Appendix O: GDE Analysis

NORTH AMERICAN SUBBASIN GROUNDWATER SUSTAINABILITY PLAN

APPENDIX O
Groundwater Dependent Ecosystems Analysis

December 2021

APPENDIX O –GROUNDWATER DEPENDENT ECOSYSTEMS ANALYSIS

This section provides a description of the approach used to refine potential groundwater dependent ecosystems (GDEs) in the North American Subbasin (Subbasin) based on depth to groundwater, groundwater dependent vegetation and potential presence of critical fauna (endangered or threatened species). Using this approach potential GDEs initially identified in the Natural Communities Commonly Associated with Groundwater (NCCAG) database were classified as "Likely", "Less Likely" or "Not Likely".

1.0 Evaluation of Plant Species and Rooting Zone Depths

An evaluation was performed to assess the types of potential groundwater dependent vegetation (vegetation) in the Subbasin to identify their rooting zone depths and where groundwater levels in the principal aquifer could be shallow enough to support them. The Natural Communities Commonly Associated with Groundwater (NCCAG) database (https://gis.water.ca.gov/app/NCDatasetViewer/) was reviewed to identify the types of native plant communities that may be considered to be groundwater dependent in the Subbasin for each section referenced in the Public Land Survey System (PLSS) (https://gis.conservation.ca.gov/server/rest/services/Base/BASE_PLSS/MapServer/1. **Table O-1**, located at the end of this document, provides the details of the types of native plant communities by township, range and section for the entire Subbasin.

Each plant species shown on the NCCAG database was compared to those listed on the Plant Rooting Depth database, developed by The Nature Conservancy (TNC), that includes spreadsheets with California Phreatophyte Rooting information and a Comprehensive Root Depth List. These two spreadsheets provided rooting depth references for many of the species listed in the NCCAG database. The following species were identified in the NCCAG database as being present in the Subbasin and were included in the TNC California Phreatophyte Rooting list database:

Scientific Name	Common Name	Max Rooting Depth (feet)
Acer negundo	Box-elder	13.12
Alnus rhombifolia	White Alder	Not cited
Plantanus racemosa	California Sycamore	Not cited
Populus fremontii	Fremont Cottonwood	6.89
Quercus lobata	Valley Oak	(1)
Salix exigua	Narrowleaf Willow	Not cited
Salix gooddingii	Goodding's Willow	6.89
Salix lasiolepis	Arroyo Willow	Not cited
Sambucus nigra	Common Elderberry	Not cited

(1) While some Valley Oak (Quercus lobata) has been noted at rooting depths of up to 80 feet, the optimal depth is more in the vicinity of 33 feet (Howard, 1992).

The following species were identified on the NCCAG database, but not included on the California Phreatophyte Rooting list, but were included on the TNC Comprehensive Root Depth List:

Scientific Name	Common Name	Max Rooting Depth (feet)
Juglans hindsii	Northern California Black Walnut	Not cited
Fraximus latifolia	Oregon Ash	Not cited
Typha augustifolia	Narrowleaf Cattail	Not cited
Schoenoplectus acutus	Hardstem Bulrush	1.97
Vitus californica	California Grape	Not cited
Persicaria lapathifolia	Curly-topped knotweed	Not cited

Arundo donax (Giant Reed) was identified on NCCAG database, but not included on the Plant Rooting Depth database.

The average depth of California phreatophytes is about 30 feet. Therefore, the depth to groundwater of less than 30 feet below ground surface groundwater was assumed to potentially being capable of supporting dependent ecosystems.

1.1 Identification of Critical Species

Using the California Department of Fish and Wildlife RareFind5 database (https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data), an evaluation of aquatic critical fauna that may be present in the Subbasin was conducted to determine location of species by section using the PLSS. A query using RareFind5 included species that are "endangered", "threatened" or "candidate" under the Federal Listing Status or "endangered", "threatened", "rare", "candidate threatened" or "candidate endangered" under the California State Listing Status. The following species within these categories were identified within the NASb:

Scientific Name	Common Name
Riparia riparia	Bank Swallow
Laterallus jamaicensis coturniculus	California Black Rail
Branchinecta conservatio	Conservation Fairy Shrimp
Thamnophis gigas	Giant Gartersnake
Buteo Swainsoni	Swainson's Hawk
Agelaius tricolor	Tricolored Blackbird
Desmocerus californicus dimorphus	Valley Elderberry Longhorned Beetle
Branchinecta lynchi	Vernal Pool Fairy Shrimp
Lepidurus packardi	Vernal Pool Tadpole Shrimp
Coccyzus americanus	Yellow Billed Cuckoo
Onocorhynchus mykissirideus	Steelhead
Oncorhynchus tshawytscha	Chinook Salmon

1.2 Depth to Groundwater

Groundwater contours were developed using 61 wells and groundwater level measurements from Spring 2020. Spring 2020 was selected as having the most complete set of measurements, that include measurements from four new shallow monitoring wells (RDMW-101 through RDMW-104) constructed along the Bear and Feather Rivers early 2020 along with additional monitoring wells from various sources. Monitoring wells selected for contouring had screen intervals between 20 and 300 feet below ground surface (bgs), with only one exception, to represent the water table surface that could be accessed by vegetation. Deeper wells were incorporated into the contouring in the Central area where a large pumping depression has lowered the groundwater surface to more than 150 bgs. **Table O-2** provides the list of wells and their total depths and screen intervals. **Figure O-1** shows the location of the wells and the groundwater elevation contours.

Invert elevations within rivers and canals were obtained from the Central Valley Floodplain Evaluation and Delineation Program. Feather River, Bear River, Yankee Slough and Natomas Cross Canal were based on minimum values from selected cross section surveys. Sacramento River and American River values were derived from Urban Levee Evaluation Program multibeam SONAR surveys at approximately 1mile intervals within survey extents.

Ground surface elevations from National Elevation Dataset (NED) 1/3 arc-second (approximately 10 meter) elevation grids were obtained from United States Geological Survey via the National Map.

Water surface elevations were then subtracted from ground surface elevations to obtain the depth to water throughout the Subbasin. **Figure O-2** shows the depth to groundwater contours along with potential GDEs. **Figure O-3** highlights the areas where groundwater levels are less than 30 feet bgs.

1.3 GDE Classification

GDEs were prioritized by assigning a point system based on depth to groundwater using 2019 depth to groundwater contours for the Subbasin, vegetation diversity (NCCAG database) and the potential presence of critical species (RareFind5) for each section in the PLSS:

Criteria	Assigned Points
Depth to groundwater less than 30 ft bgs	2
Critical species identified	1
Diverse vegetation (3 or more plant species identified by NCCAG)	1
Depth to groundwater greater than or equal to 30 ft bgs	0
Lack of diverse vegetation (less than 3 plant species identified by NCCAG)	0
No vegetation identified (NCCAG)	-1
Diverse vegetation with rooting depths less than depth to water	0

The scoring system was used to simplify classification of GDEs as "Likely", "Less Likely" or "Not Likely" as follows:

Priority	Points Assigned
Likely GDE	3-4
Less Likely GDE	2
Not Likely GDE	0-1

Figure O-4 provides the priority classification of potential GDEs by section. **Figure O-5** provides a simplified summary of the results for the potential GDEs using this approach. Additional details describing the approach are provided below.

Figure O-6 provides the additional details for those Likely and Less Likely GDEs, by illustrating:

- high priority areas, where diverse and critical species are present,
- those areas where just diverse vegetation is present, and
- those areas where just critical species are present
- low priority areas, where depth to groundwater is less than 30 feet bgs but diverse vegetation or critical species are not present

Prioritizing GDEs by these criteria was performed to assist in selection of representative groundwater monitoring wells and identification of data gaps in the monitoring network. This approach will help to prioritize limited funding to fill monitoring gaps.

