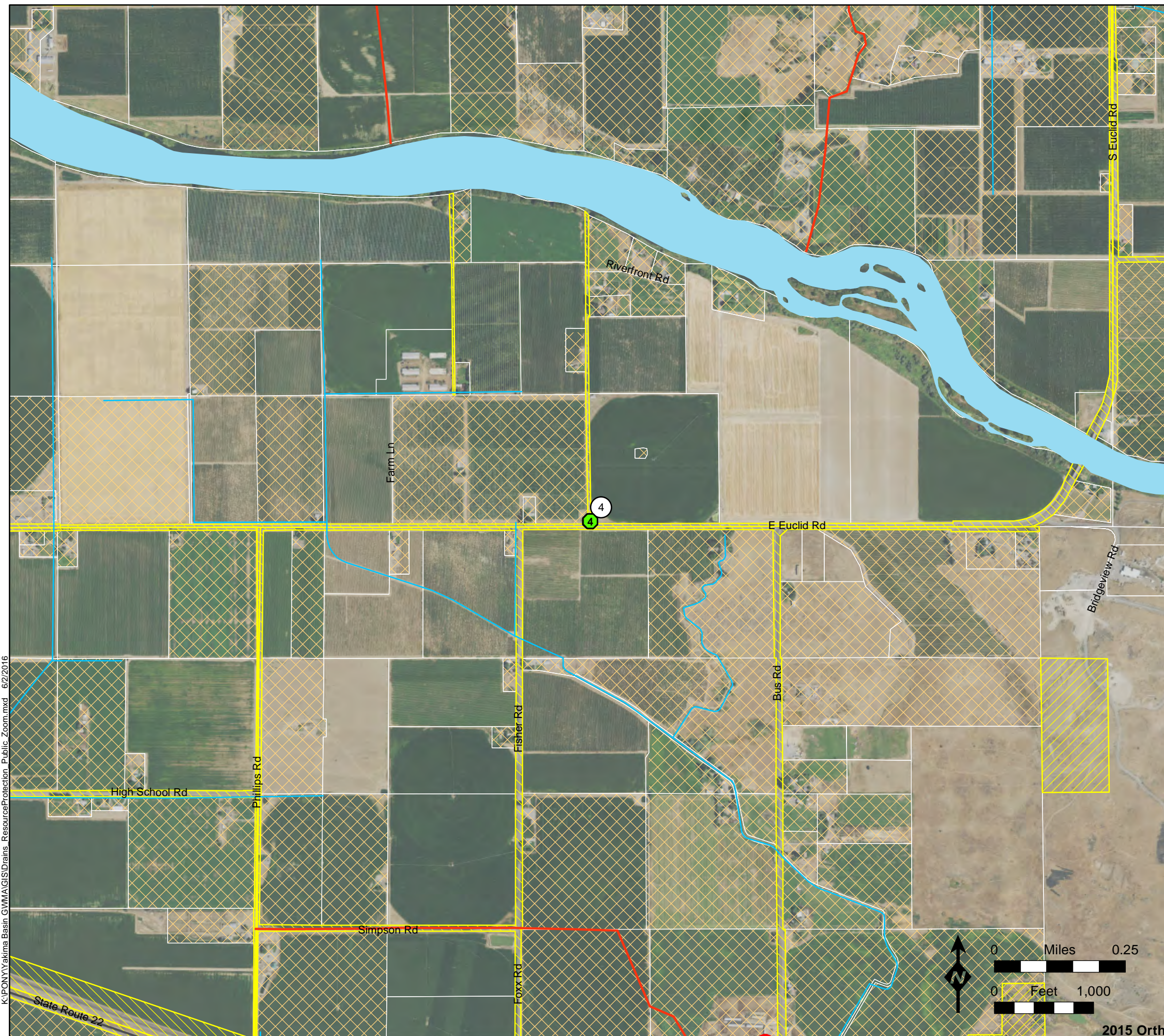


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Figure A4
General Well Location and
Preliminary Drill Site 4



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014



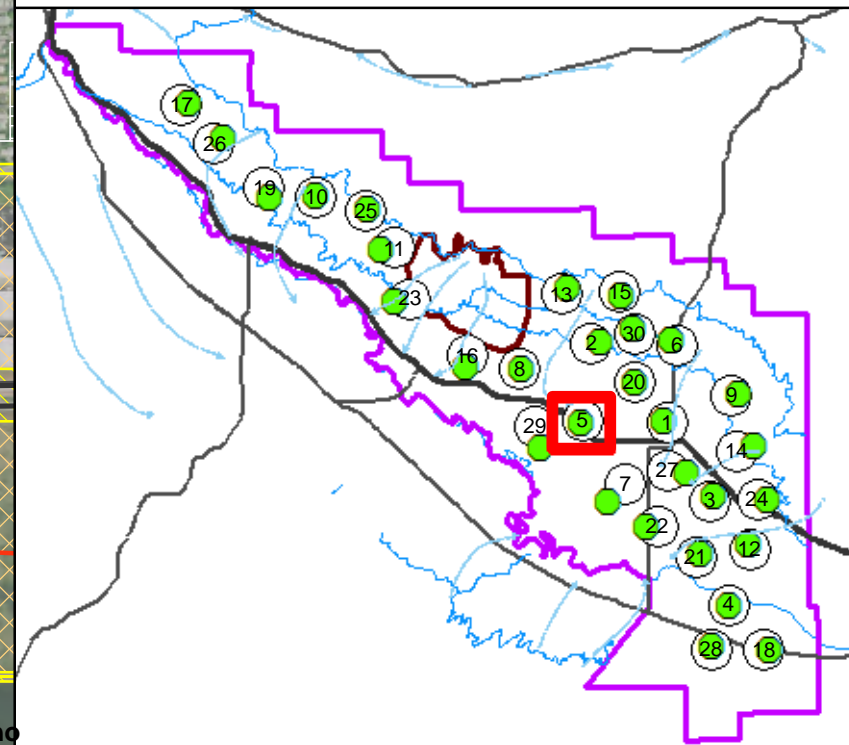
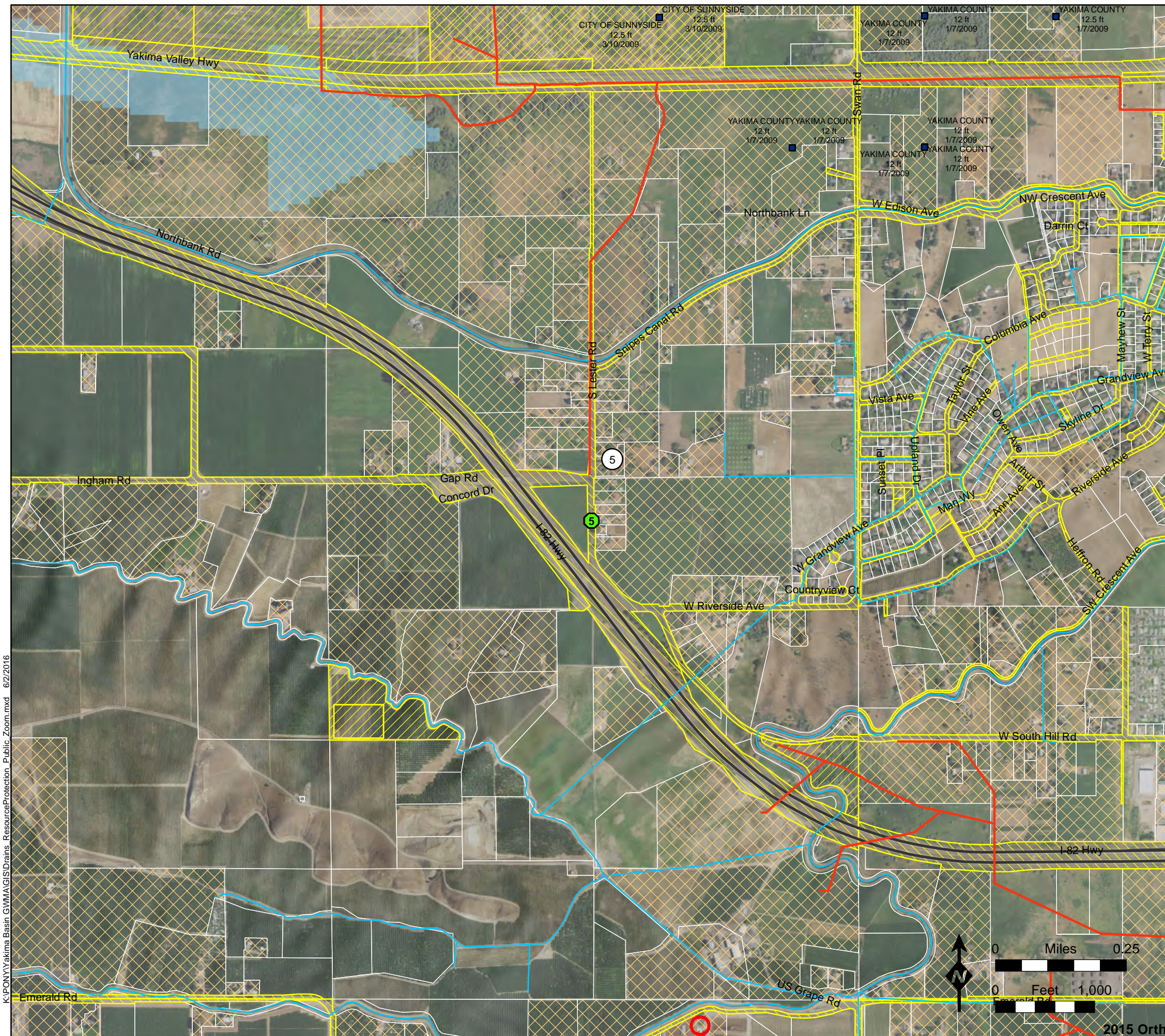
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Figure A5
General Well Location and
Preliminary Drill Site 5



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014
- Resource Protection Wells with public owner name



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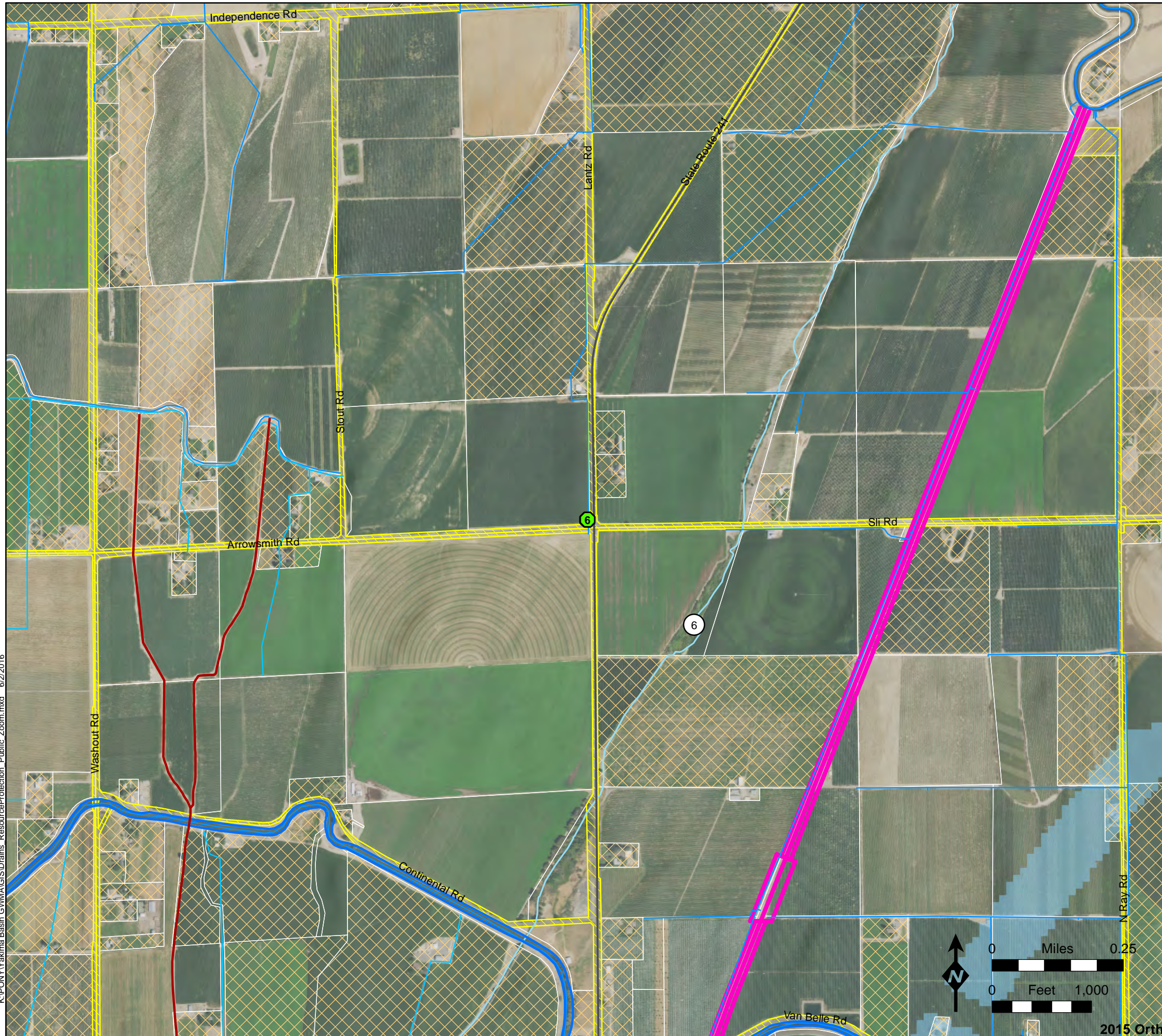


Figure A6
General Well Location and
Preliminary Drill Site 6

- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Wasteway (Roza Irr. Dist)
- Joint Drains (JD_Lines)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)

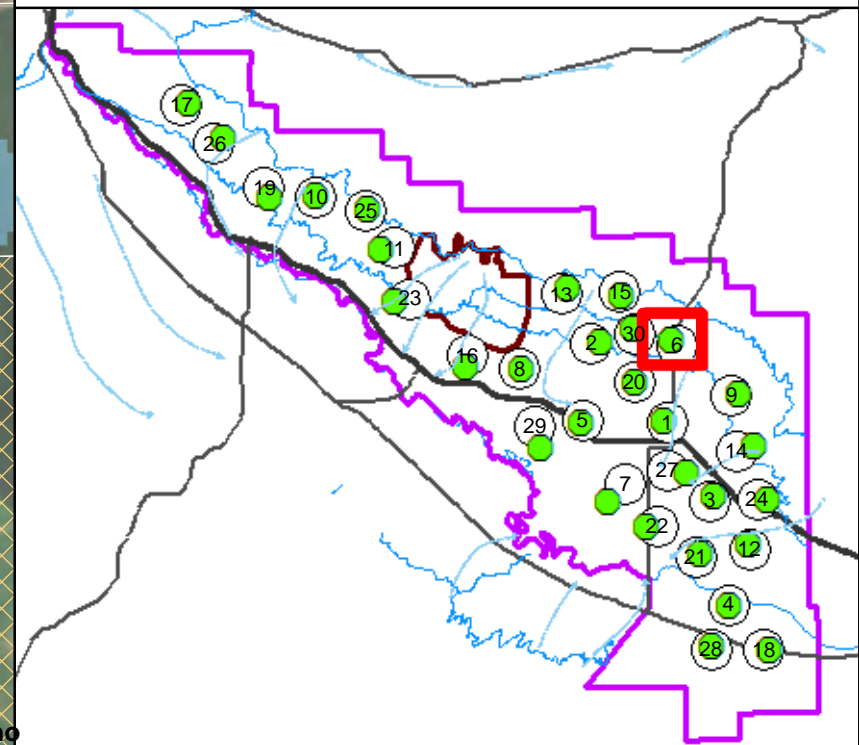
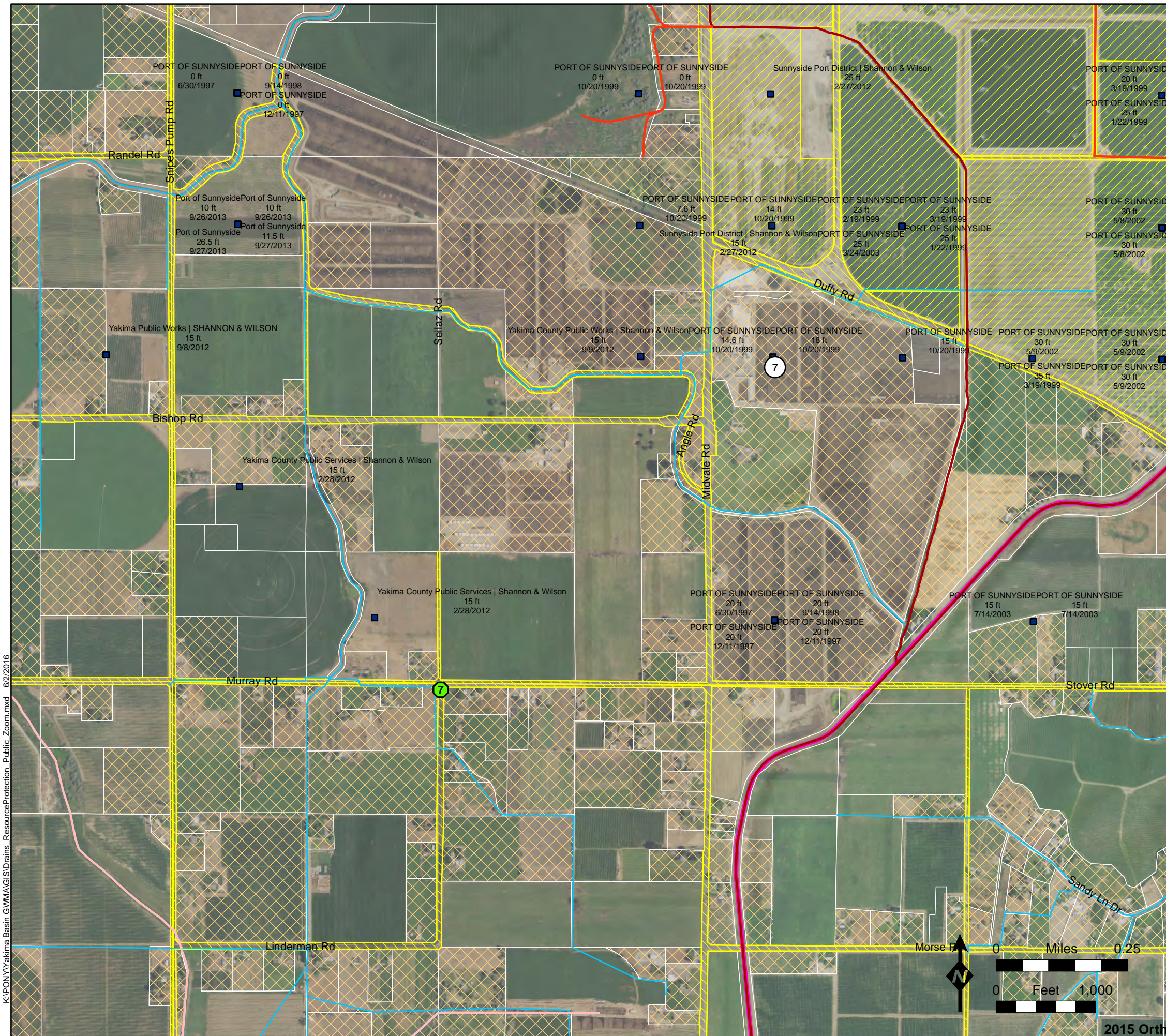
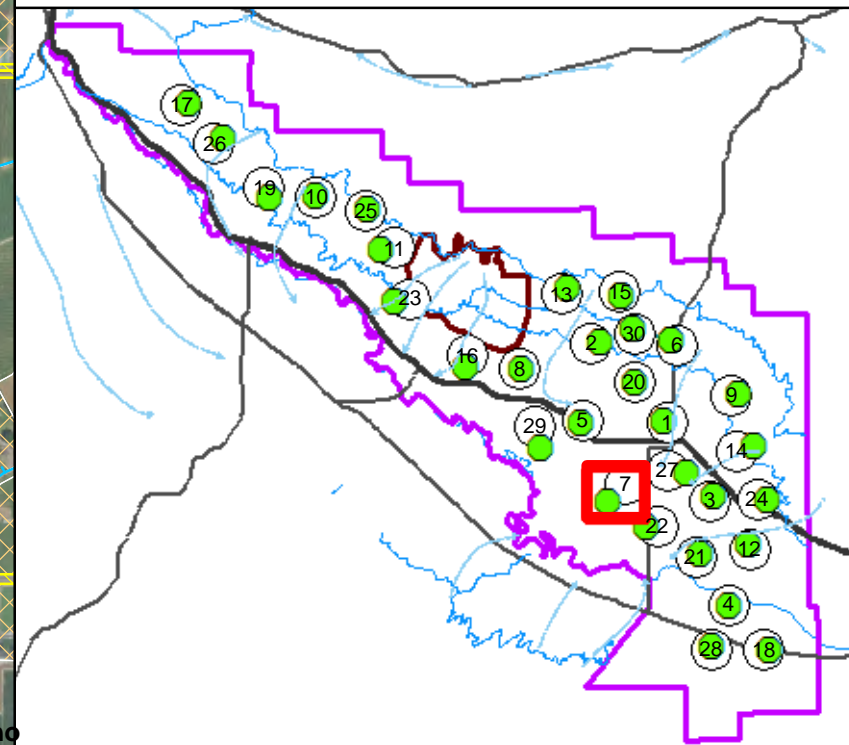