1.4.1 Likely GDEs

Sections that had depth to groundwater of less than 30 feet bgs, diverse vegetation and critical species identified received as score of 4. Sections that had depth to groundwater of less than 30 feet bgs, diverse vegetation, but no critical species received as score of 3. Likewise, sections with depth to groundwater of less than 30 feet bgs, critical species identified, but no diverse vegetation also received a score of 3. Sections with scores of 3 or 4 were considered "Likely" GDEs. Likely GDEs consisted of approximately 14% of all sections evaluated.

Exceptions occurred where land uses were identified based on historical aerial photos that showed that these vegetative species did not exist at these locations in the past, but do presently due to artificial sources of surface water, for example an NCCAG identified at a golf course that did not exist prior to the course being constructed.

1.4.2 Less Likely GDEs

Sections that had depth to groundwater of less than 30 feet bgs, critical species identified, but no groundwater dependent vegetation received a score of 2. Sections that had depth to groundwater of less than 30 feet bgs, vegetation identified, but no critical species identified also received a score of 2. Sections with scores of 2 were considered "Less Likely" GDEs. "Less likely" GDEs consisted of approximately 15 percent of the sections evaluated.

1.4.3 Not Likely GDEs

Sections that were classified as "Not Likely" GDEs generally had depth to groundwater equal to or greater than 30 feet bgs. If no critical species were identified a score of 0 was assigned. If critical species were identified, a score of 1 was assigned. Diverse vegetation was noted, but because groundwater dependent species in the Subbasin have rooting depths of less than 30 feet it was not considered in scoring.

There were "Not Likely" GDEs identified in sections that had depth to groundwater less than 30 feet bgs. These sections lacked the presence of critical species and there was no groundwater dependent vegetation identified. These received a score of 1. "Not Likely" GDEs consisted of 71 percent of all sections evaluated.

Further evaluation of some of the potential GDE areas with depths to groundwater greater than 30 feet bgs was performed to assess why the potential GDEs were present and their source of water. Most of the potential GDEs were present along creeks in these areas. Sources of surface water to portions of Dry, Raccoon, and Pleasant Grove Creeks and Auburn Ravines are from wastewater treatment plants both in the Subbasin and in watershed. Water in the creeks is also present due to releases from Nevada Irrigation District (NID) and Placer County Water Agency (PCWA) canals to Doty Ravine, Raccoon Creek, Antelope Creek and Miners Ravine. The amount of surface water in these waterways can be influenced by return flows from customer purchases, leakage, and end of canal losses, but cannot be quantified and is highly variable. Another waterway that benefits from return flows is Markham Ravine but NID does not currently use it for conveyance. Historically, NID had

supplied South Sutter Water District (SSWD) through Auburn Ravine but SSWD has not purchased water for a number of years. Currently, PCWA supplies surface water to a few agricultural customers in the Subbasin along Auburn Ravine. SSWD also uses the creeks and ravines within its boundaries for conveyance and to receive return water. Water in these creeks and ravines from these sources are not mandated, except for Dry Creek where 10,000 AFY is required to be released from Roseville's Dry Creek treatment plant, and may vary from year to year and may be reduced in the future due to recycling of treated water for use for irrigation and other uses.

It is important to note that many of the areas retained as Likely and Less Likely GDEs in Sutter County are supported through surface water, regardless of whether they or not they are groundwater-dependent. SSWD delivers surface water into several channels from April into October each year. From north to south, SSWD has documented deliveries into the following: Yankee Slough, Raccoon Creek, Bunkham Slough, Markham Ravine, Auburn Ravine, King Slough, and Pleasant Grove Creek. Deliveries to the East Side Canal are also documented. Also, conservation and preserves with potential GDEs, in areas with depth to groundwater less than 30 feet bgs, were also retained as Likely or Less Likely even though some of these areas are being supported by groundwater from wells.

Perched water is present beneath and adjacent to several creeks in the eastern portion of the Subbasin where potential GDEs were identified by NCCAG, even within areas designated as being less than 30 feet depth to groundwater. These perched water areas cannot be managed and are not part of the principal aquifer as illustrated below.

- Some of the potential GDEs along Markham Ravine in the area where the depth to groundwater is greater than 30 feet bgs, may be supported by perched groundwater which cannot be managed and is not part of the principal aquifer. Perched water was encounter during construction of monitoring well 90, located on the north side of the creek in Placer County. Perched water was encountered at a depth of about 5 feet below ground surface while the monitoring well shows the depth to water in the principal aquifer is over 40 feet bgs (see **Appendix H**).
- Studies along the foothills, northeast of Lincoln and east of Highway 65, along Raccoon Creek and Doty Ravine have shown groundwater is perched in thin alluvium resting on the low permeability sediments of the marine Ione Formation. **Figures O-7 through O-10** and provide a location map and geologic profiles (cross sections) showing the types of sediments in the subsurface. All three profiles paint a consistent picture that the Ione Formation is present at or near the ground surface east of the old Highway 65 and that thin alluvium rests on top of the Ione Formation where groundwater may be perched. The principal aquifer in the Subbasin starts to the west of old Highway 65 where the sediments are thicker.
- A fairly large area of perched water is present near the upper reaches of Dry Creek where potential GDEs were identified by NCCAG. Case files for releases of contaminants to the environment (leaky underground storage tanks, Roseville Railyard) were reviewed for groundwater levels and plotted with groundwater levels from dedicated groundwater monitoring wells. **Figure O-11** shows the locations of

the monitoring wells from these contaminant evaluation studies, dedicated monitoring wells, and cross sections drawn to illustrate the perched water occurrences and the potential path of the water to the saturated zone. **Figures O-12 through O-14** cross sections show groundwater levels and sediment types. **Figure O-12** was drawn generally parallel to Dry Creek and shows the principal aquifer (saturated zone) groundwater levels and other groundwater occurrences (inverted triangles) of groundwater levels from the various monitoring wells. There are four wells along this section that have perched groundwater levels up to 100 feet above the saturated zone. **Figure O-13** shows the same occurrences. The hydrograph for monitoring well 35 (see **Appendix H**) illustrates the long-term groundwater level occurrences along Dry Creek just north of the railyards and that even seasonal highs in the principal aquifer do rise high enough to connect with the perched water. These multiple perched groundwater levels extend north of the railyards to the Placer County Fair Grounds and south of Highway 80. **Figure O-14**, close to the foothills, does not show perched water but a continuous saturated interval with the principal aquifer.

- Areas around Auburn Ravine also have documented perched water but the extent is unknown. Evidence to support that the groundwater levels in this area are perched is because groundwater levels are higher (by about 20 feet) than in underlying principal aquifer and that the groundwater levels in the principal aquifer never rise to the levels of the perched water, showing they are disconnected. Monitoring well 65 (see **Appendix I**) illustrates the long-term groundwater level occurrences along Auburn Ravine and the perched water.

Potential GDEs along these creeks and in areas with depths to groundwater greater than 30 feet were removed as likely GDEs.

1.5 Summary of NCCAG Dataset Review

The NCCAG vegetation dataset covers 9,197 acres in the NASb. Of that amount, only 4,229 acres (46 percent) were present in areas with a depth to groundwater of 30 feet or less. Of the 4,229 acres, 1,679 acres (40 percent) was excluded as having no vegetation capable of being supported by groundwater at 30 feet bgs (e.g., Valley Oak), having no critical species, or having man-made features (e.g., irrigated golf course). The remaining 2,550 acres that remain as likely GDEs can be classified as follows:

Vegetation Priority	Acres	Percent of Area
High Priority	1,334	52
Critical Species	524	21
Diverse Vegetation	305	12
Low Priority	387	15
Total	2,550	100

The NCCAG dataset also has identified wetlands. Some of these are coincident with mapped vegetation areas, so the total acres of vegetation and wetlands are not additive. The NCCAG dataset identifies 3,298 acre in the NASb. Of that amount, 2,133 acres (65 percent) are in areas where the depth to groundwater 30 feet or less. Of the 2,133 acres, 686 acres (32 percent) were excluded based on supporting no species or being man-made features. The remaining 1,447 acres that remain as likely GDEs can be classified as follows:

Wetlands Priority	Acres	Percent of Area
High Priority	656	45
Critical Species	520	36
Diverse Vegetation	50	4
Low Priority	221	15
Total	1,447	100

1.6 Effects of Sustainable Management Criteria on GDEs

The NASb sustainable management criteria (SMC) were developed based on modeling of future demand projections with climate change and a limited urban area expanded conjunctive use program. This modeling produced estimated future Spring groundwater levels resulting from a 50-year simulation period. The future projected water levels were used to create a future conditions Spring groundwater elevation map. The projected Spring water levels were intersected with the NASb NCCAG vegetation and wetlands dataset in the same manner as was done for the Spring 2020 groundwater levels as described in Section 1.2 above. This had only a limited effect on the likely GDE areas as shown below:

Vegetation Priority	Spring 2020 Acres	Future Projected Spring Acres	Percent Reduction
High Priority	1,334	1,327	0.5
Critical Species	524	521	0.6
Diverse Vegetation	305	300	1.6
Low Priority	387	346	10.6
Total	2,550	2,496	2

Wetlands Priority	Spring 2020 Acres	Future Projected Spring Acres	Percent Reduction
High Priority	656	656	0
Critical Species	520	520	0
Diverse Vegetation	50	50	0
Low Priority	221	208	5.9
Total	1,447	1,434	0.9

The table above shows that only about 54 acres of vegetation GDE could be lost under the NASb SMC, which is only 2 percent of the area. Of the 54 acre reduction, nearly all can be

accounted for by low priority GDEs. For the wetlands areas, only a 13 acre reduction is projected. The entire reduced area is within wetlands that are classified as low priority based on having no critical species and lacking diverse vegetation.