Figure A7
 General Well Location and
 Preliminary Drill Site 7



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Wasteway (Roza Irr. Dist)
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Resource Protection Wells with public owner name



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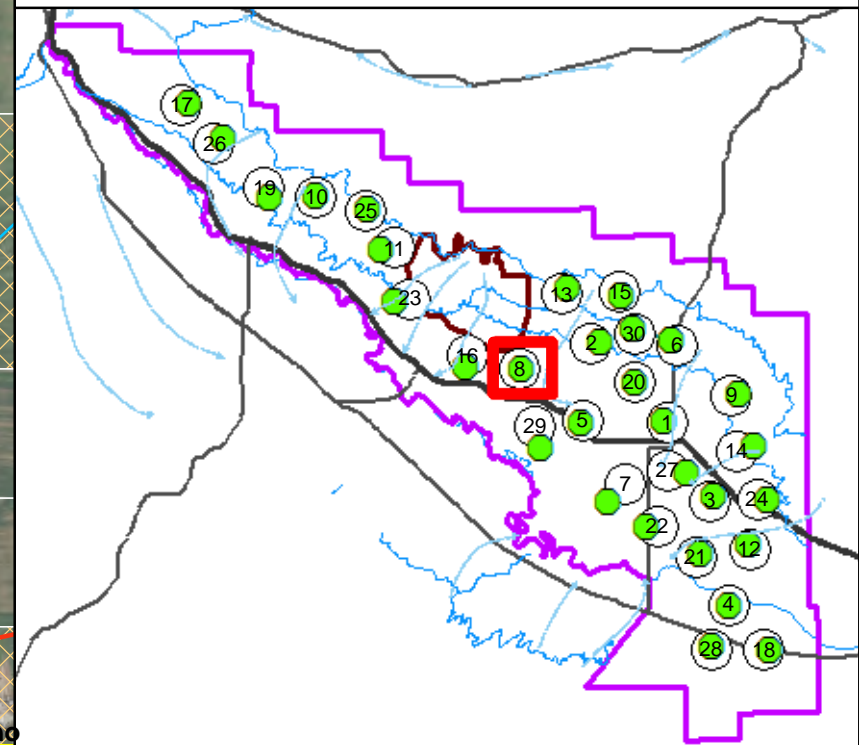
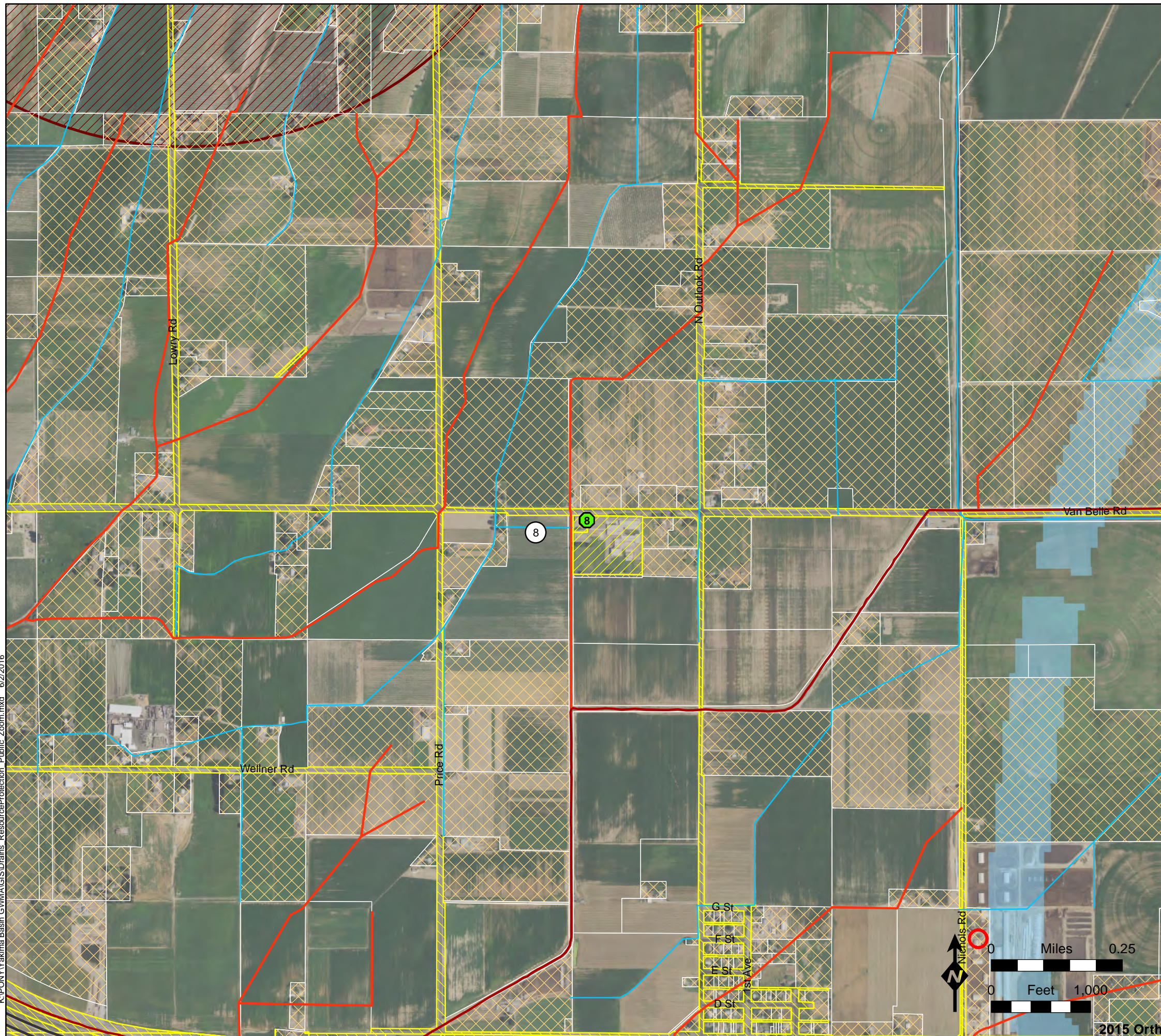


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Figure A8
 General Well Location and
 Preliminary Drill Site 8



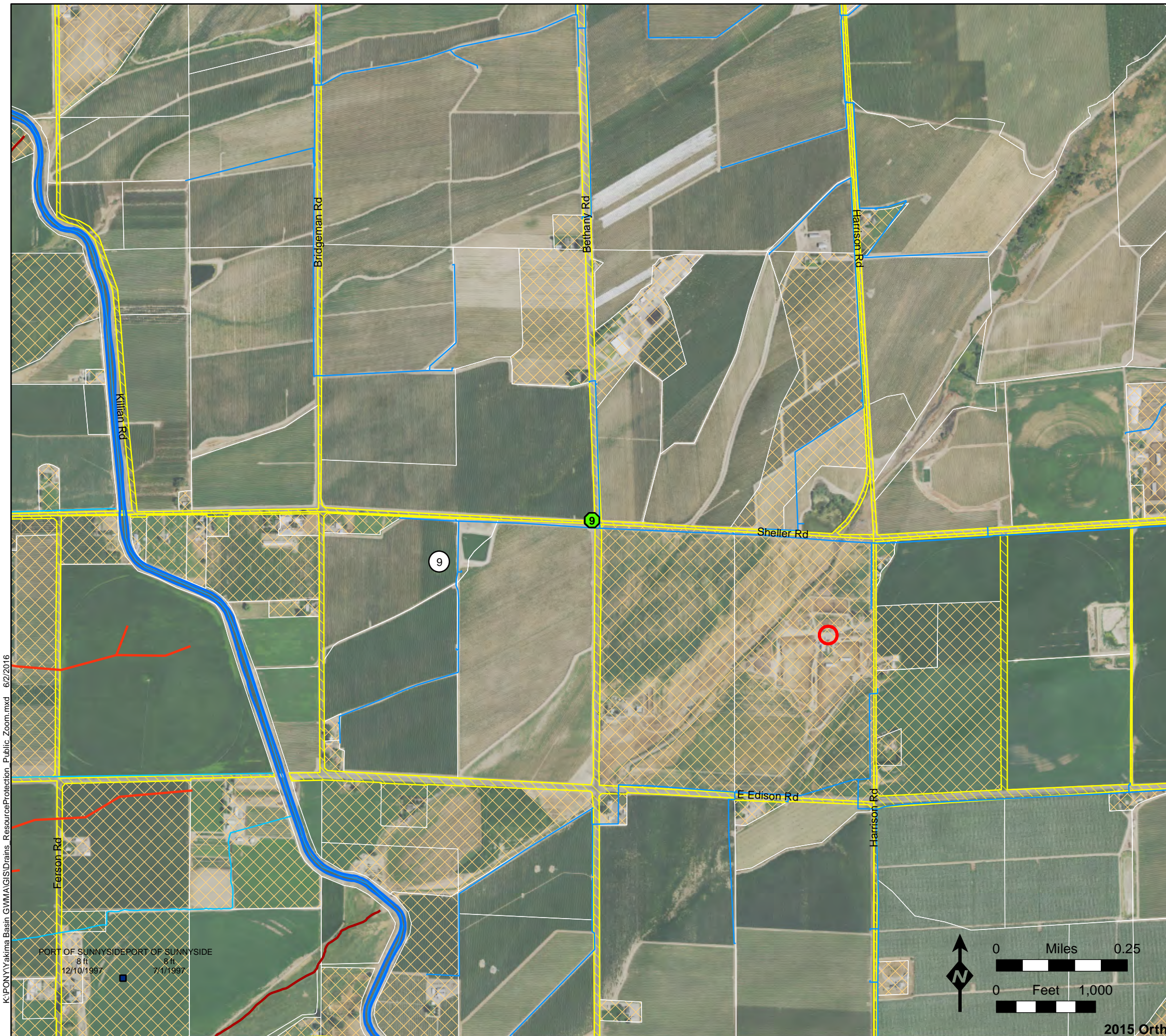
- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- EPA Dairy Cluster Buffer Boundary
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014



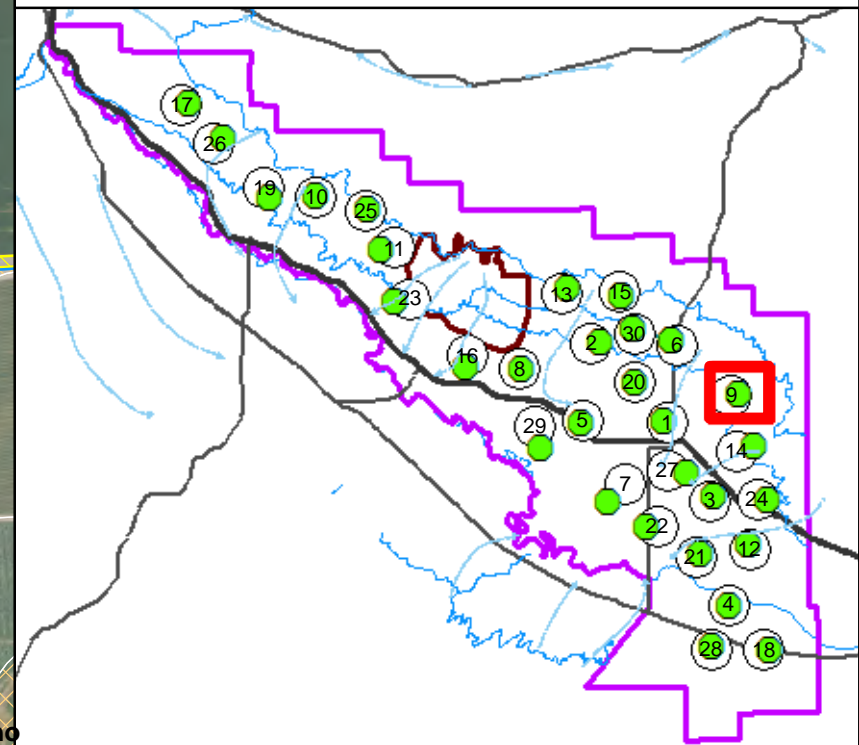
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2015 Ortho

Figure A9
 General Well Location and
 Preliminary Drill Site 9



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014
- Resource Protection Wells with public owner name



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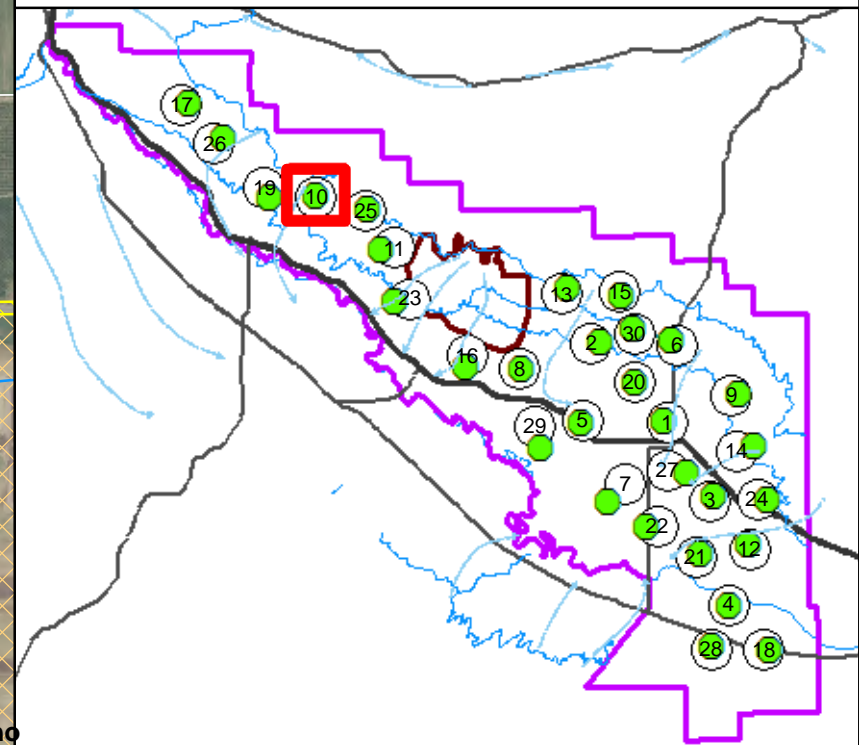
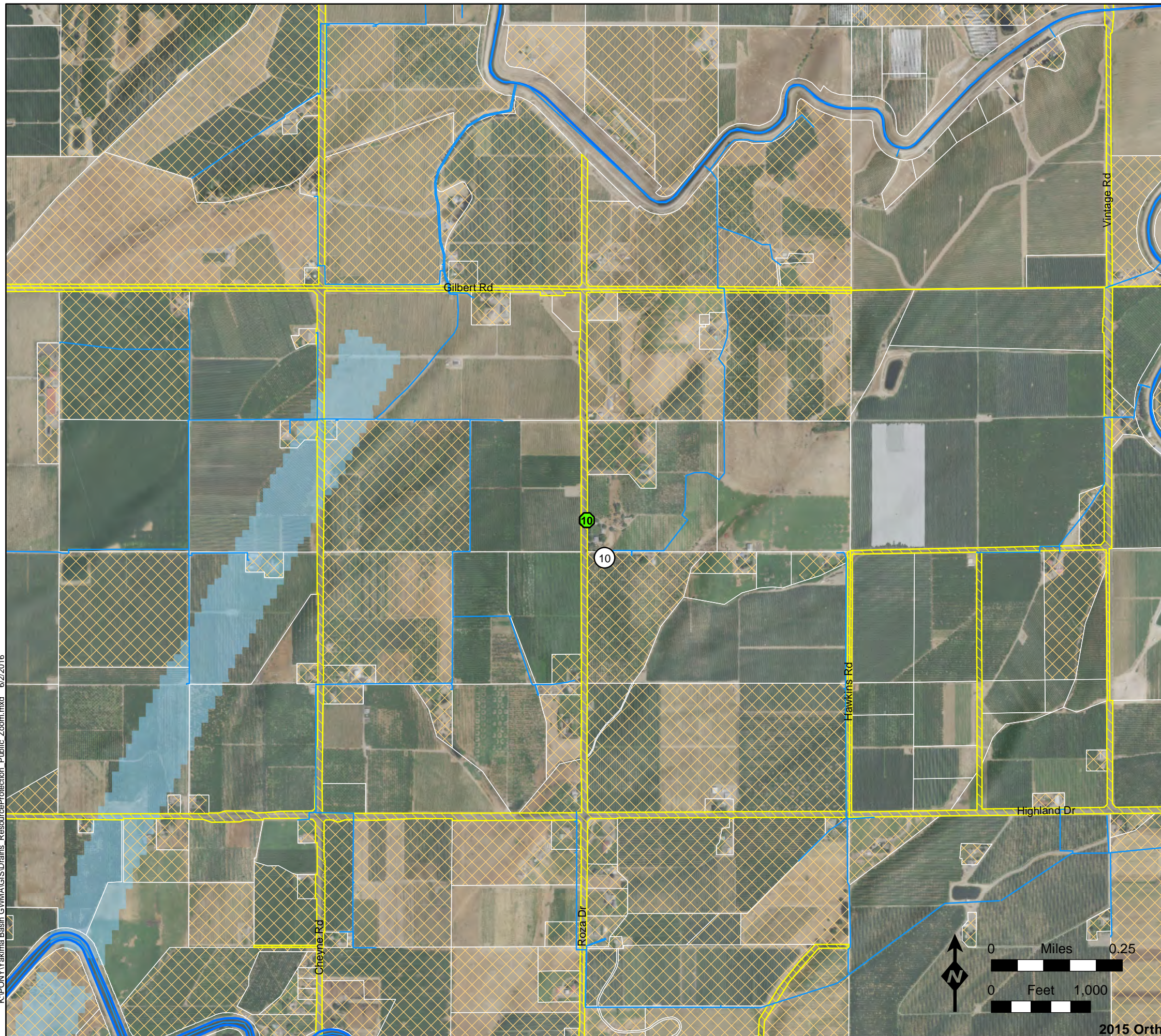
PORT OF SUNNYSIDE PORT OF SUNNYSIDE
 8 ft 8 ft
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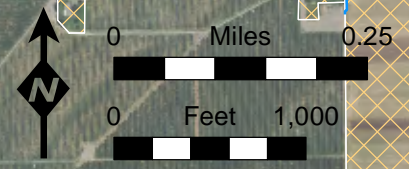
Figure A10
General Well Location and
Preliminary Drill Site 10



- General Well Location
- Preliminary Drill Site
- ▨ Right of Way Parcels
- ▧ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)