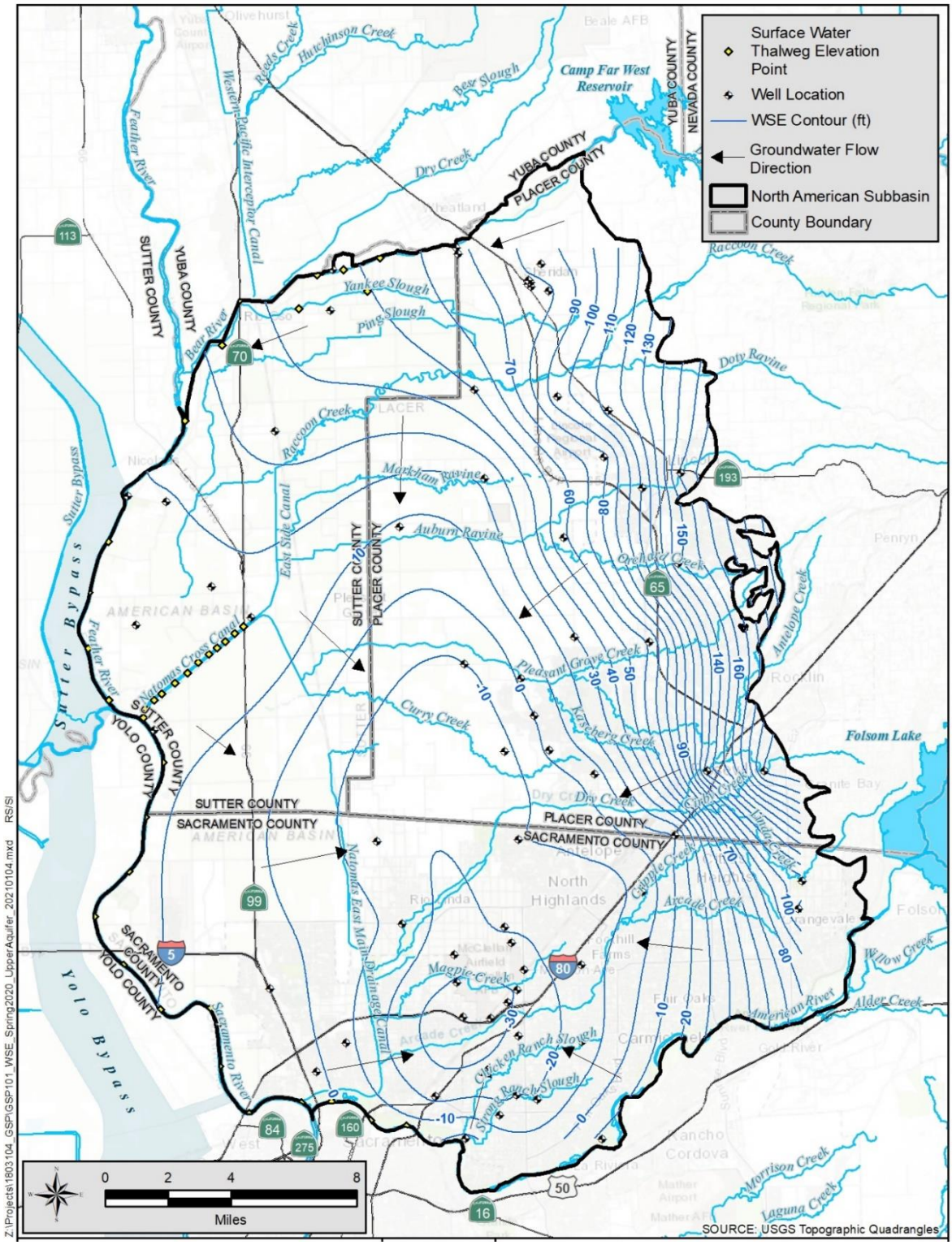

Figure O-1 Regional Groundwater Contours – Spring 2020

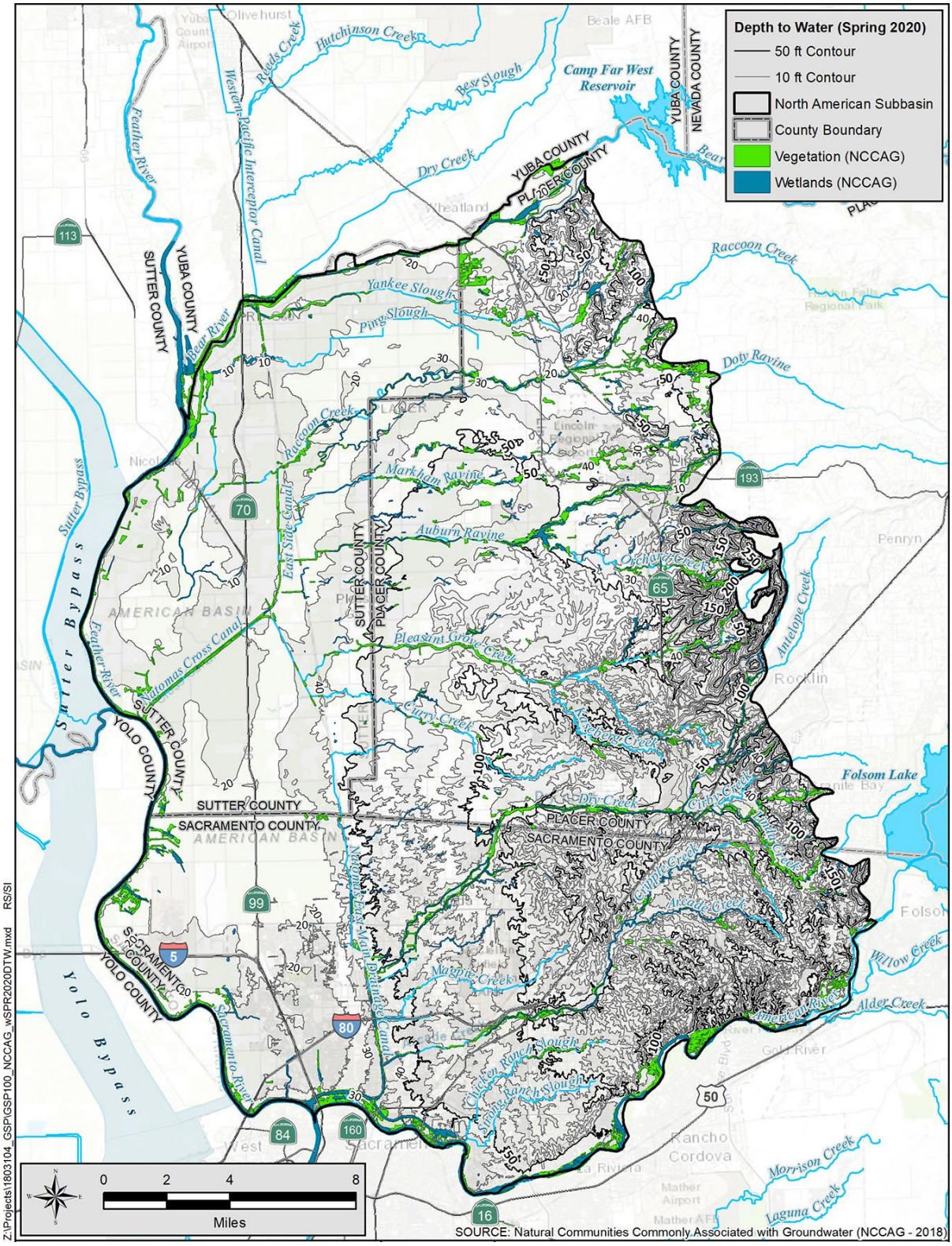

Figure O-2 Depth to Groundwater – Spring 2020

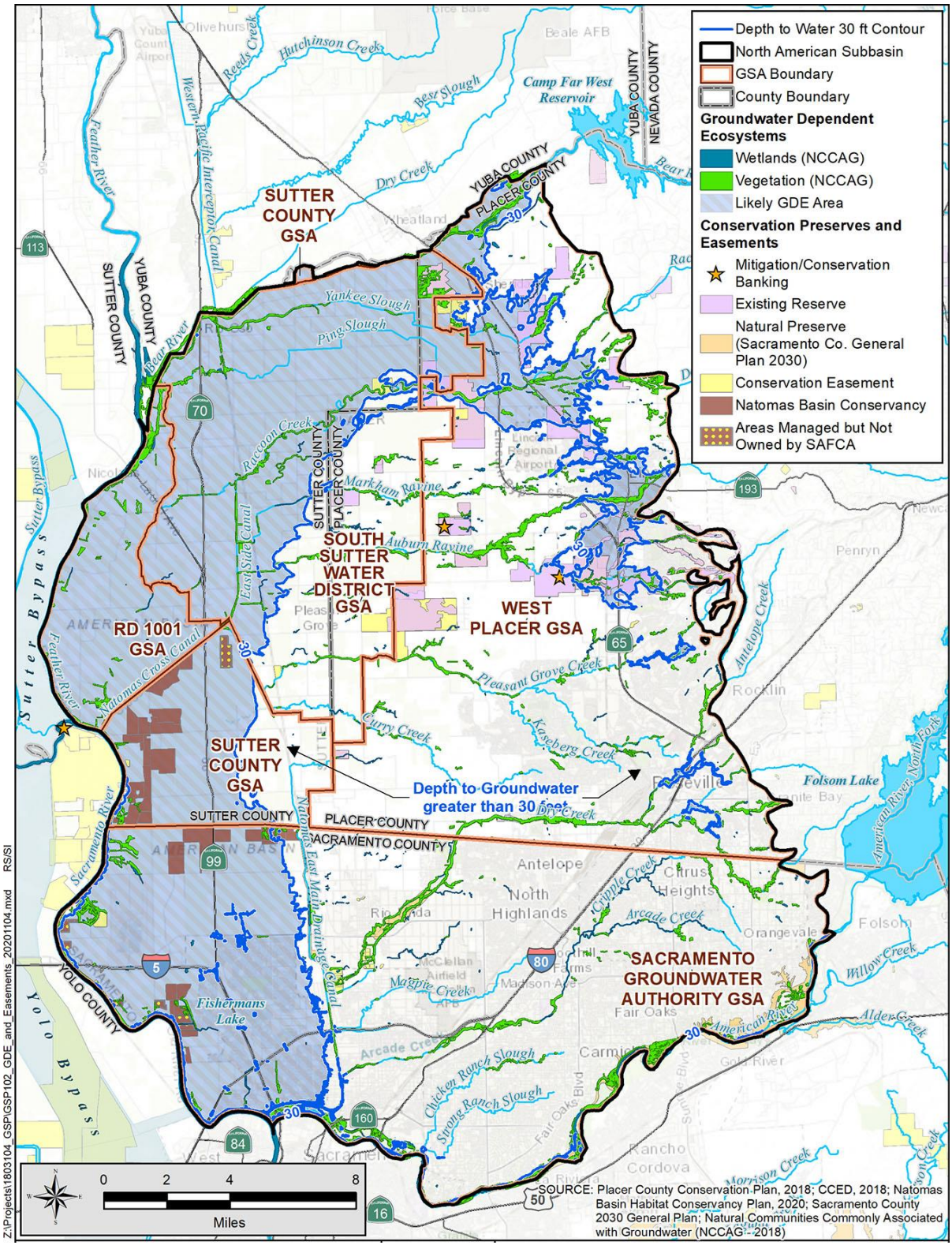

Figure O-3 Areas with Likely GDEs – Groundwater Less Than 30 Feet

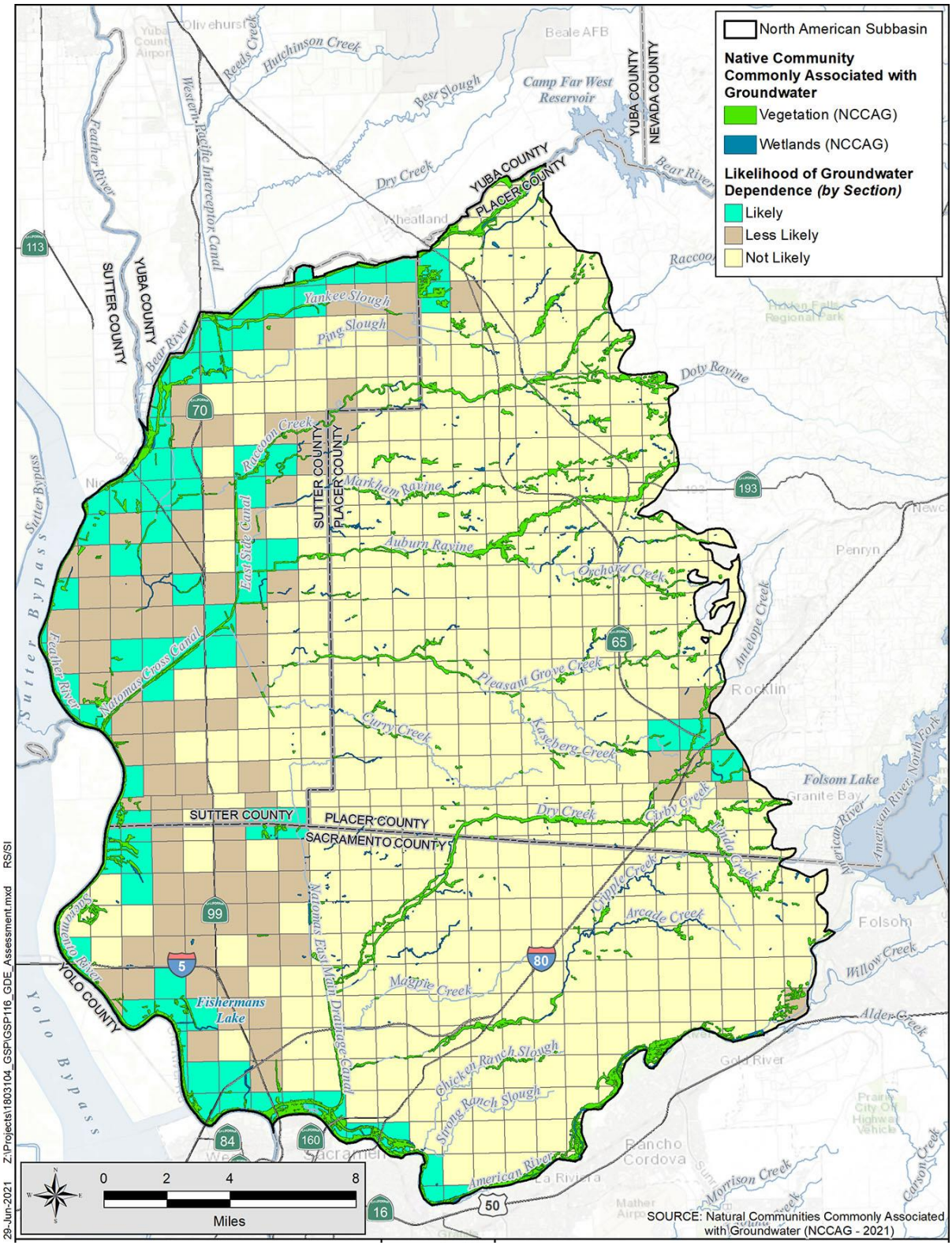

Figure O-4 Characterization of GDEs by Section

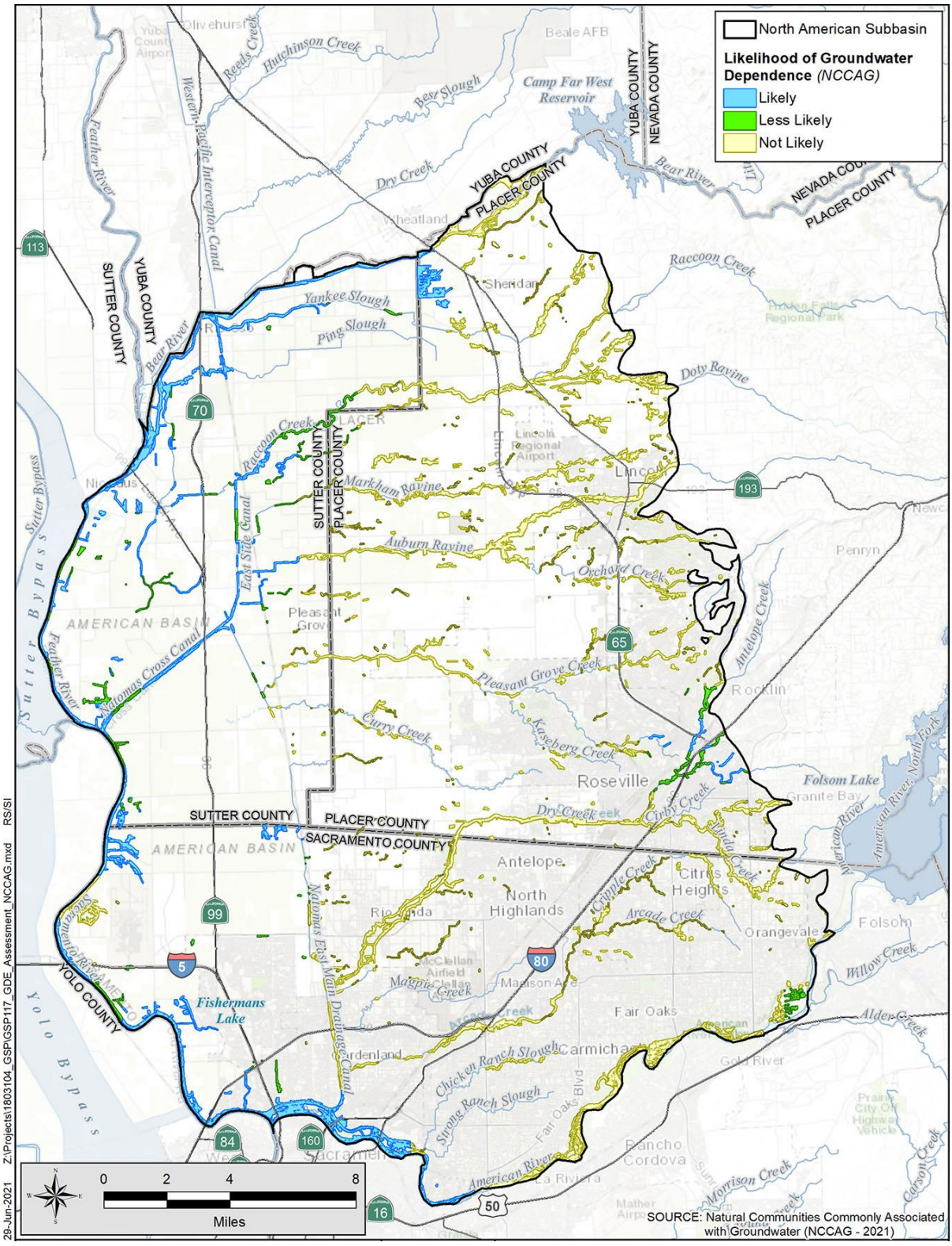