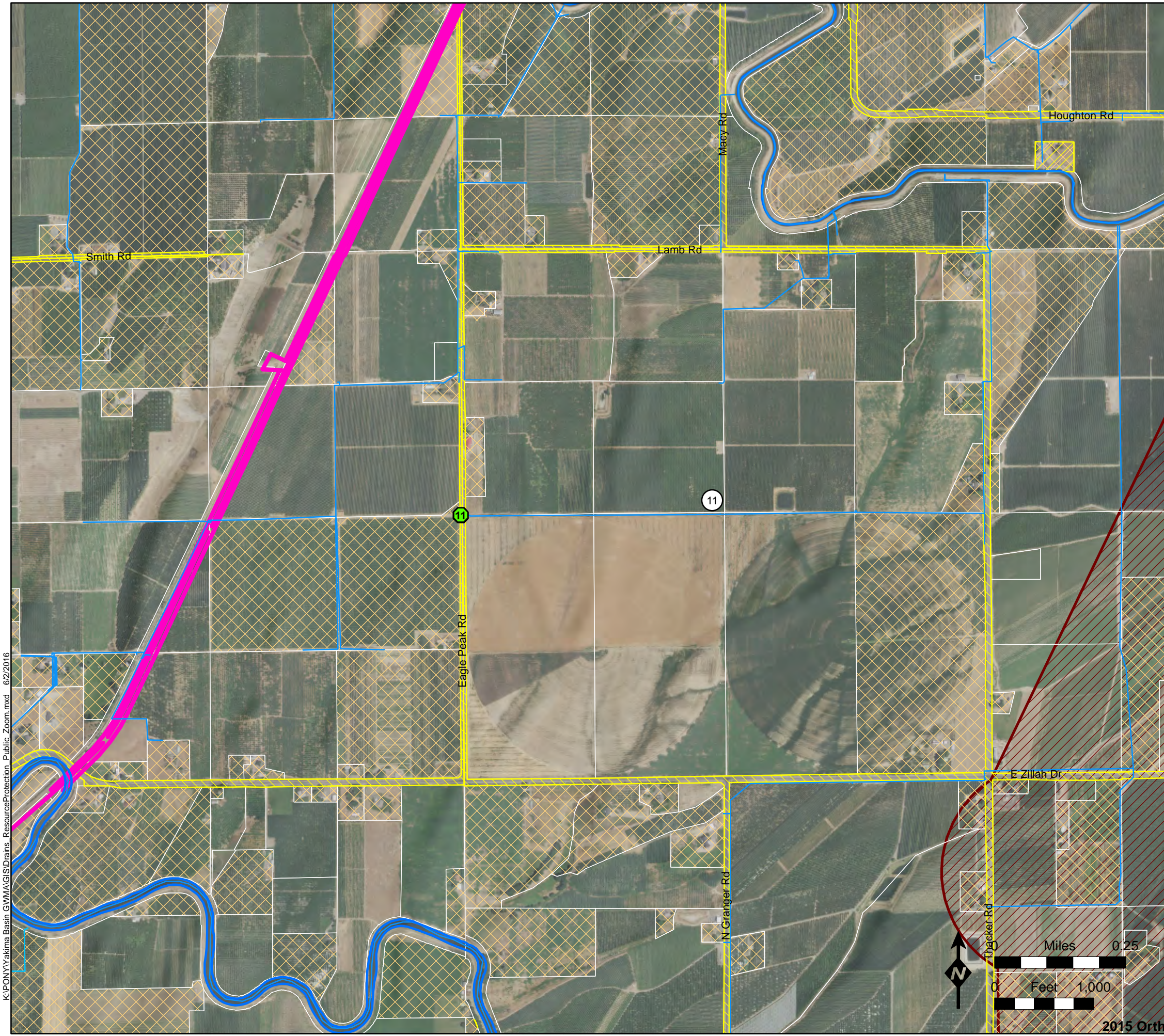


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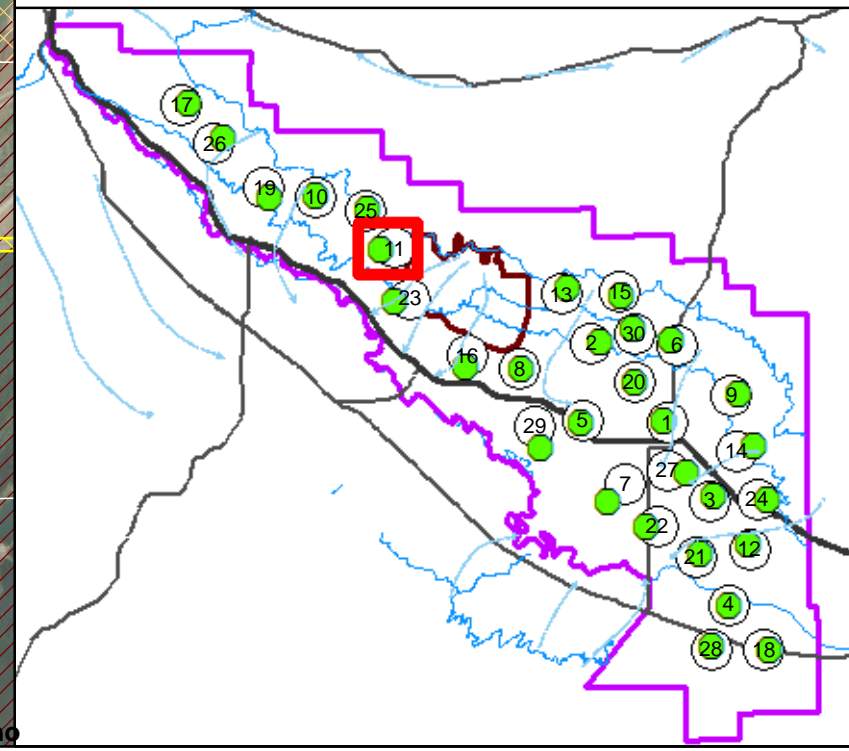


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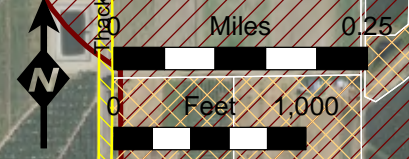
Figure A11
 General Well Location and
 Preliminary Drill Site 11



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- EPA Dairy Cluster Buffer Boundary
- Wasteway (Roza Irr. Dist)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)

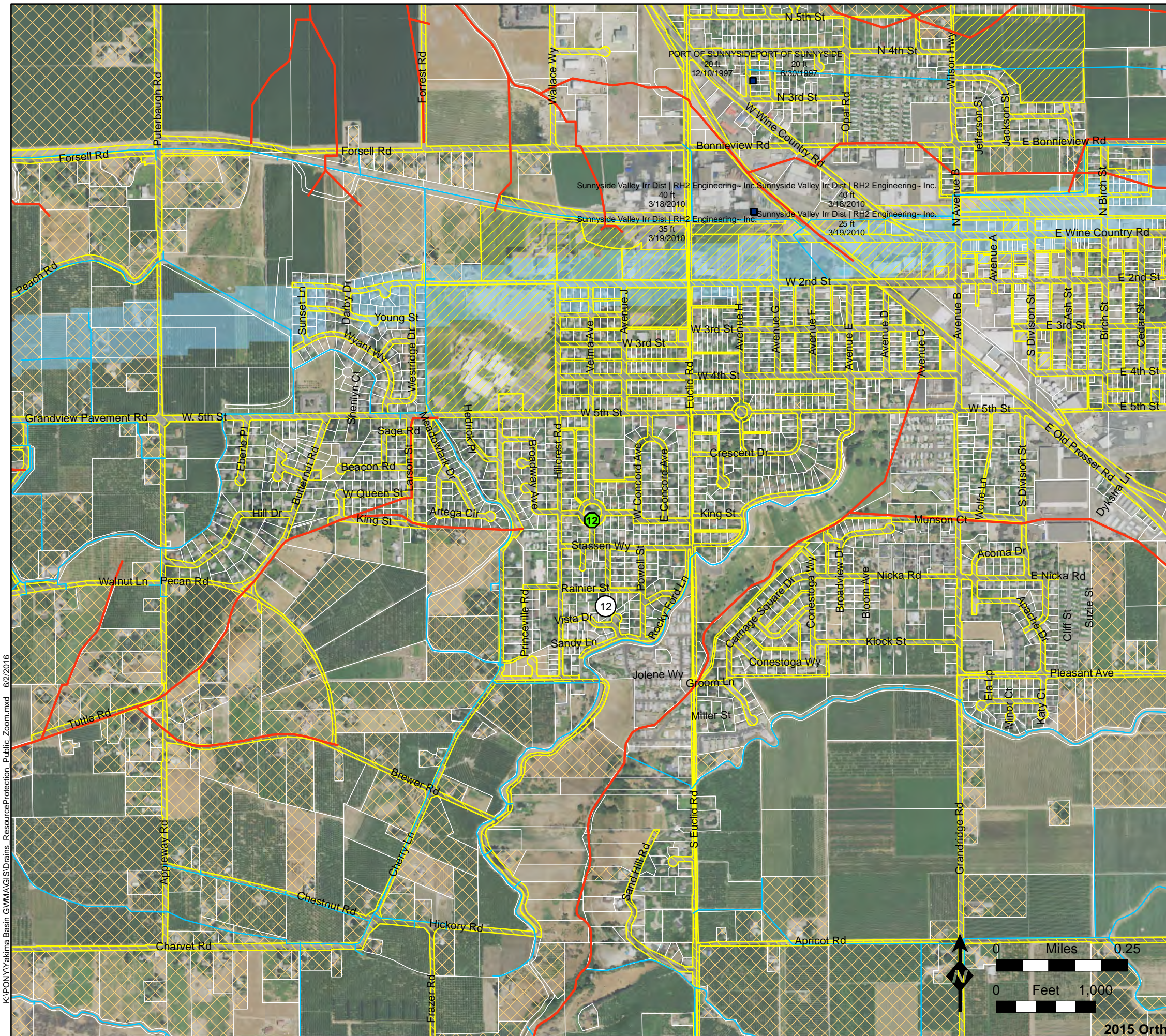


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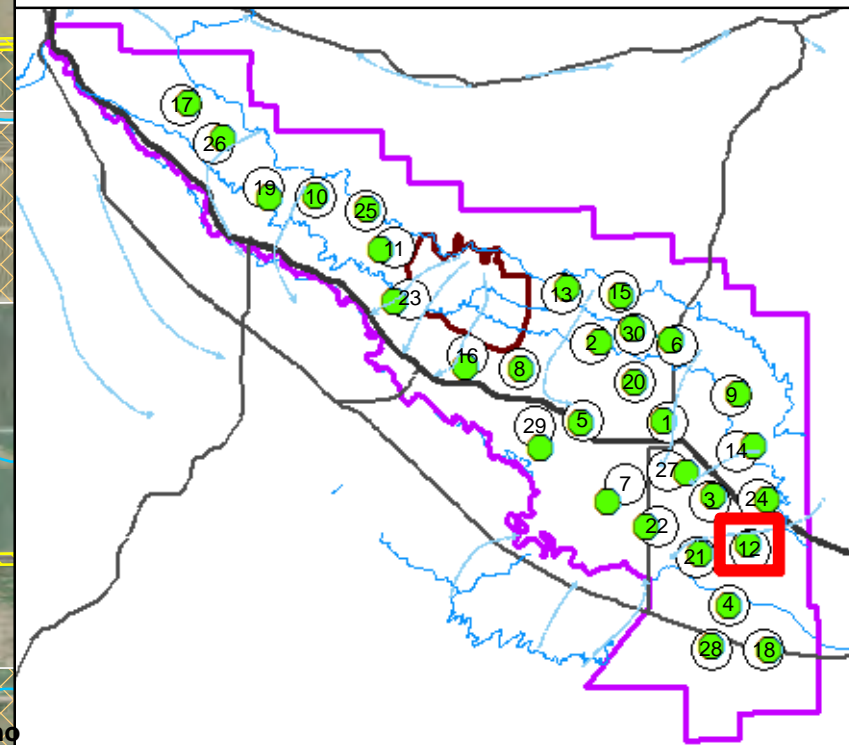


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Figure A12
General Well Location and
Preliminary Drill Site 12



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Resource Protection Wells with public owner name

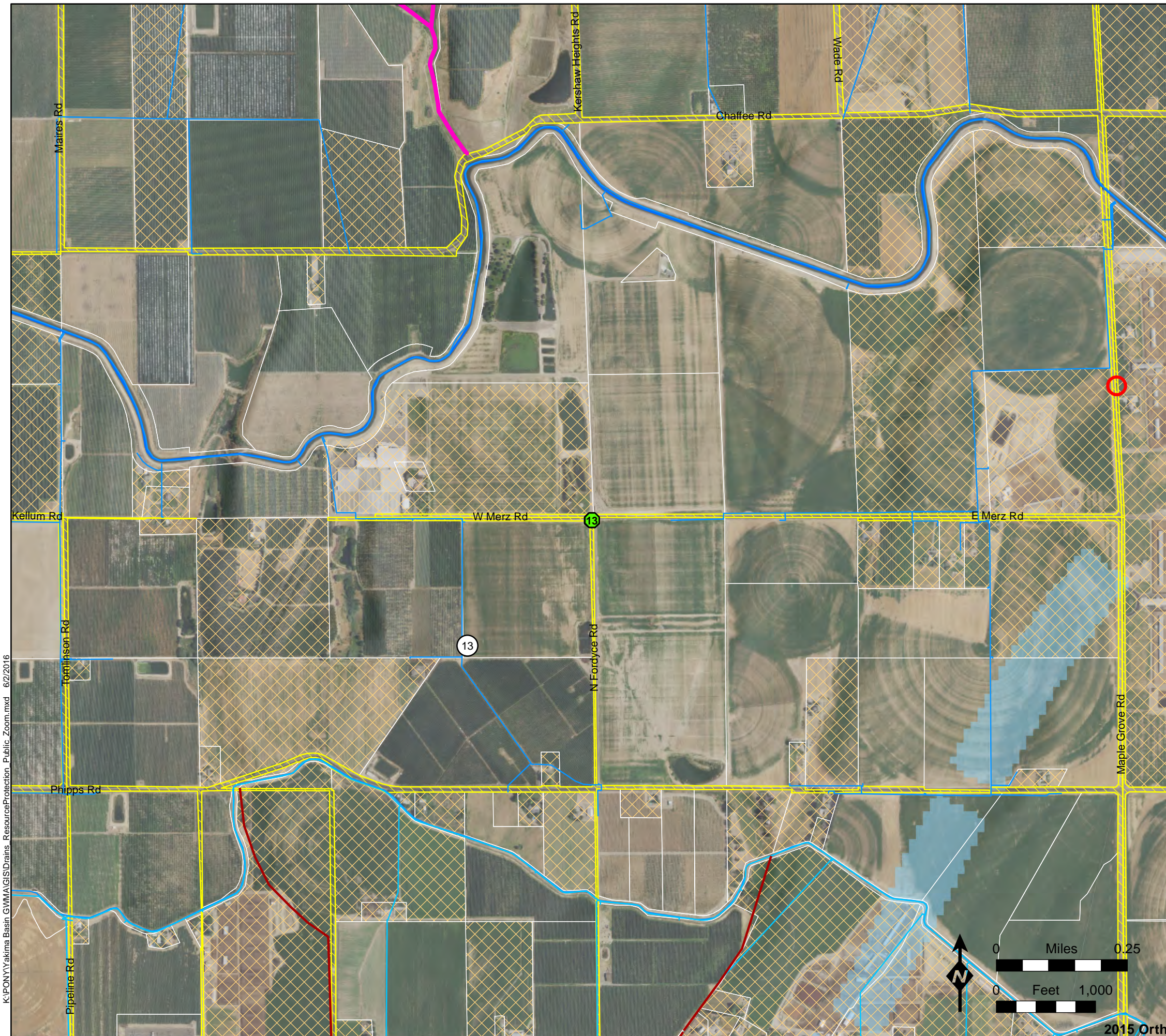


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Figure A13
 General Well Location and
 Preliminary Drill Site 13



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Wasteway (Roza Irr. Dist)
- Joint Drains (JD_Lines)
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014

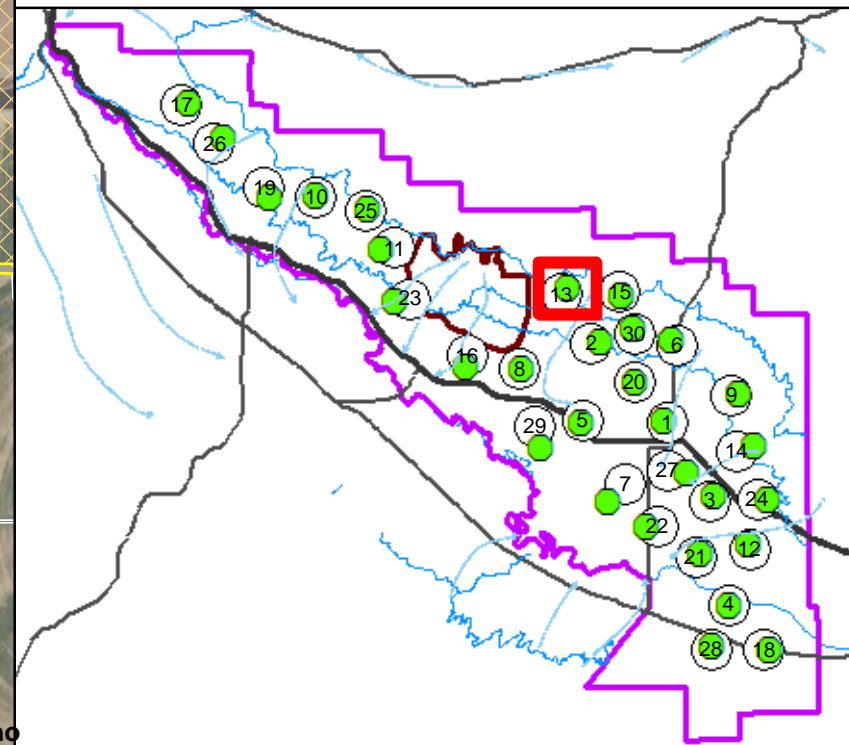
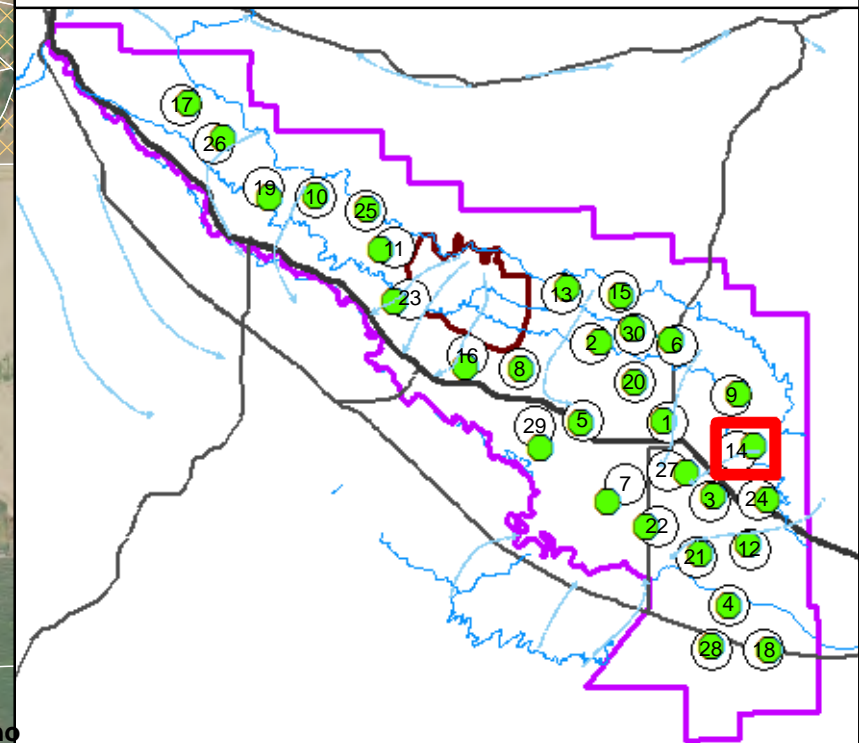
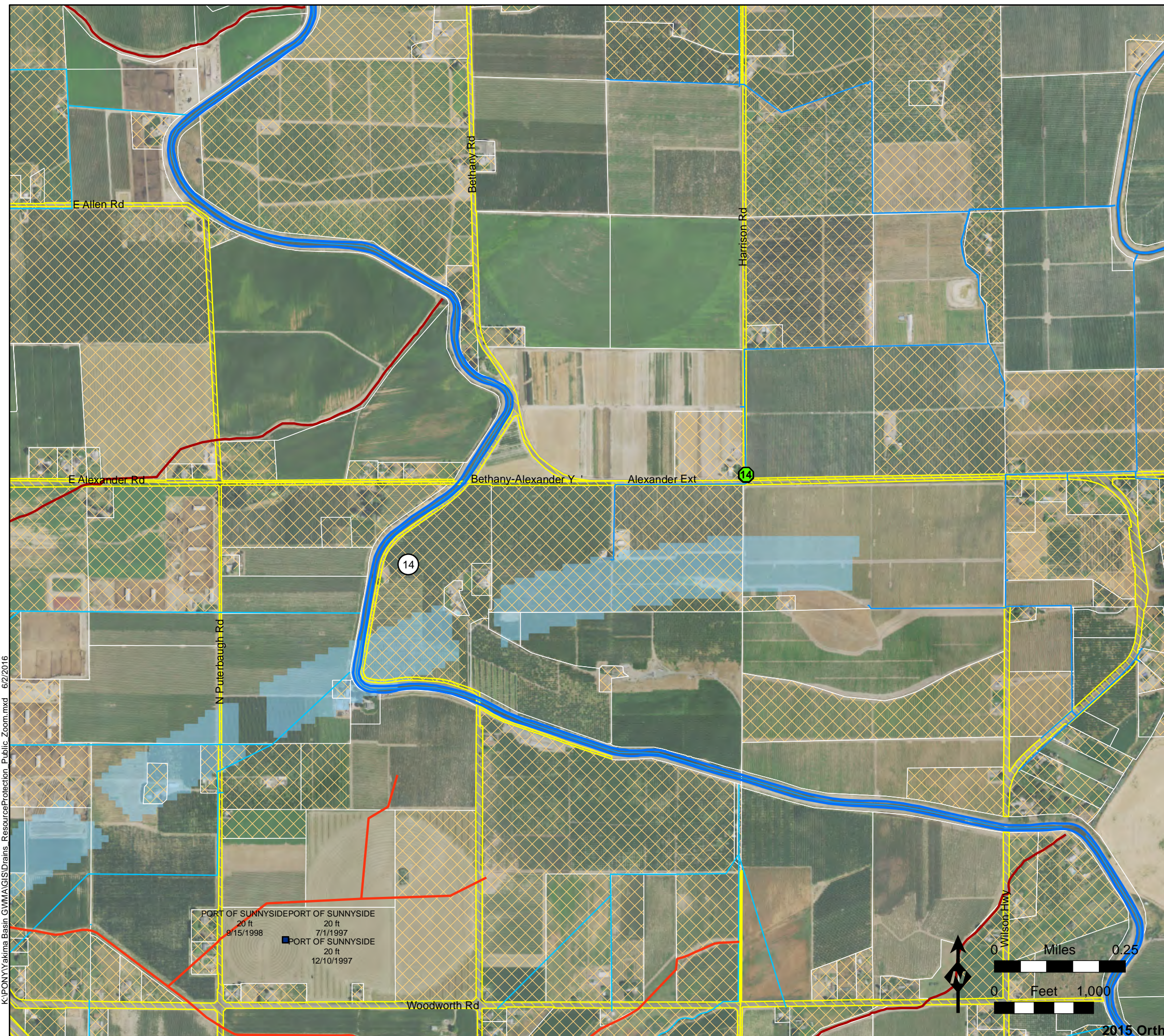


Figure A14
General Well Location and
Preliminary Drill Site 14



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Resource Protection Wells with public owner name



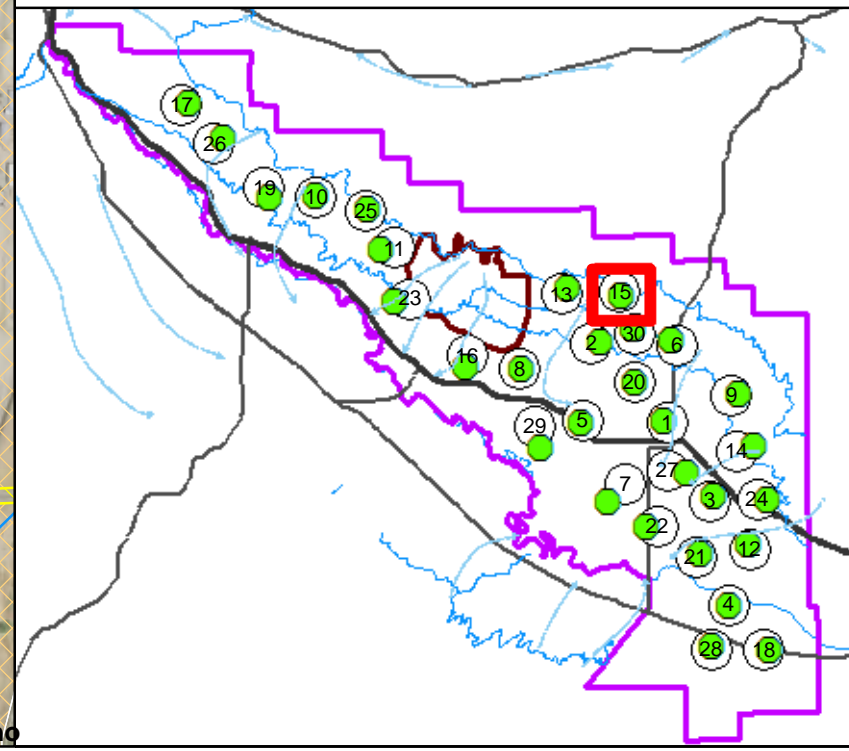
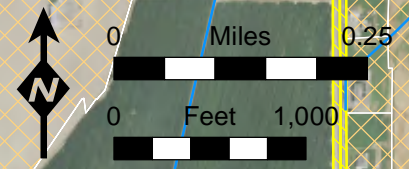
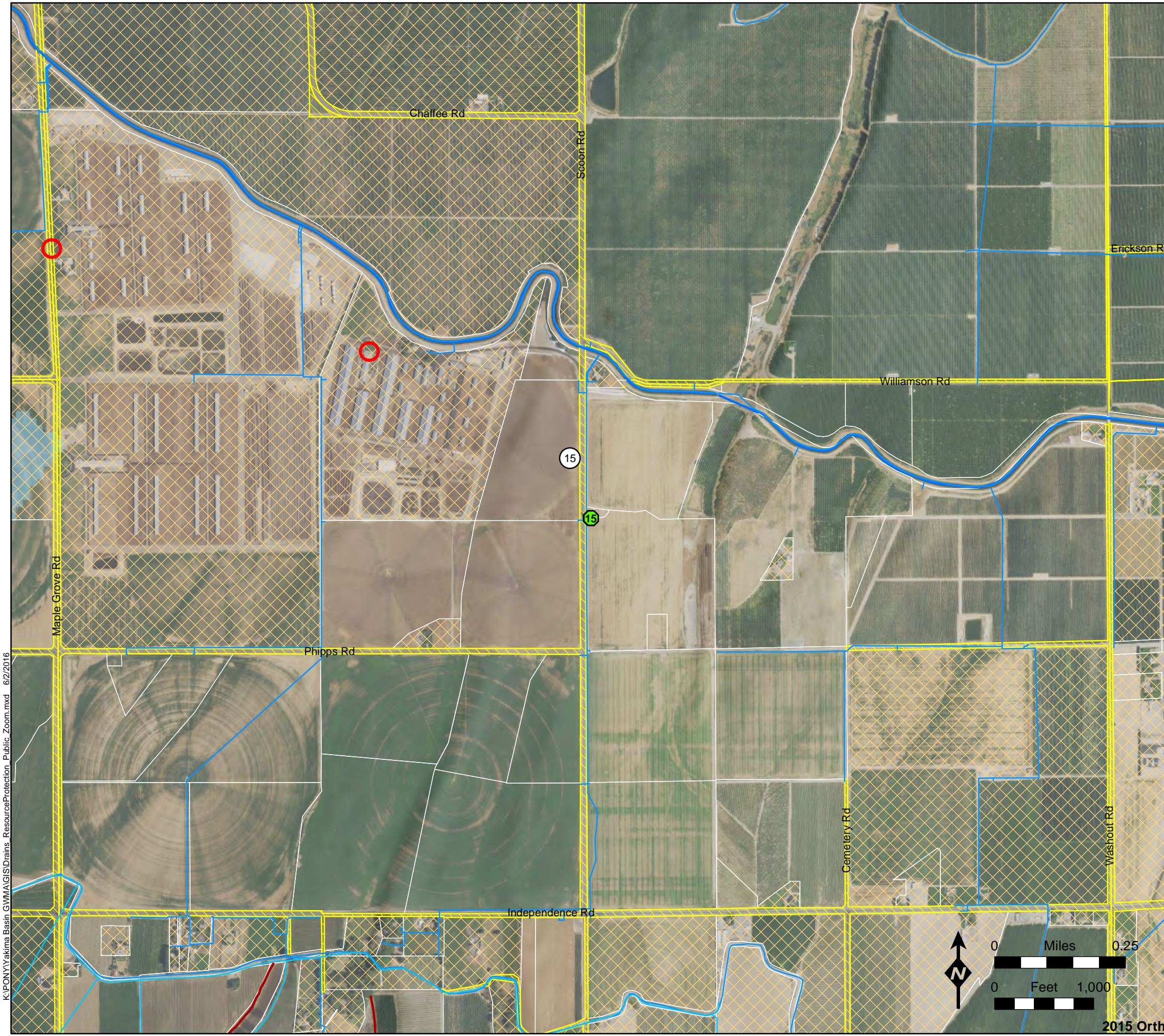
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Figure A15
 General Well Location and
 Preliminary Drill Site 15



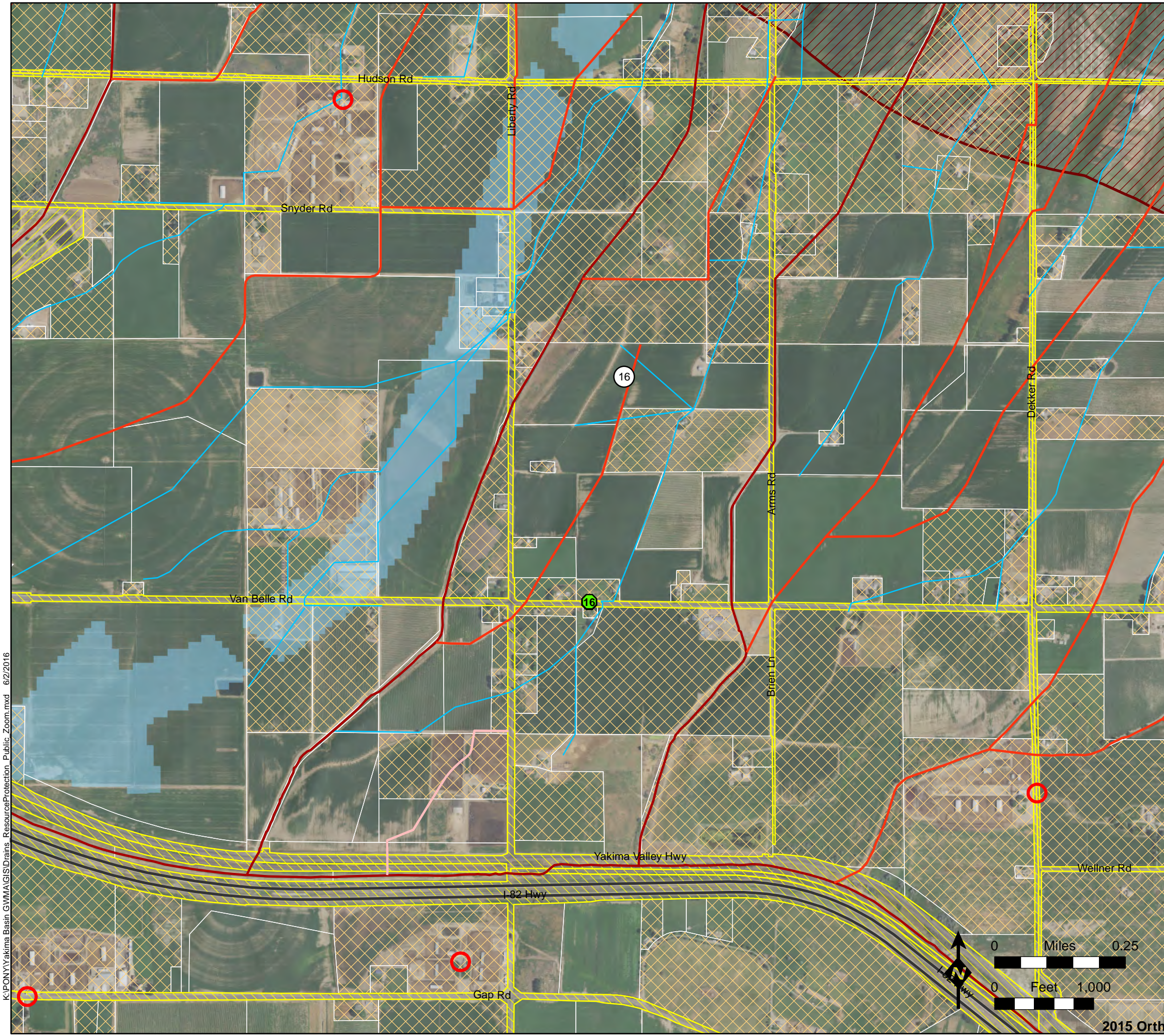
- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Joint Drains (JD_Lines)
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014



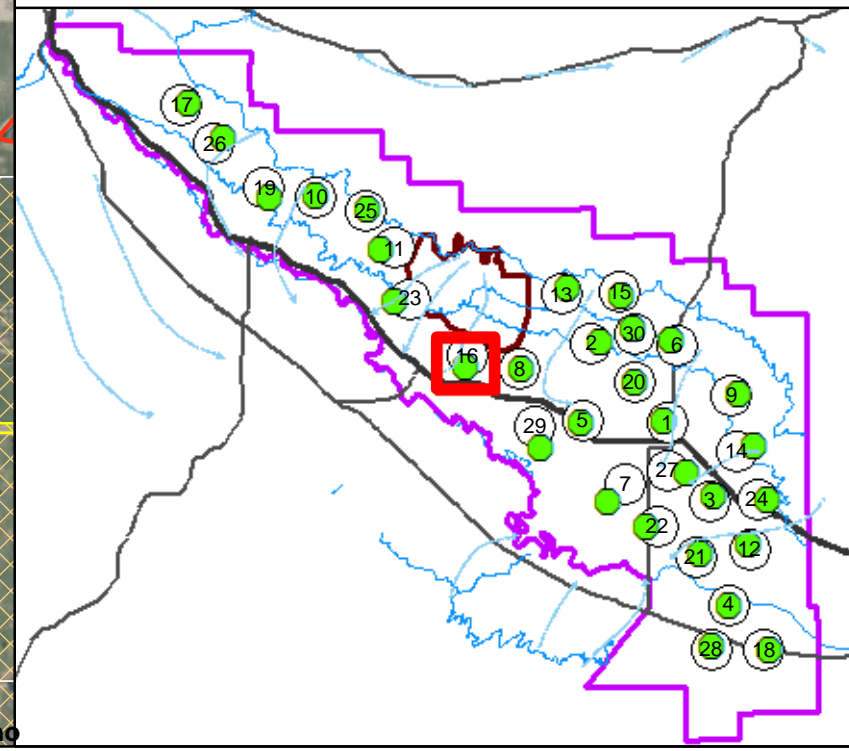
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Figure A16
 General Well Location and
 Preliminary Drill Site 16



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- EPA Dairy Cluster Buffer Boundary
- Drainage Improvement Districts Lines (DID_Lines)
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014



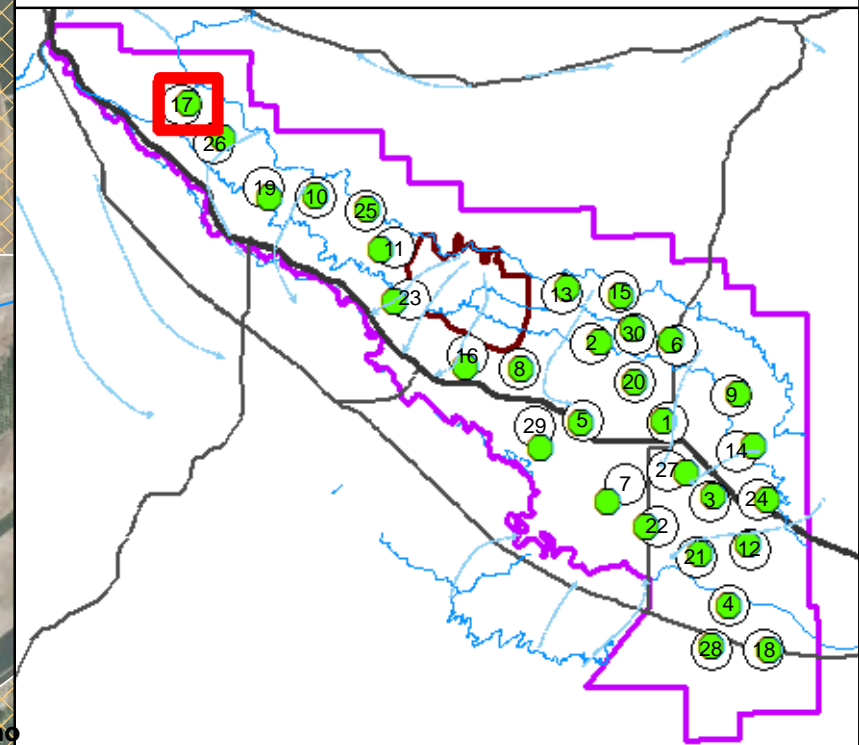
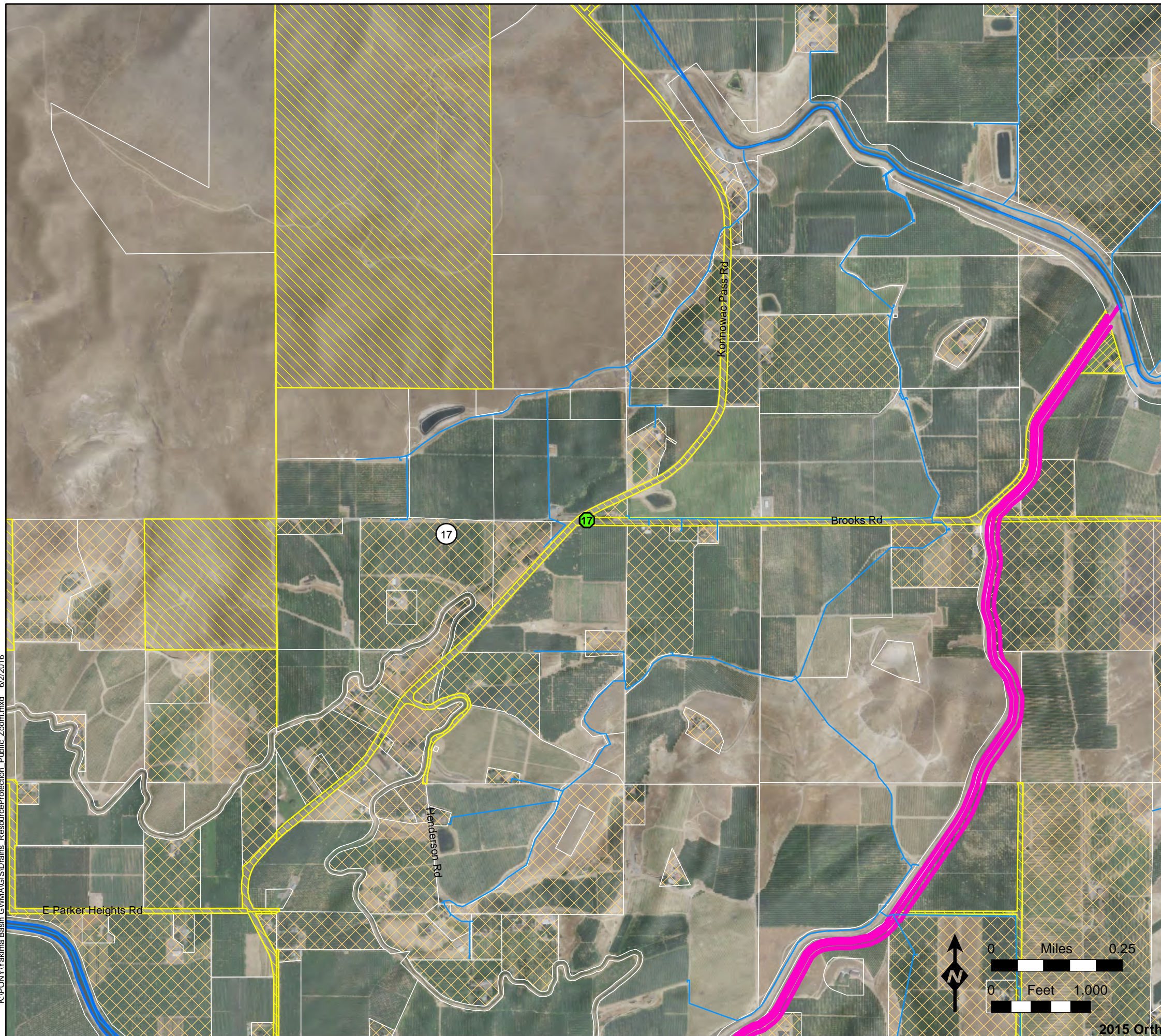
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Figure A17
General Well Location and
Preliminary Drill Site 17