Figure O-5 Classification of Potential GDEs

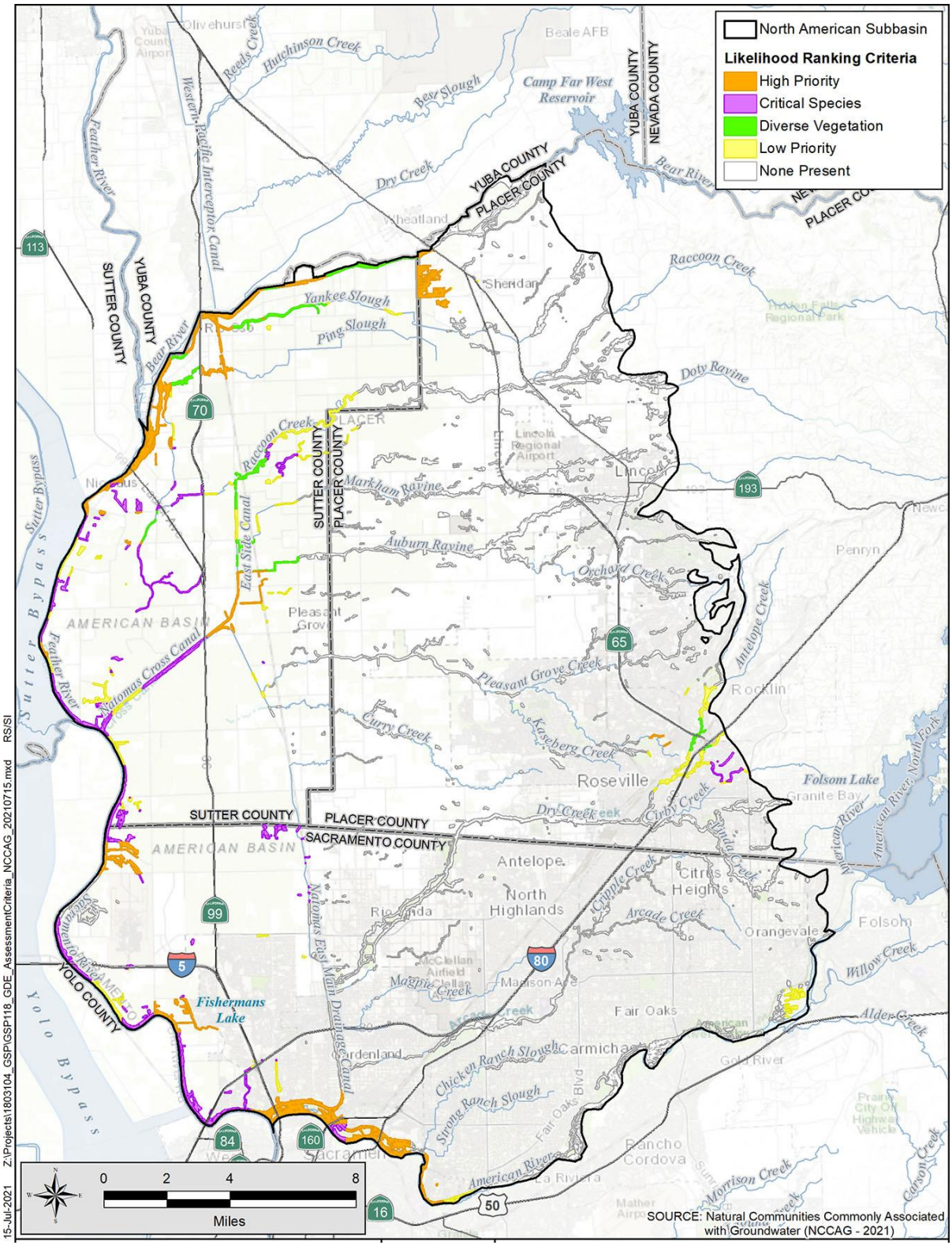

Figure O-6 Rankings of Likely and Less Likely GDE Areas

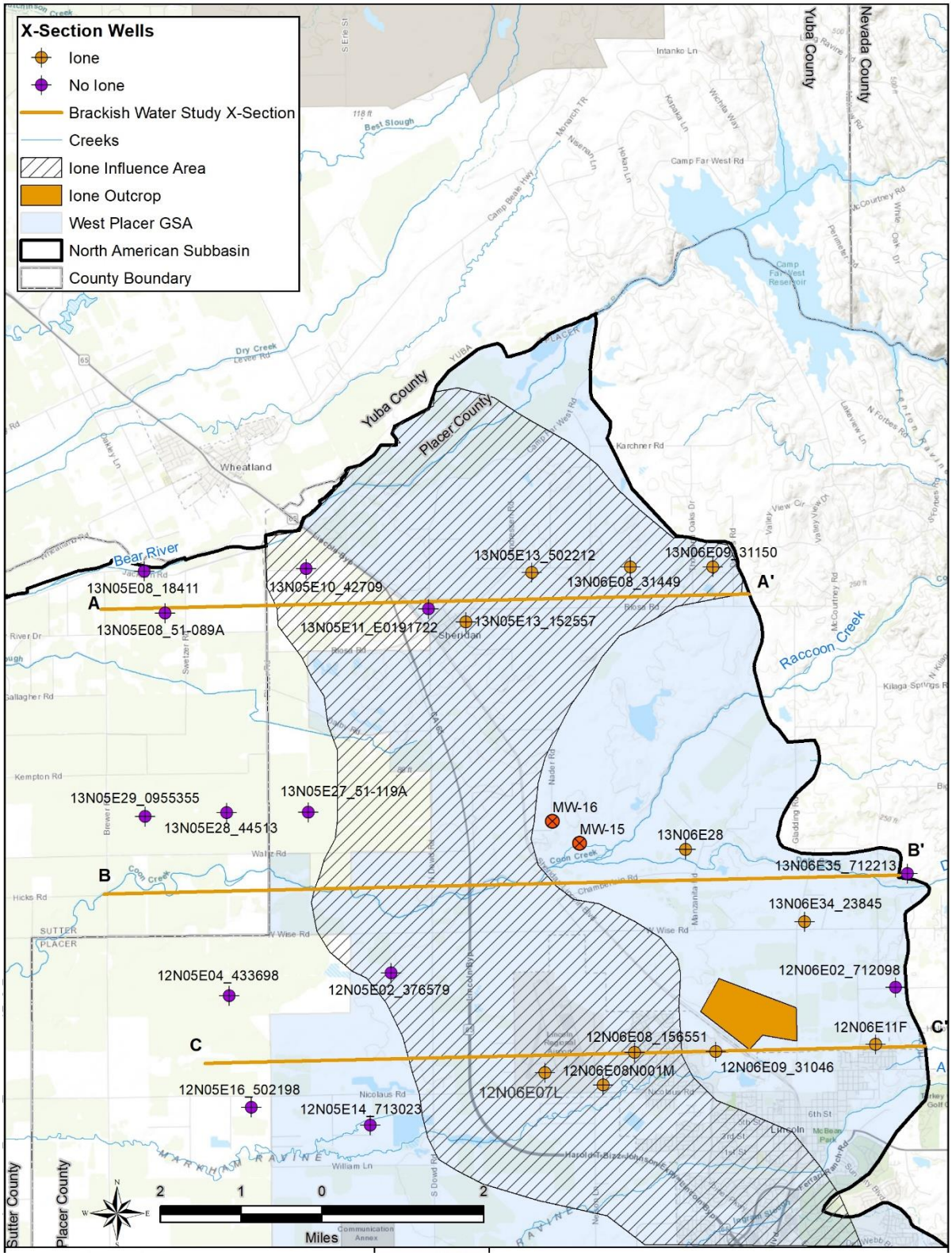

Figure O-7 Locations of Geologic Sections North of Lincoln

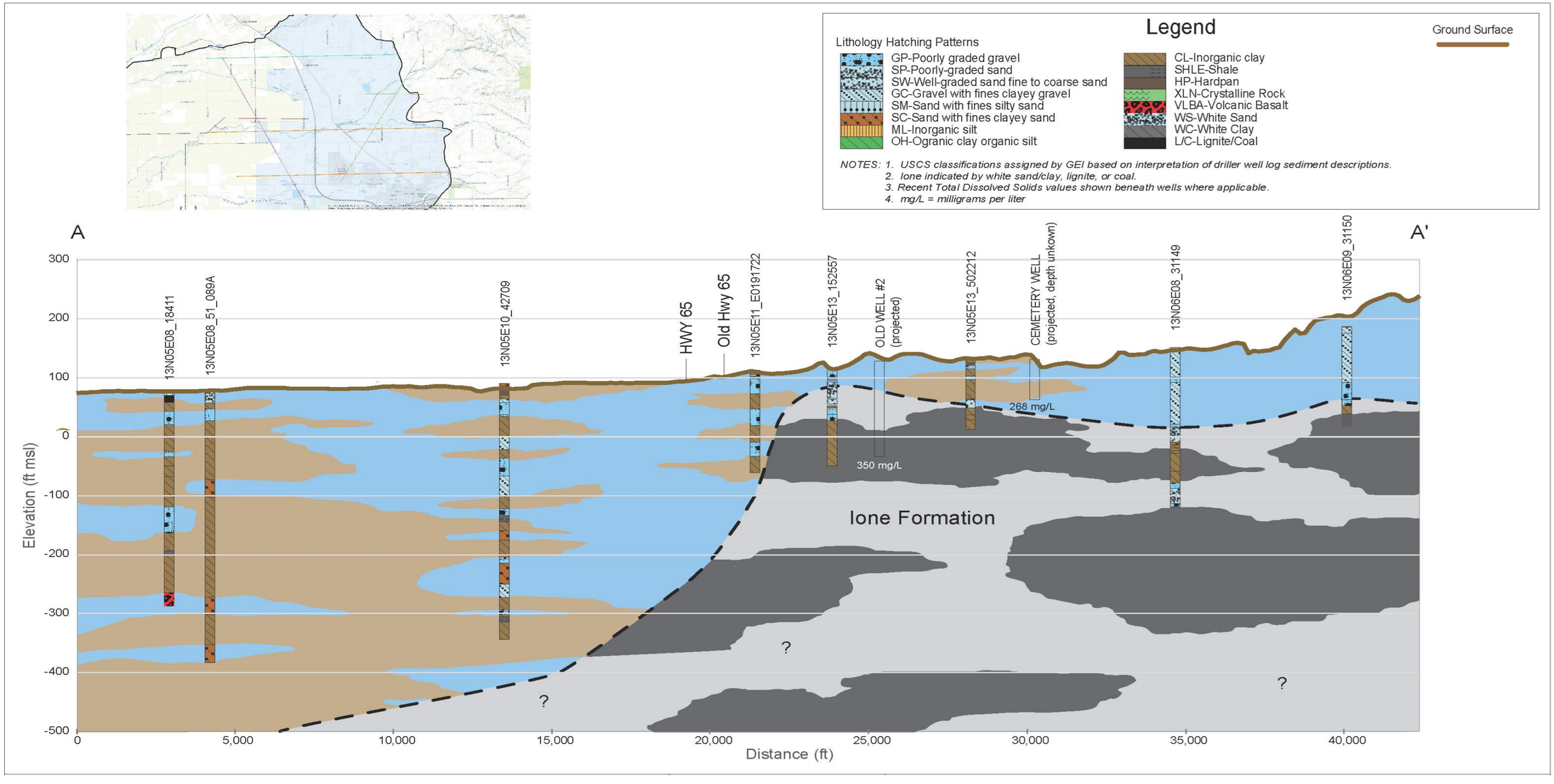

Figure O-8 Geologic Sections A-A' North of Lincoln

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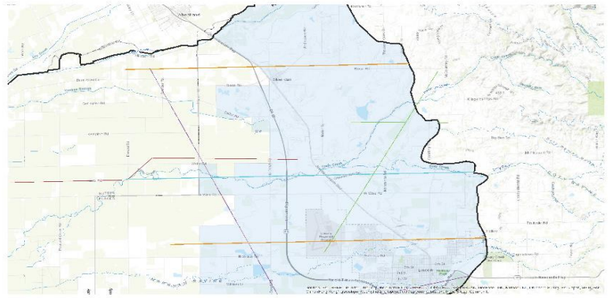