- General Well Location
- Preliminary Drill Site
- Wasteway (Roza Irr. Dist)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)



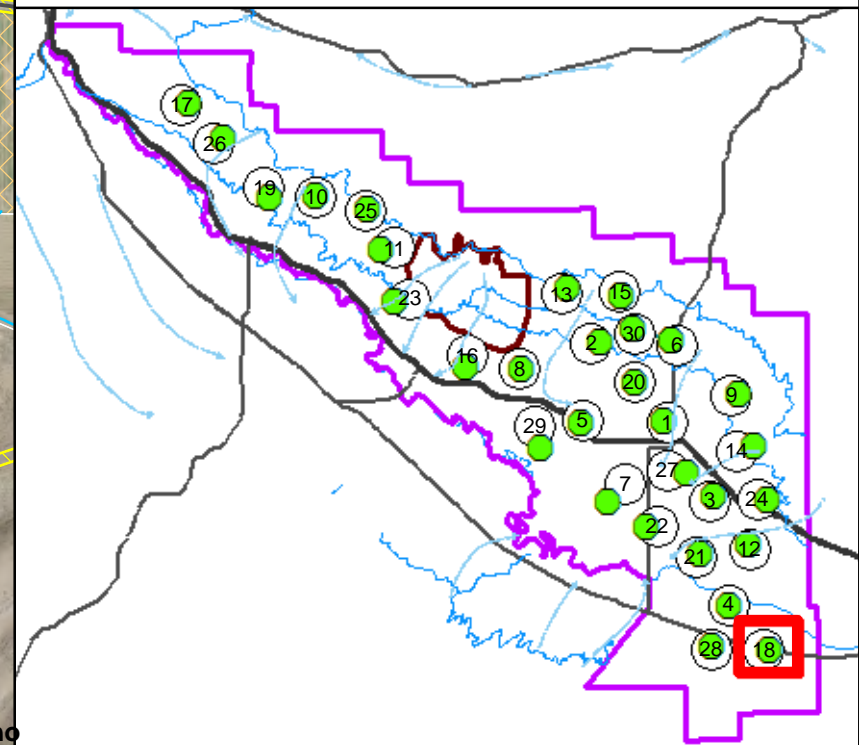
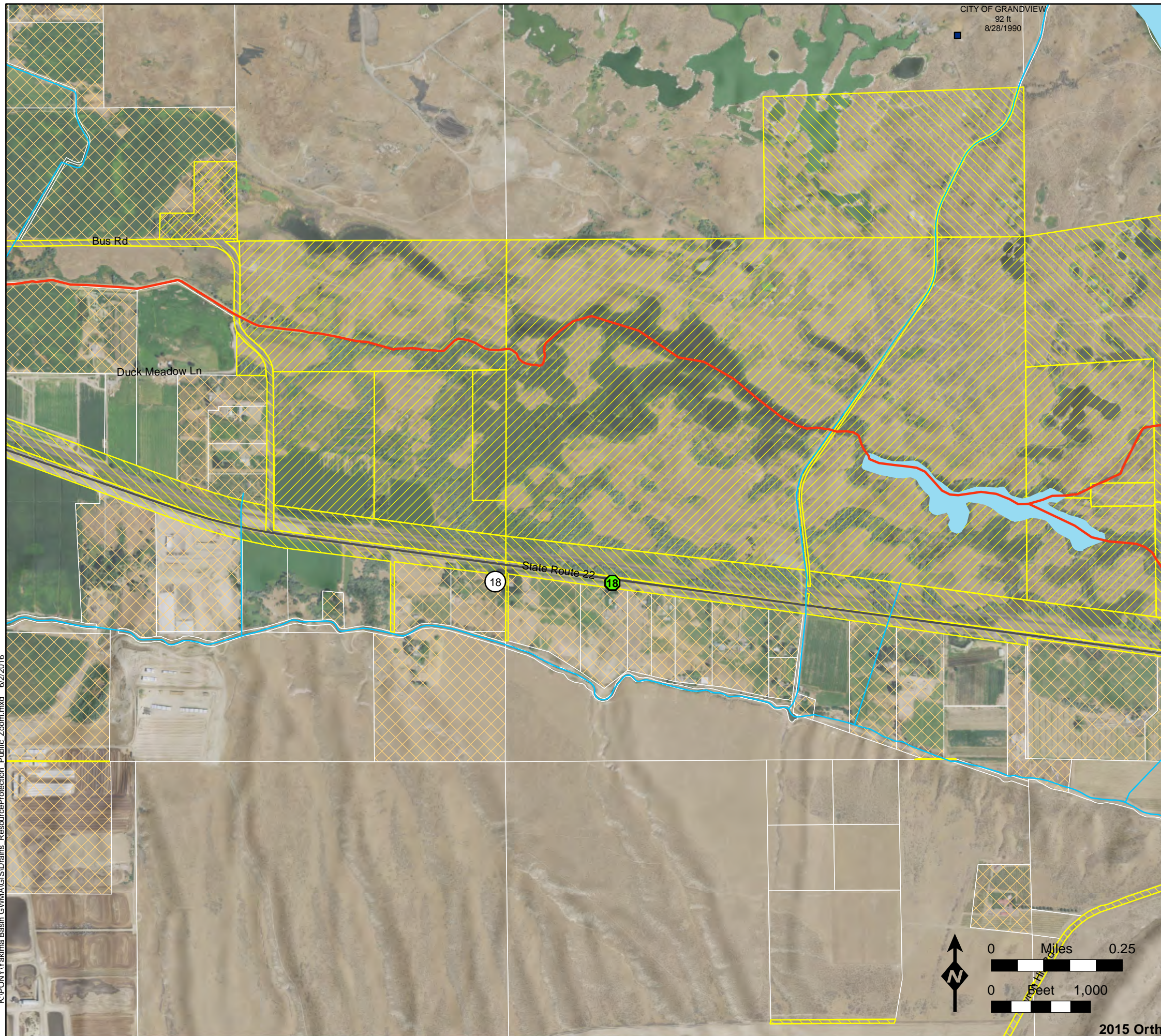
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Figure A18
 General Well Location and
 Preliminary Drill Site 18



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Resource Protection Wells with public owner name

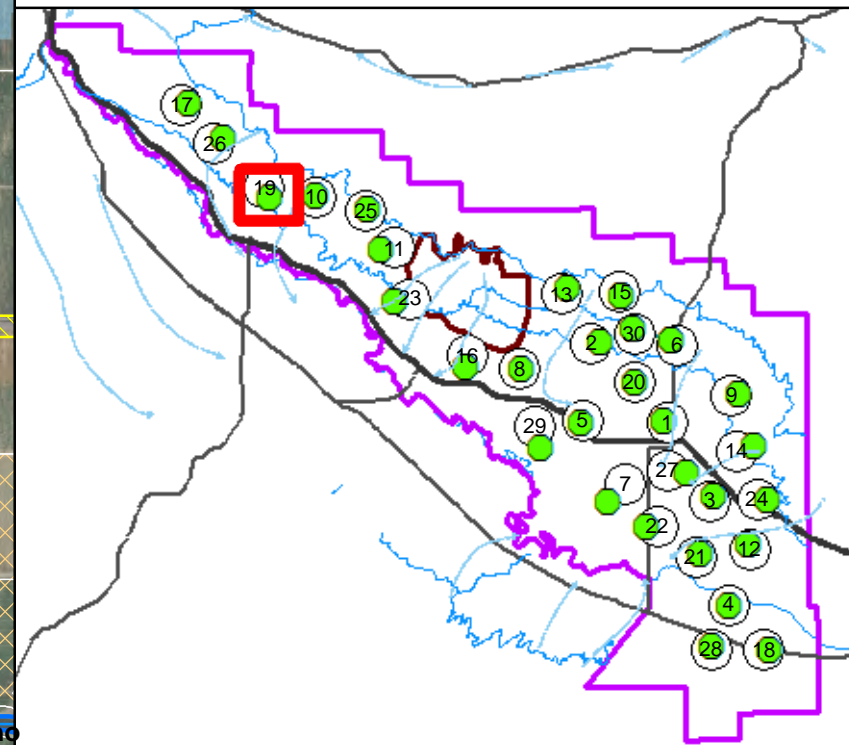
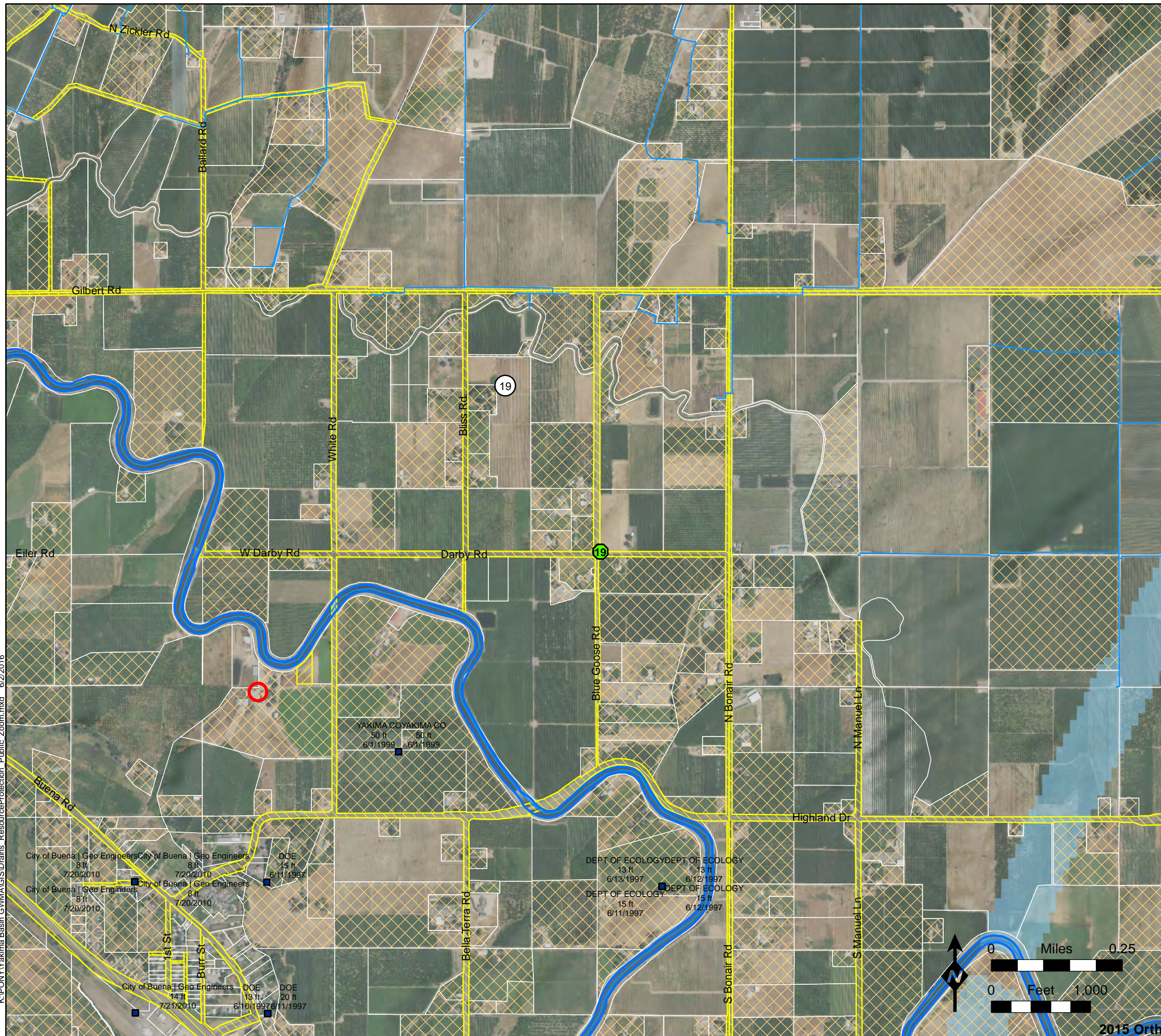


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Figure A19
 General Well Location and
 Preliminary Drill Site 19



- General Well Location
- Preliminary Drill Site
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014
- Resource Protection Wells with public owner name



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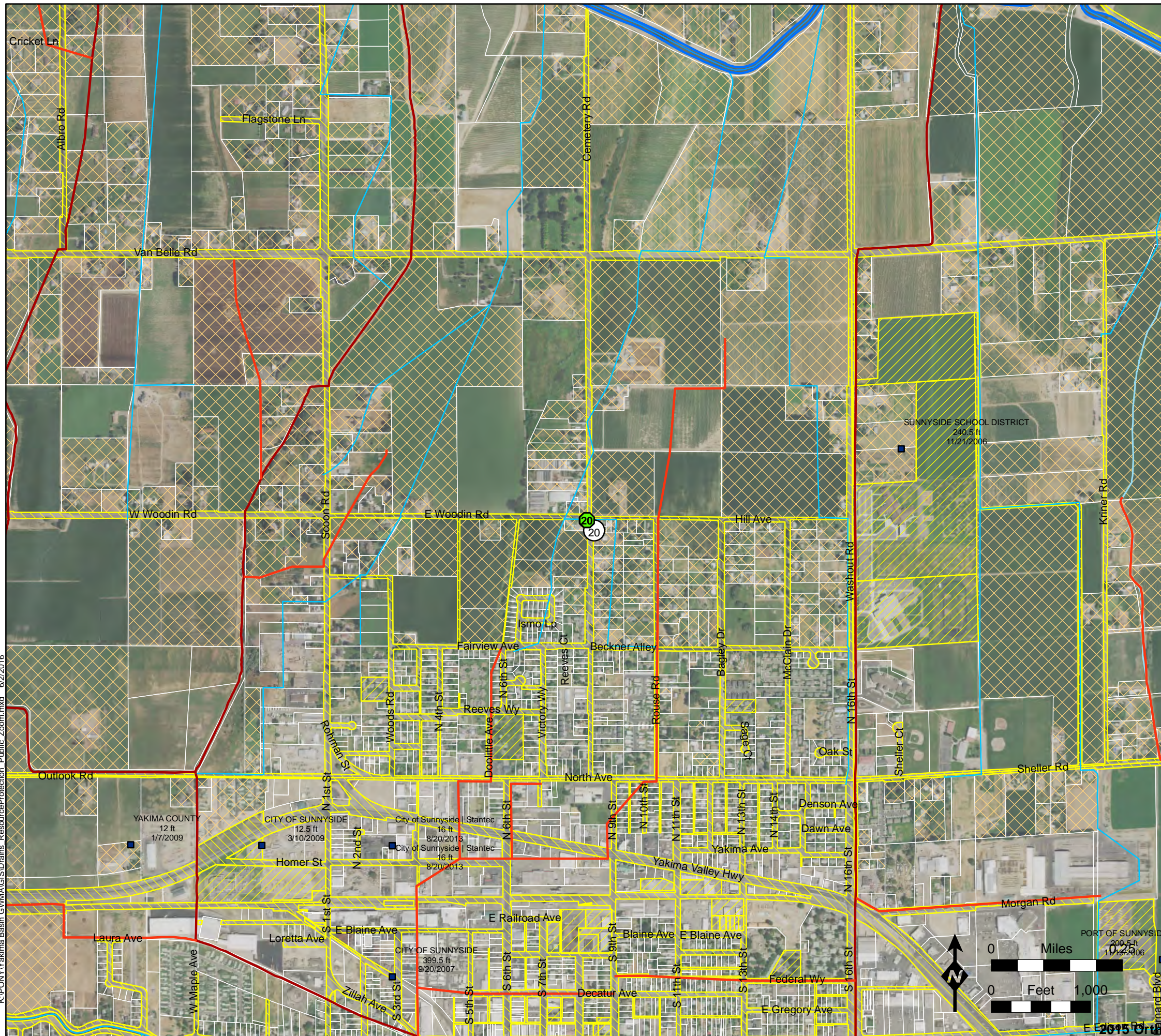









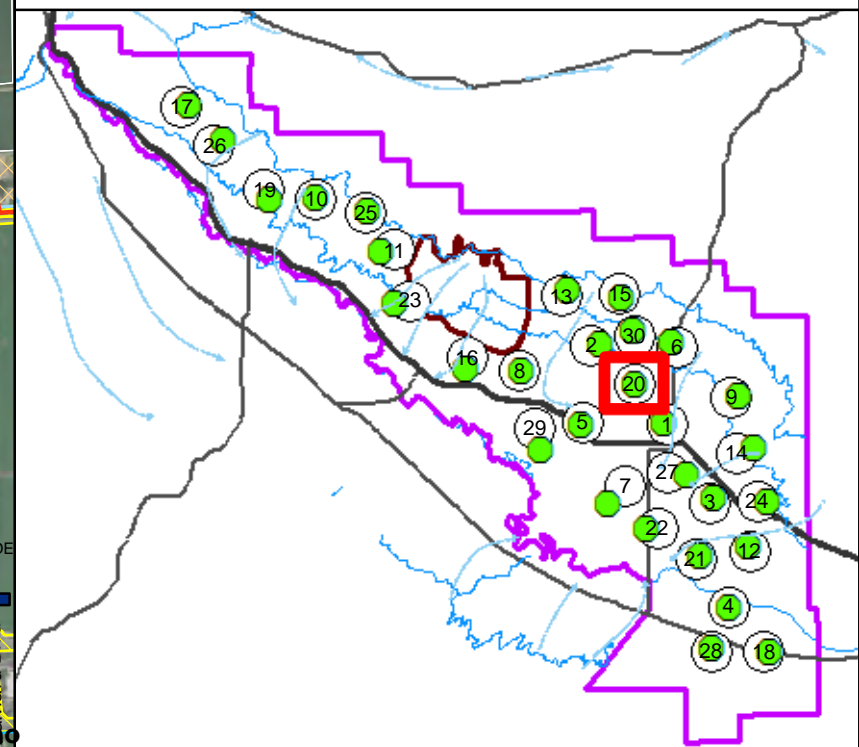


Figure A20
General Well Location and
Preliminary Drill Site 20



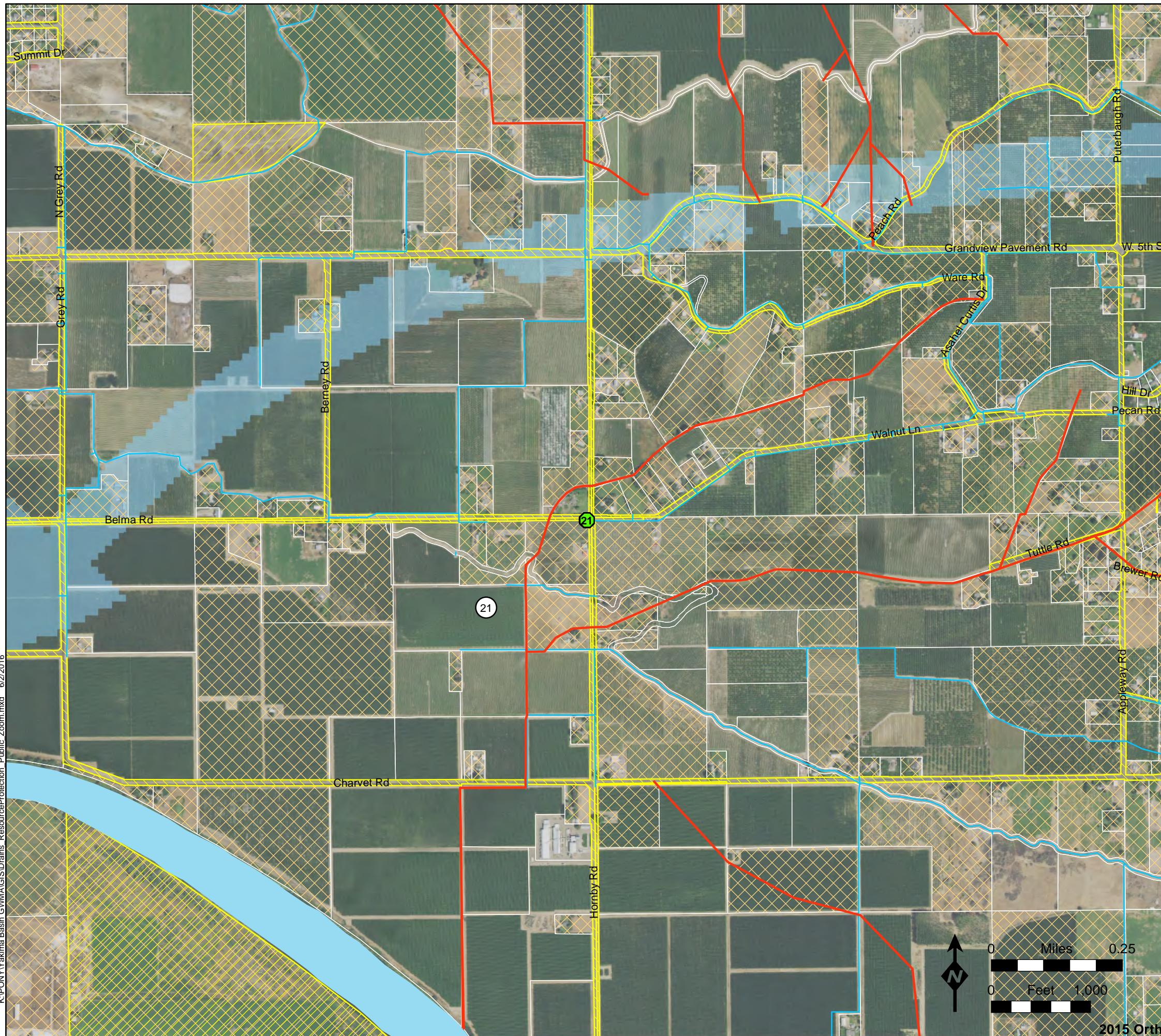
-  General Well Location
-  Preliminary Drill Site
-  Canals & Lateral Lines
-  Drain Lines (DR_Lines)
-  Joint Drains (JD_Lines)
-  Parcels with "Public" ownership
-  Right of Way Parcels
-  Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
-  Resource Protection Wells with public owner name



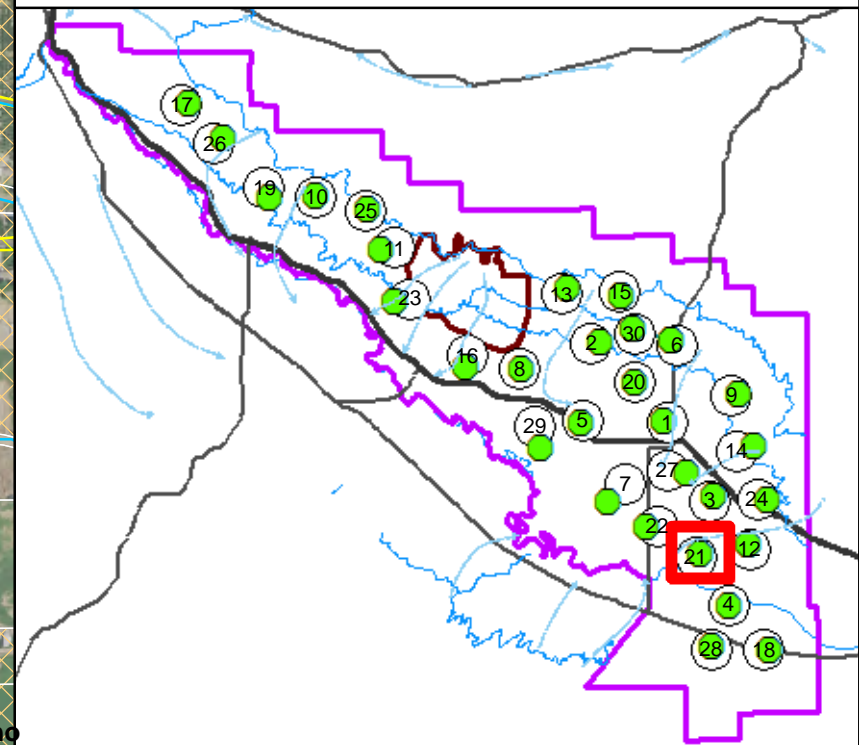
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Figure A21
General Well Location and
Preliminary Drill Site 21



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)

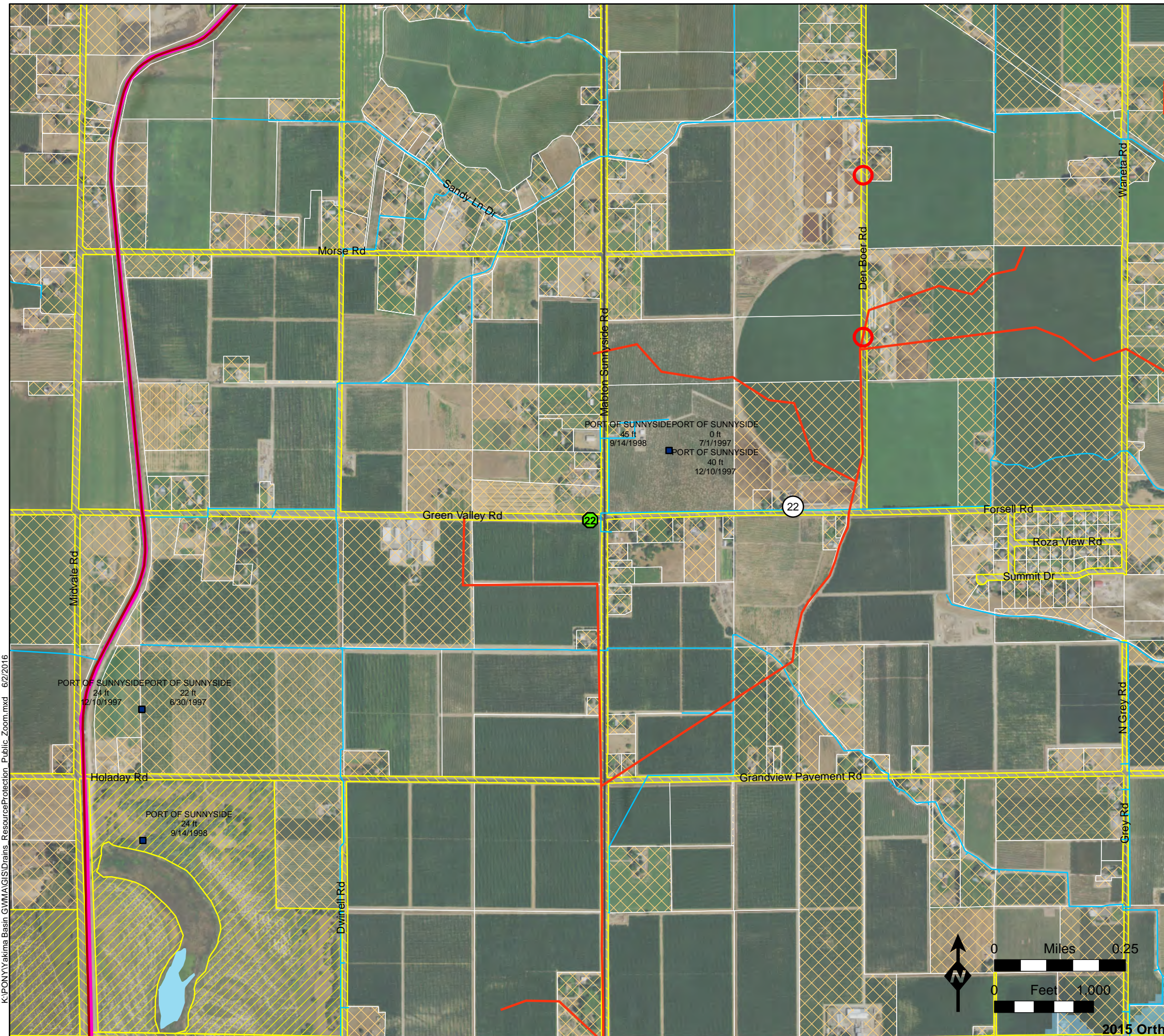


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Figure A22
 General Well Location and
 Preliminary Drill Site 22



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Wasteway (Roza Irr. Dist)
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014
- Resource Protection Wells with public owner name

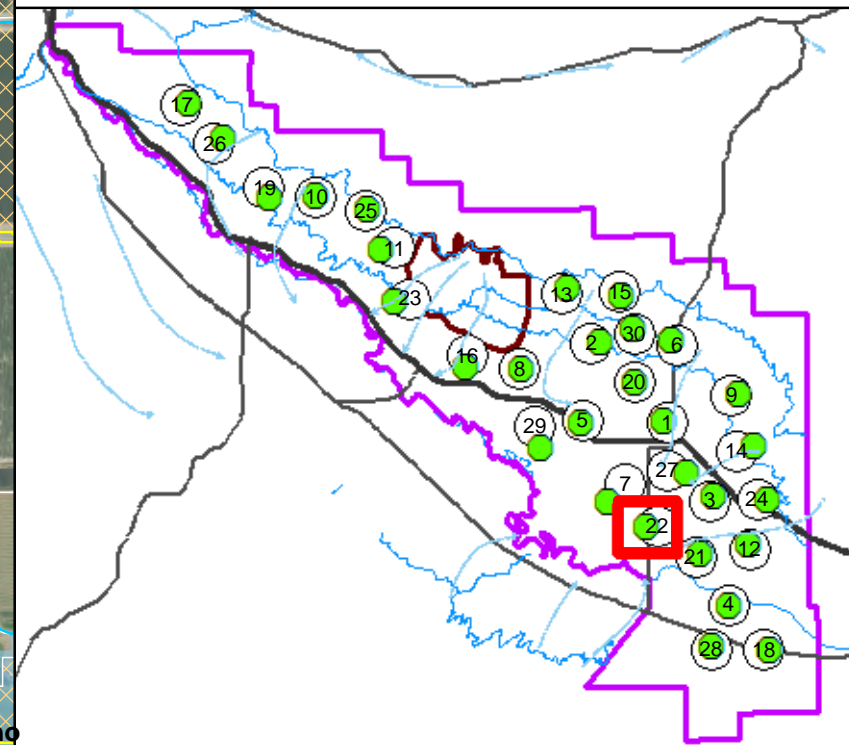
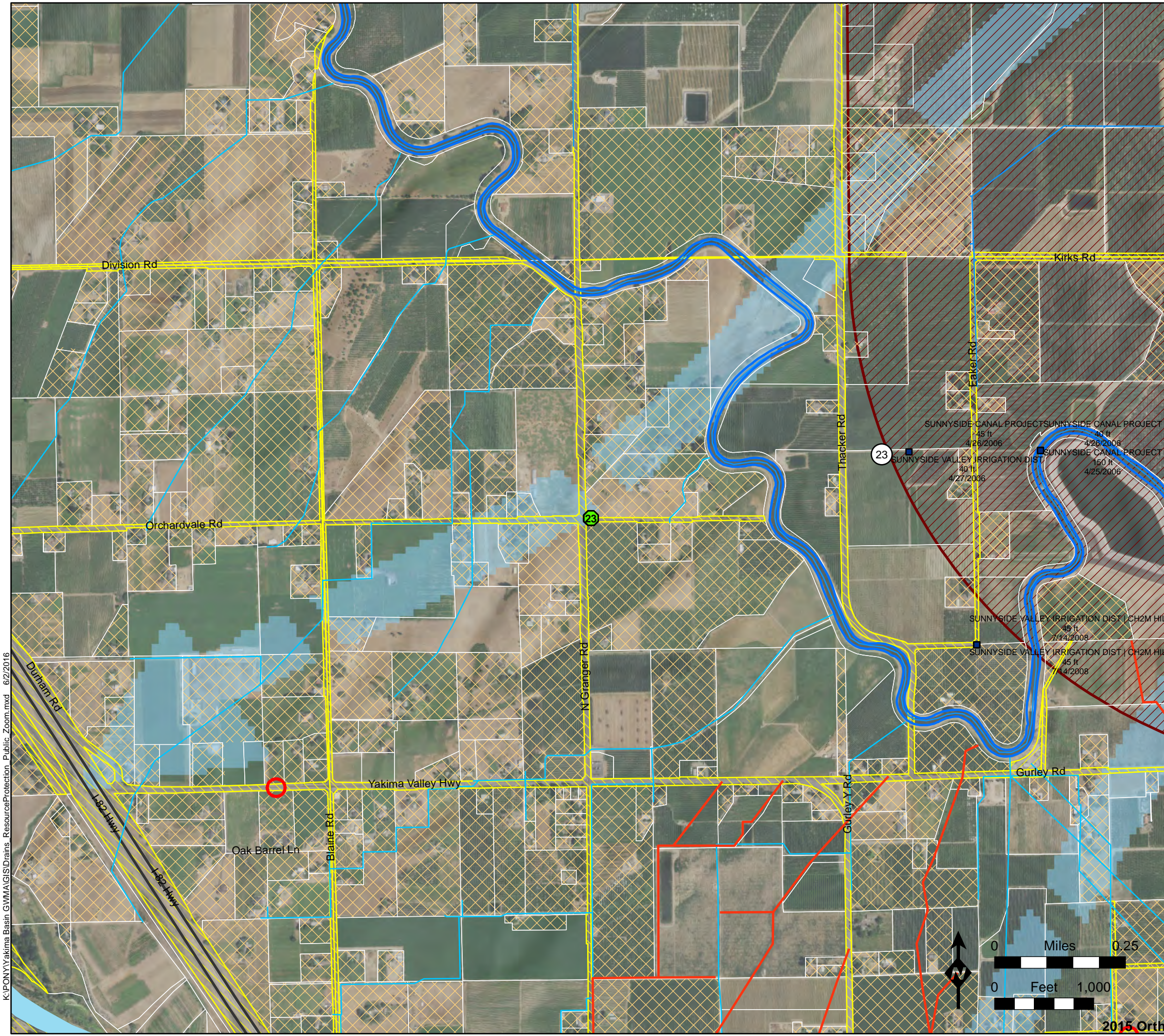
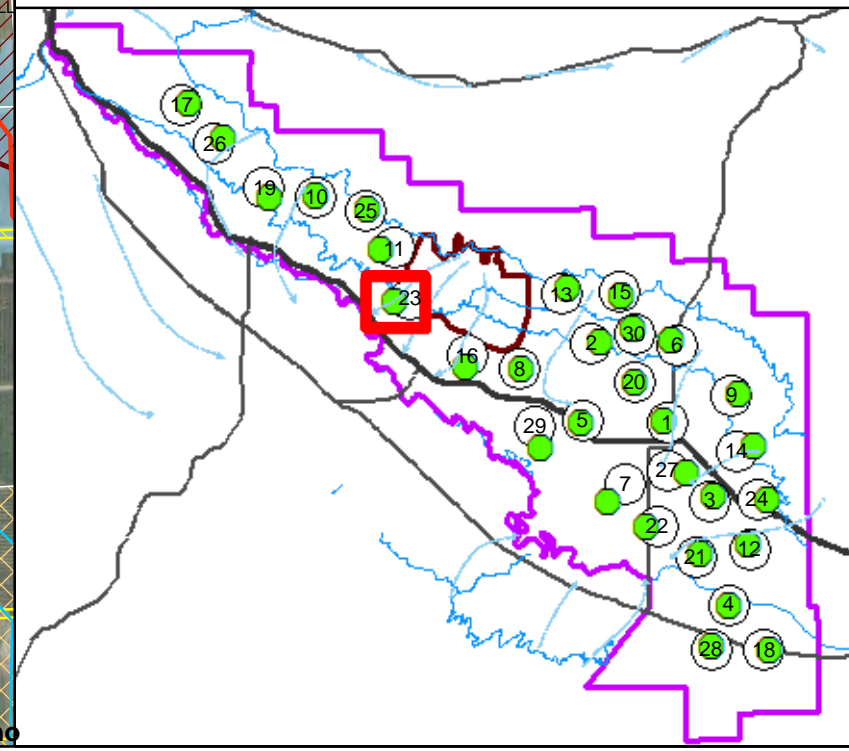


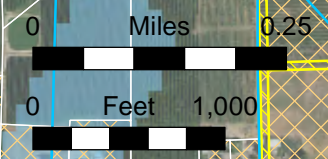
Figure A23
 General Well Location and
 Preliminary Drill Site 23



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- ▨ EPA Dairy Cluster Buffer Boundary
- Drain Lines (DR_Lines)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014
- Resource Protection Wells with public owner name