Legend

Ground Surface

Lithology Hatching Patterns

- GP-Poorly graded gravel
- SP-Poorly-graded sand
- SW-Well-graded sand fine to coarse sand
- GC-Gravel with fines clayey gravel
- SM-Sand with fines silty sand
- SC-Sand with fines clayey sand
- ML-Inorganic silt
- OH-Ogranic clay organic silt
- CL-Inorganic clay
- SHLE-Shale
- HP-Hardpan
- XLN-Crystalline Rock
- VLBA-Volcanic Basalt
- WS-White Sand
- WC-White Clay
- L/C-Lignite/Coal

NOTES: 1. USCS classifications assigned by GEI based on interpretation of driller well log sediment descriptions.
2. Ione indicated by white sand/clay, lignite, or coal.
3. Recent Total Dissolved Solids values shown beneath wells where applicable.
4. mg/L = milligrams per liter

Figure O-9 Geologic Section B-B'

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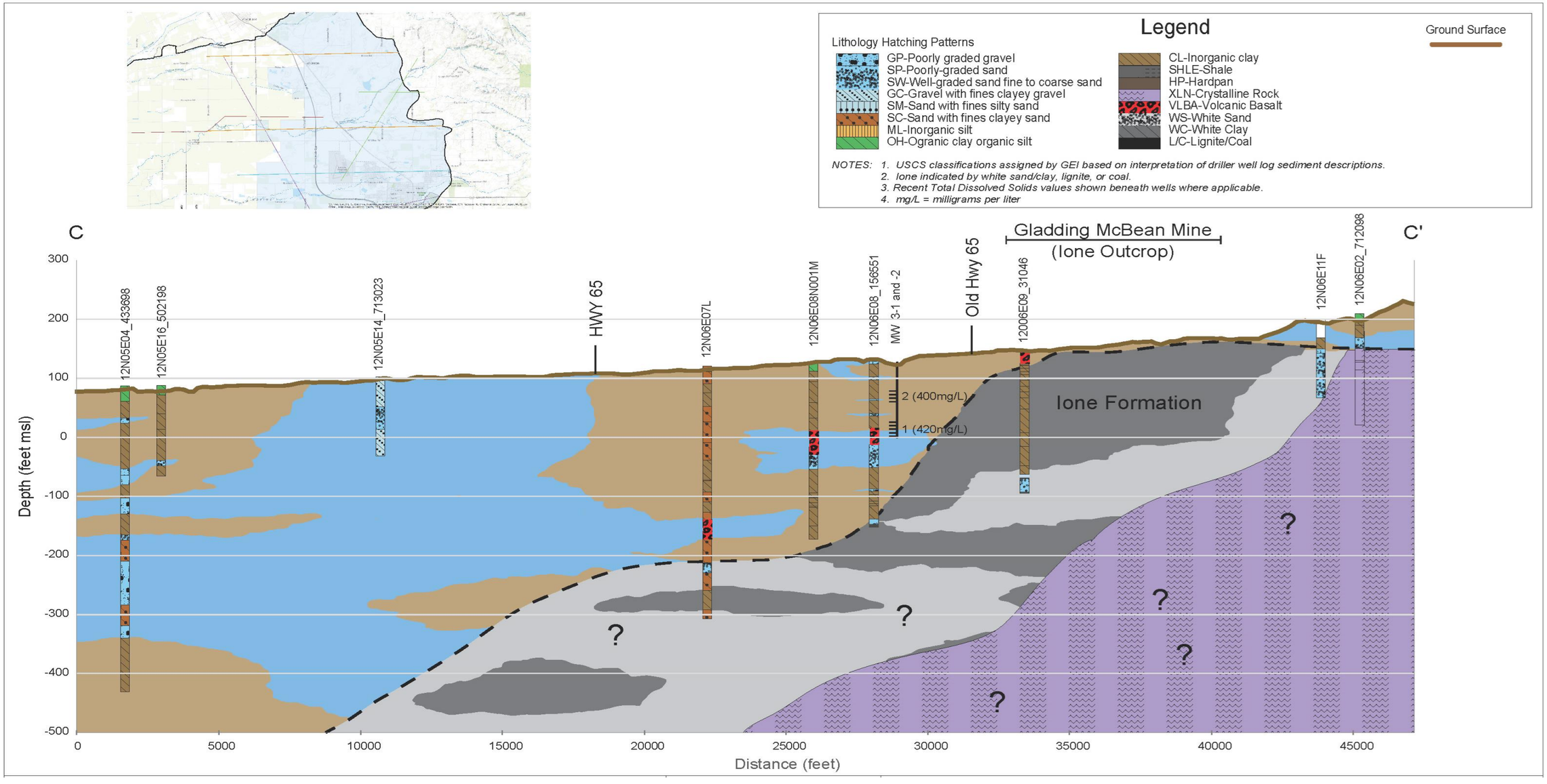