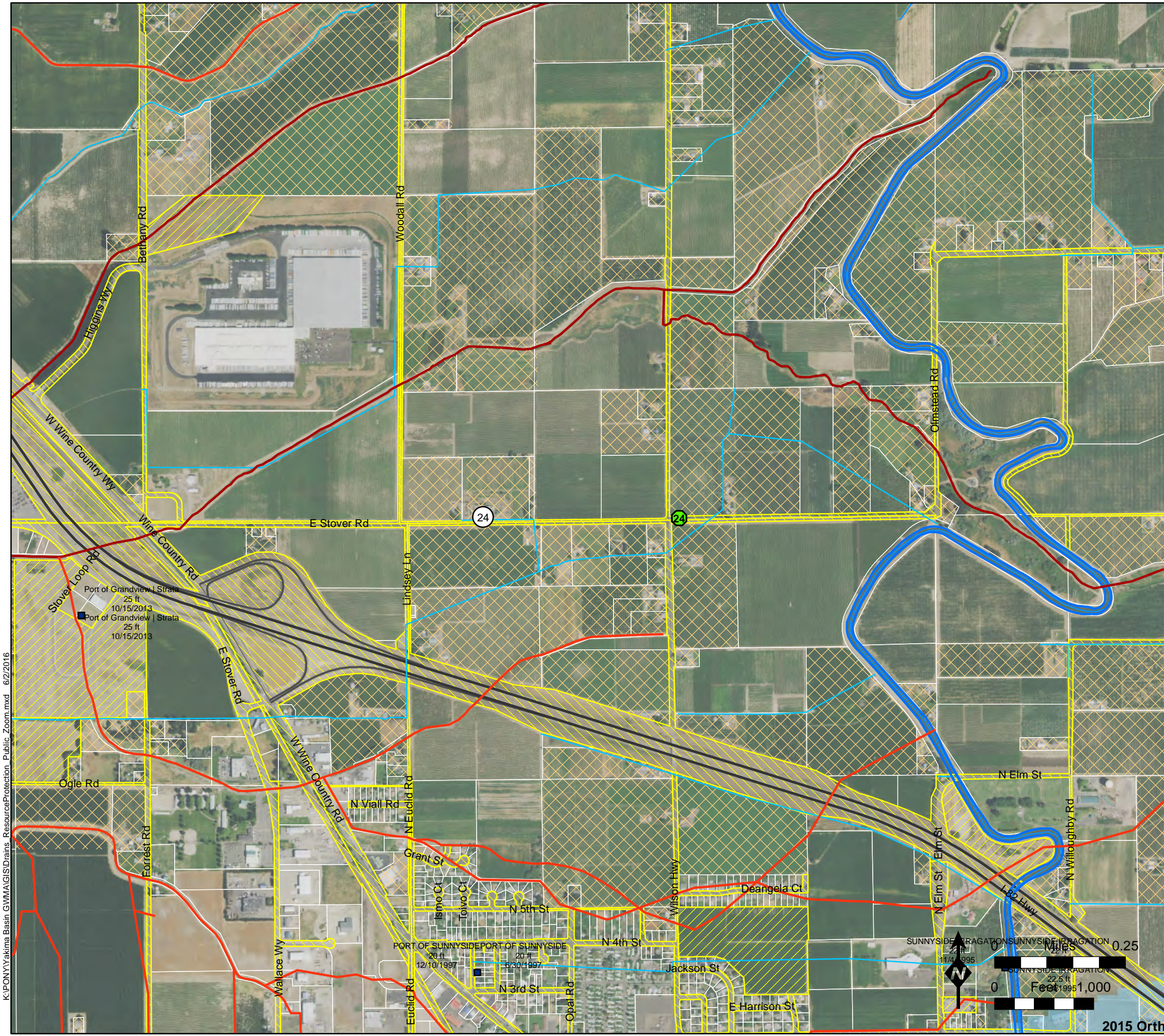


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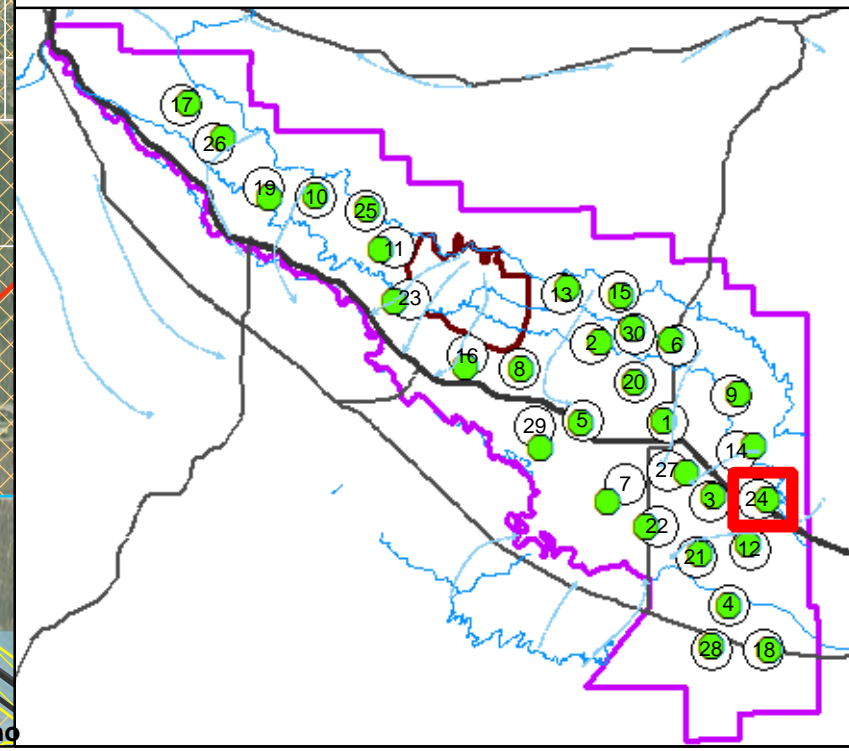


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Figure A24
 General Well Location and
 Preliminary Drill Site 24



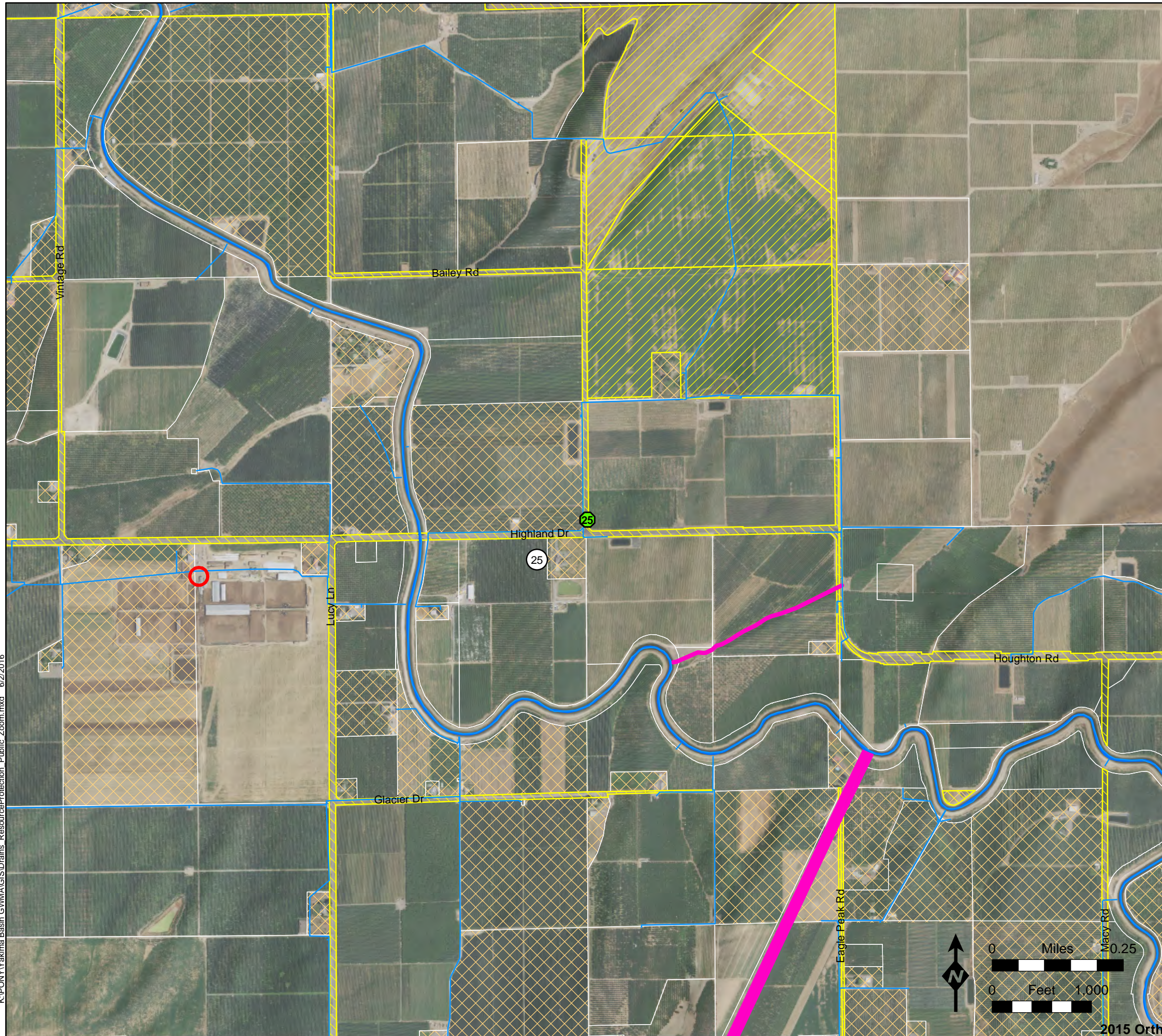
- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Resource Protection Wells with public owner name



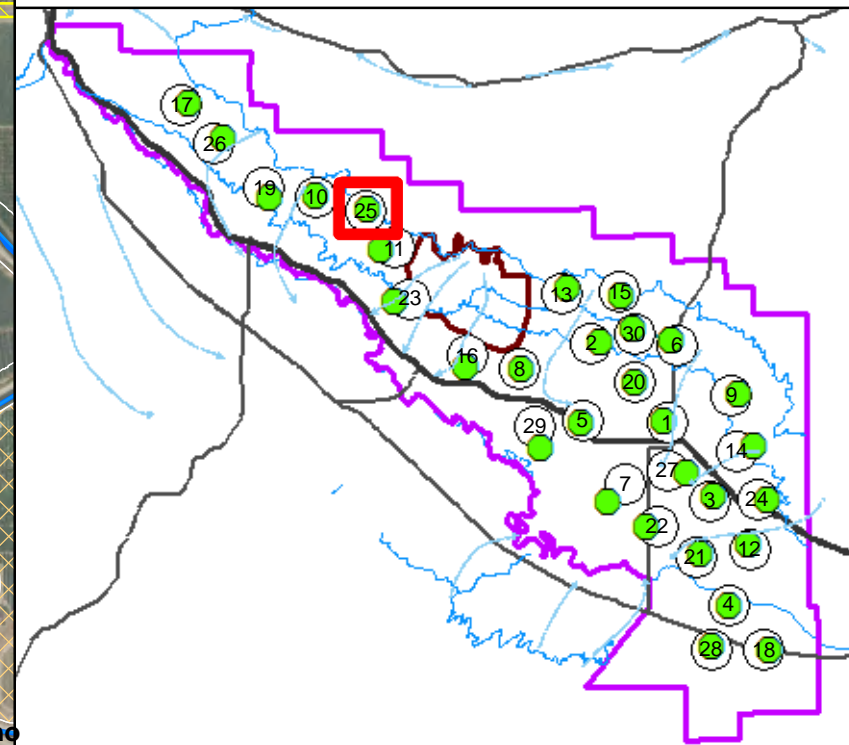
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Figure A25
 General Well Location and
 Preliminary Drill Site 25



- General Well Location
- Preliminary Drill Site
- Wasteway (Roza Irr. Dist)
- ▨ Parcels with "Public" ownership
- ▧ Right of Way Parcels
- ▩ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014



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Figure A26
 General Well Location and
 Preliminary Drill Site 26

- General Well Location
- Preliminary Drill Site
- Wasteway (Roza Irr. Dist)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)

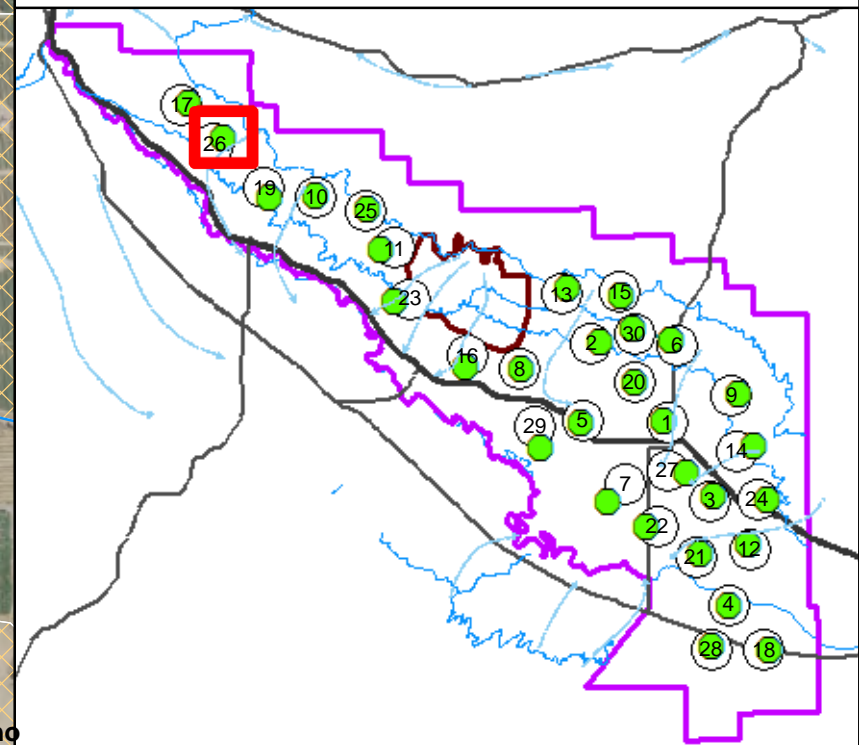
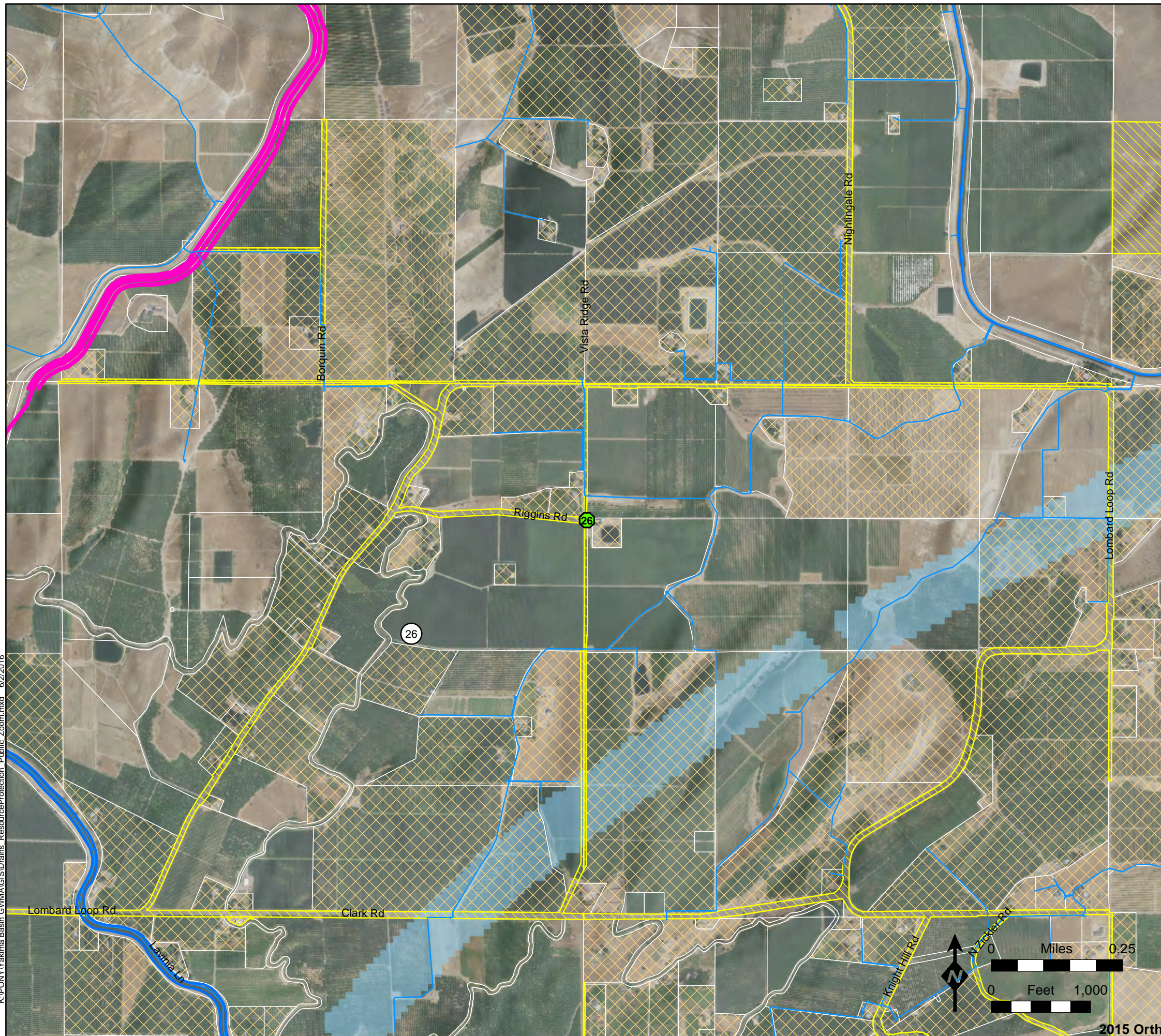
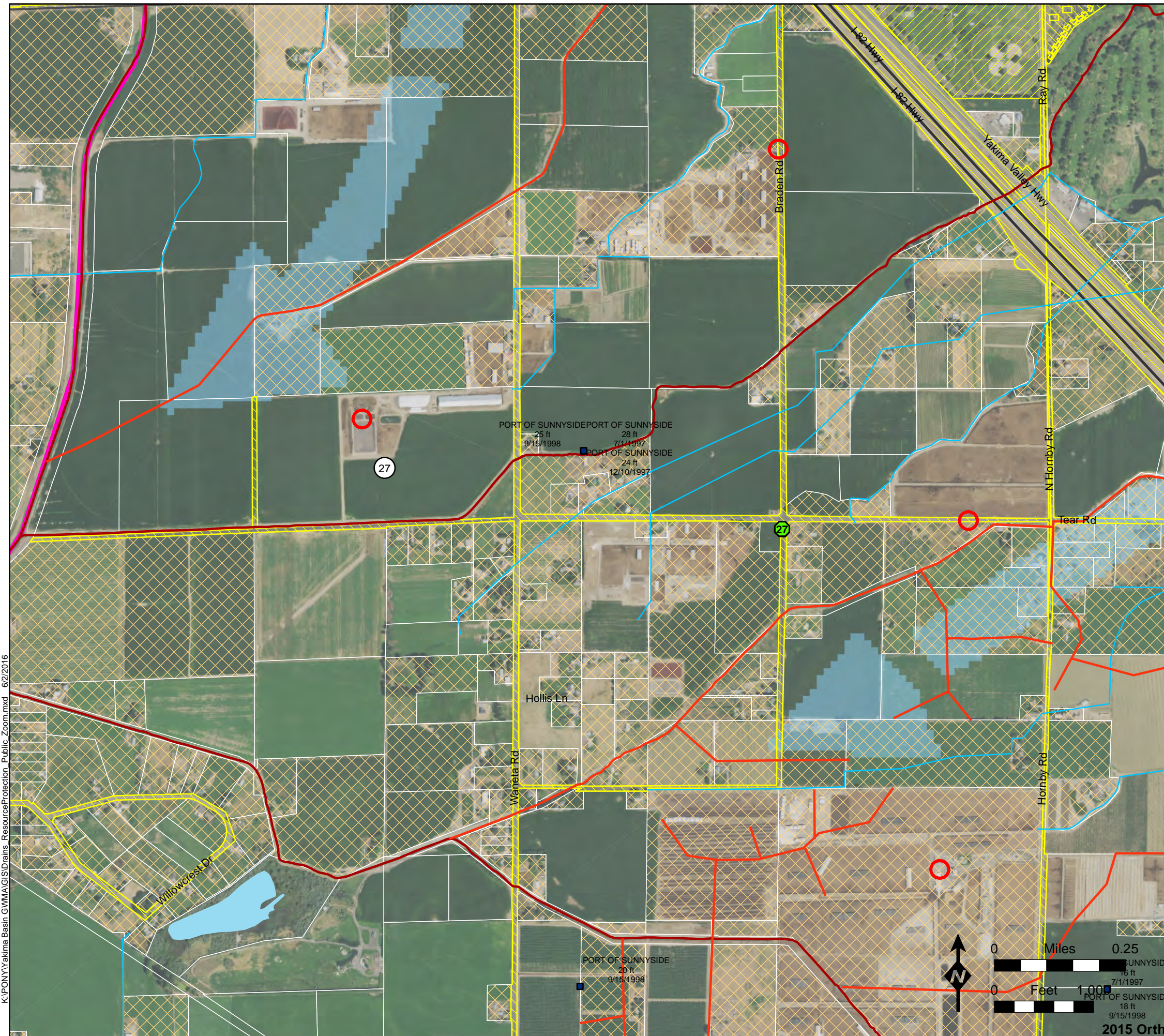


Figure A27
 General Well Location and
 Preliminary Drill Site 27



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Wasteway (Roza Irr. Dist)
- Drain Lines (DR_Lines)
- Joint Drains (JD_Lines)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014
- Resource Protection Wells with public owner name

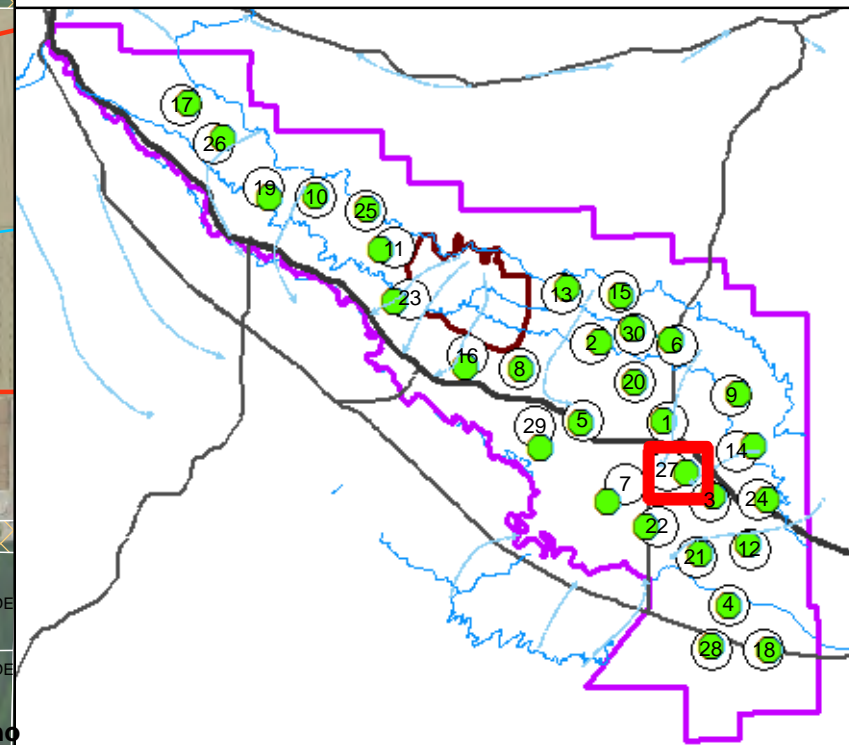
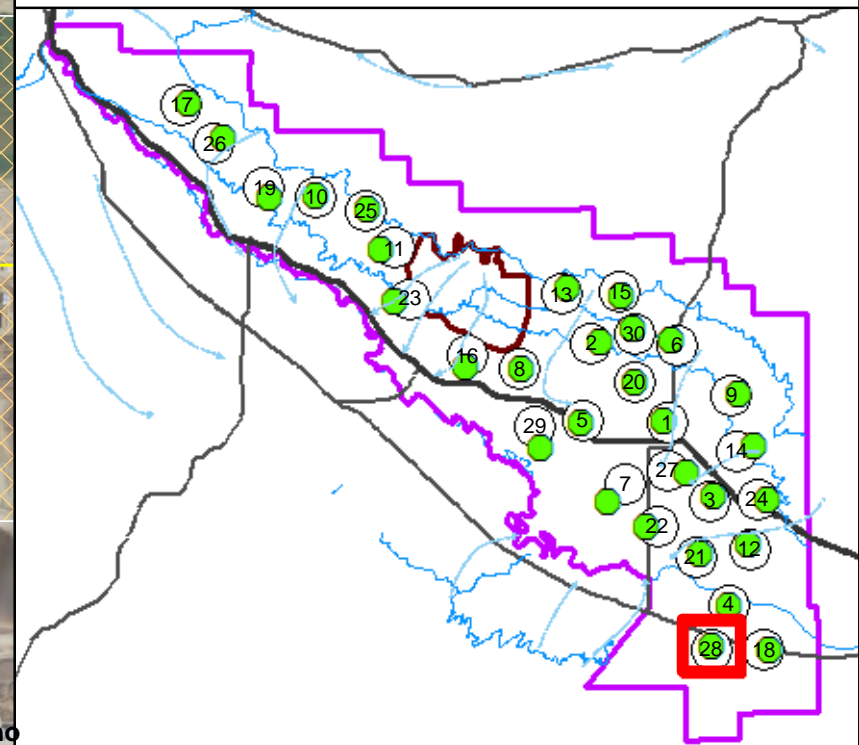
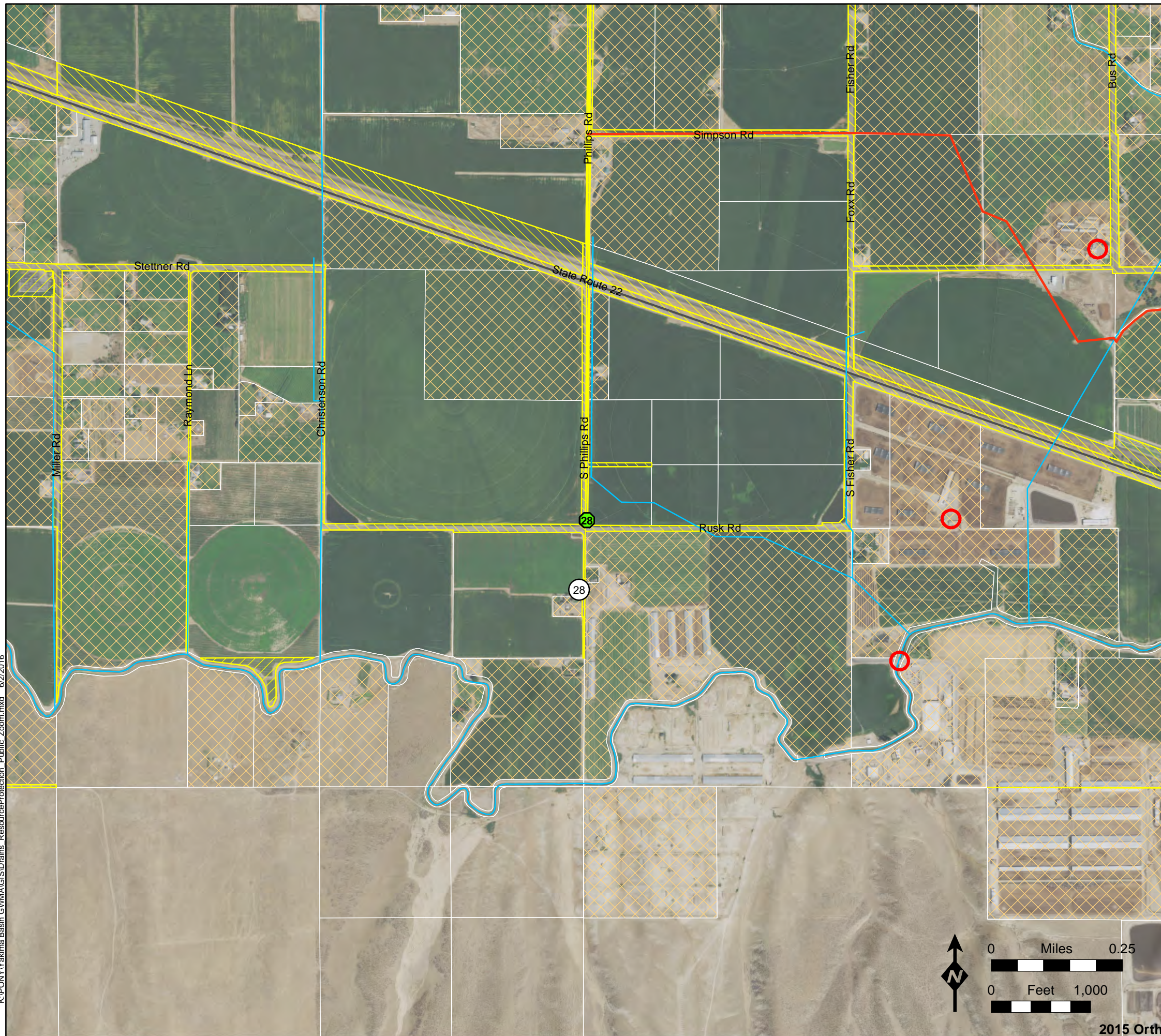


Figure A28
 General Well Location and
 Preliminary Drill Site 28



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drain Lines (DR_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014



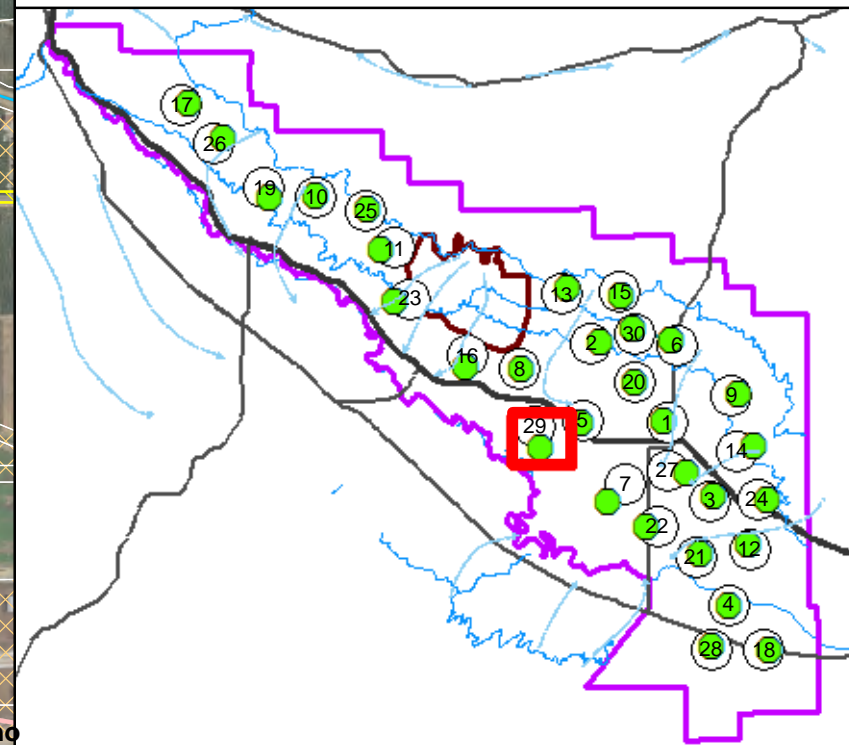
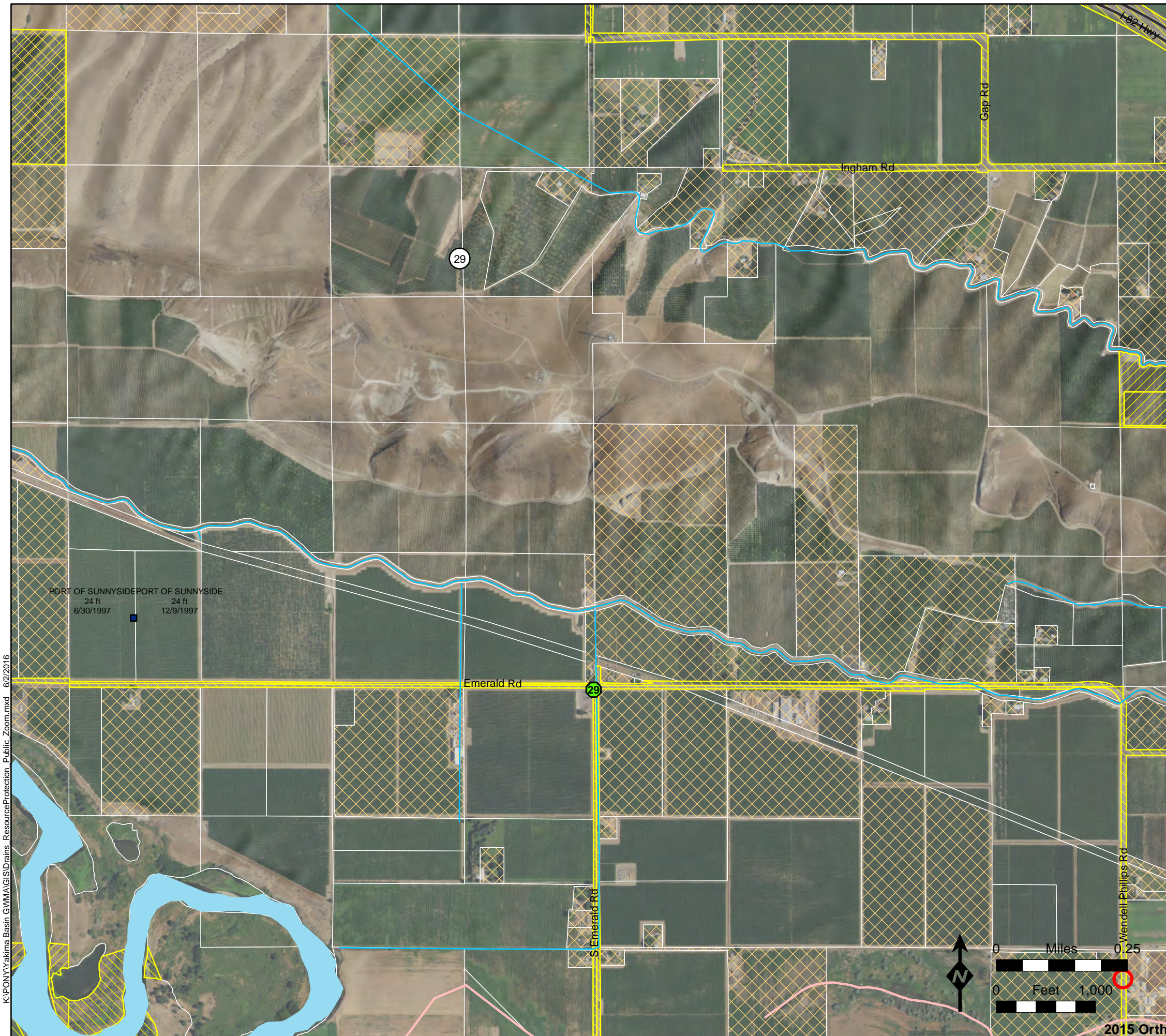
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Figure A29
 General Well Location and
 Preliminary Drill Site 29



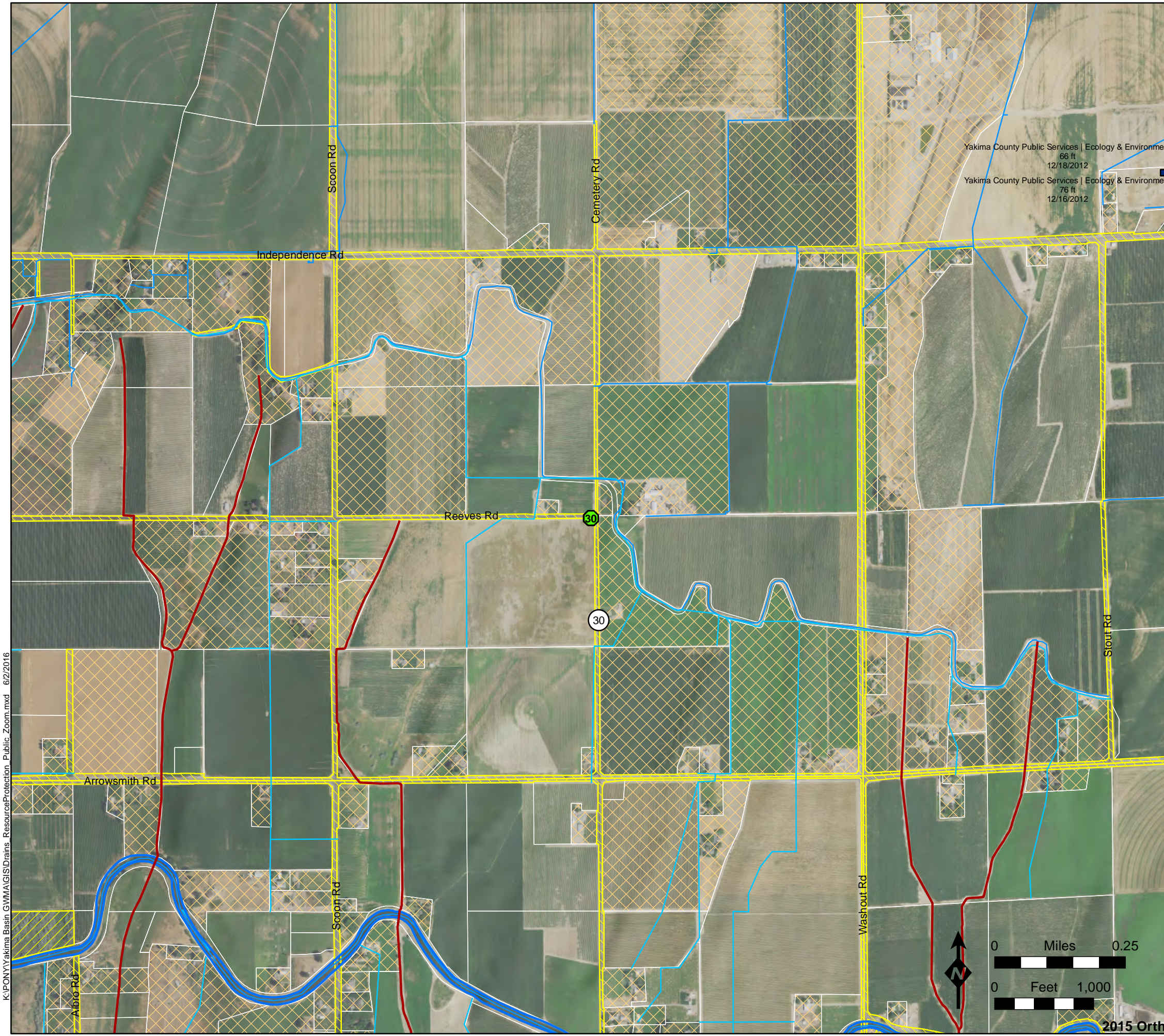
- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Drainage Improvement Districts Lines (DID_Lines)
- Parcels with "Public" ownership
- Right of Way Parcels
- Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Dairy from WADOA 2014
- Resource Protection Wells with public owner name



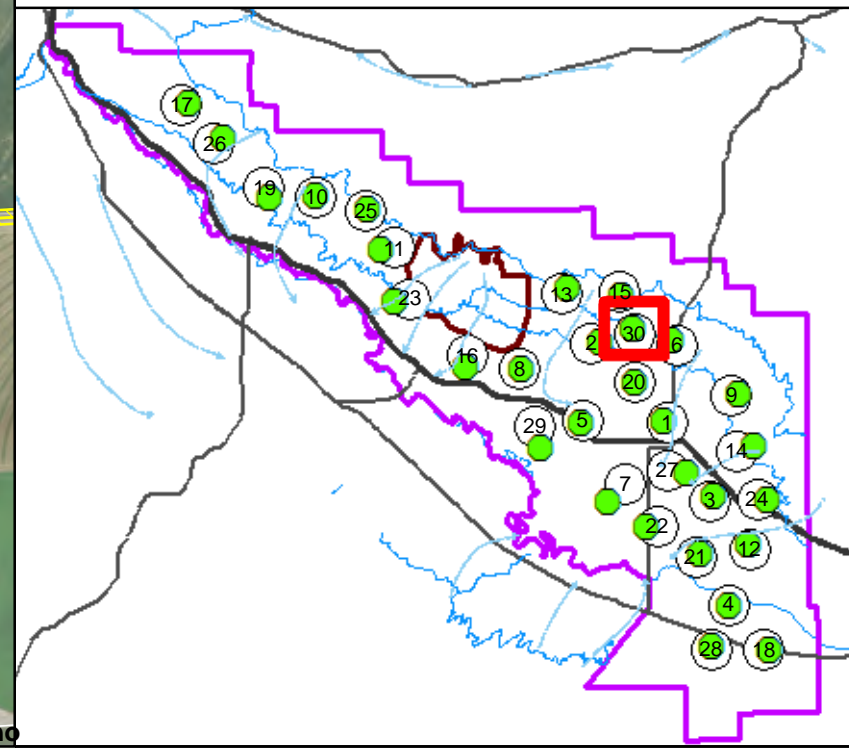
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Figure A30
 General Well Location and
 Preliminary Drill Site 30



- General Well Location
- Preliminary Drill Site
- Canals & Lateral Lines
- Joint Drains (JD_Lines)
- ▨ Parcels with "Public" ownership
- ▨ Right of Way Parcels
- ▨ Parcels Coded Septic (Assessor data 2013, water_sewer.shp)
- Resource Protection Wells with public owner name



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