Figure O-10 Geologic Section C-C' North of Lincoln

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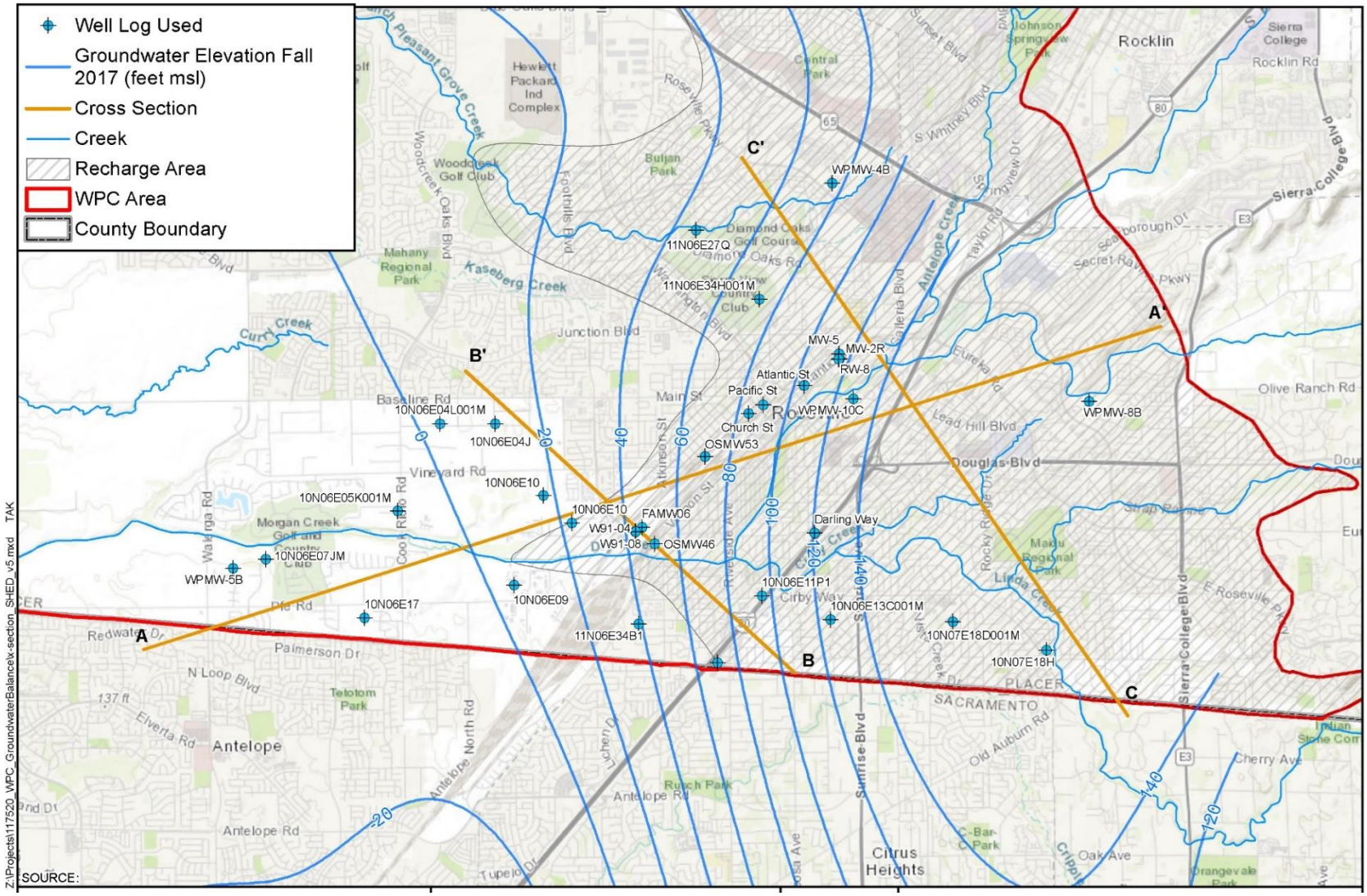

Figure O-11 Locations of Geologic Sections Dry Creek Area

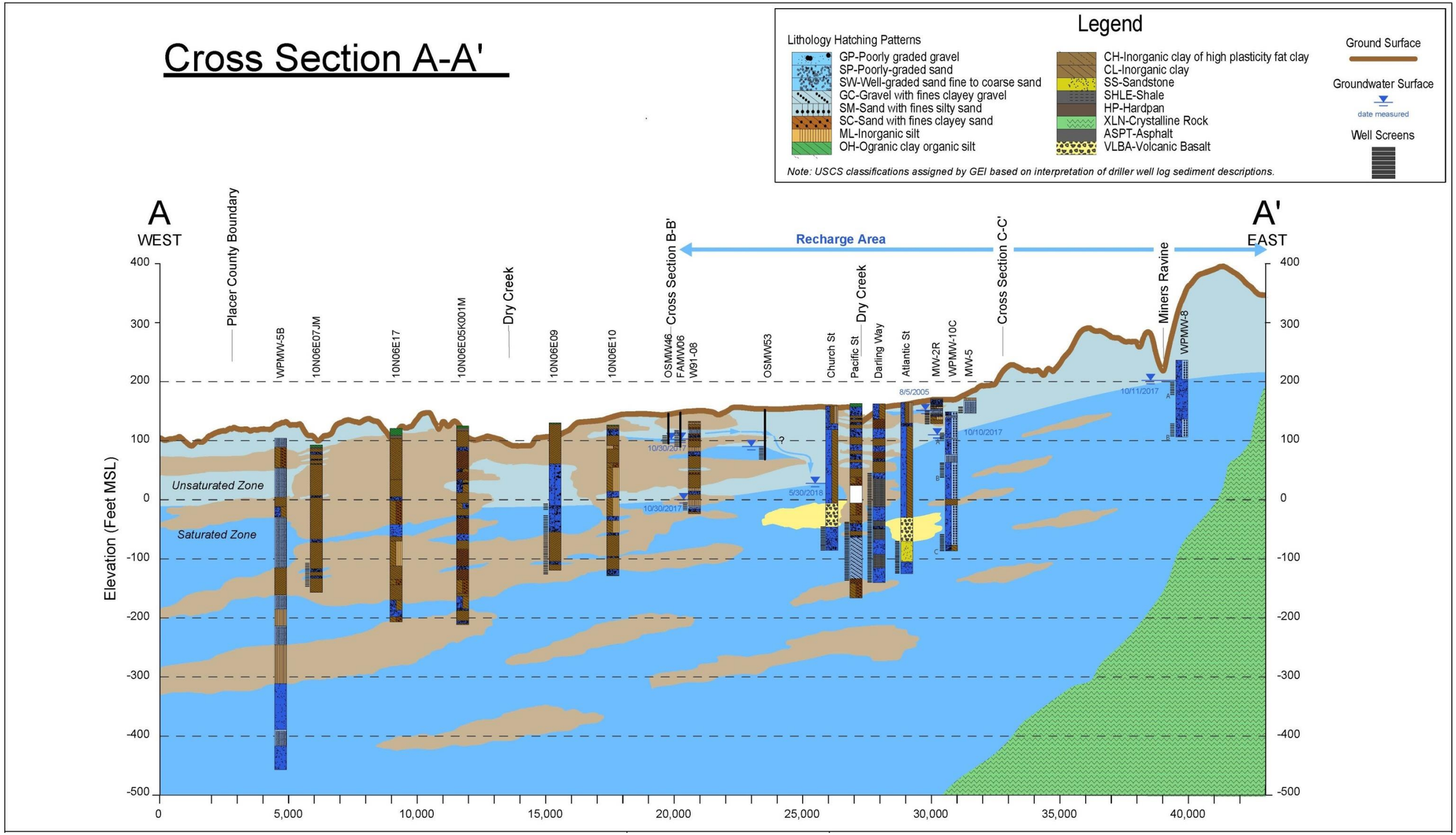

Figure O-12 Geologic Section A-A' Dry Creek Area

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Cross Section B-B'

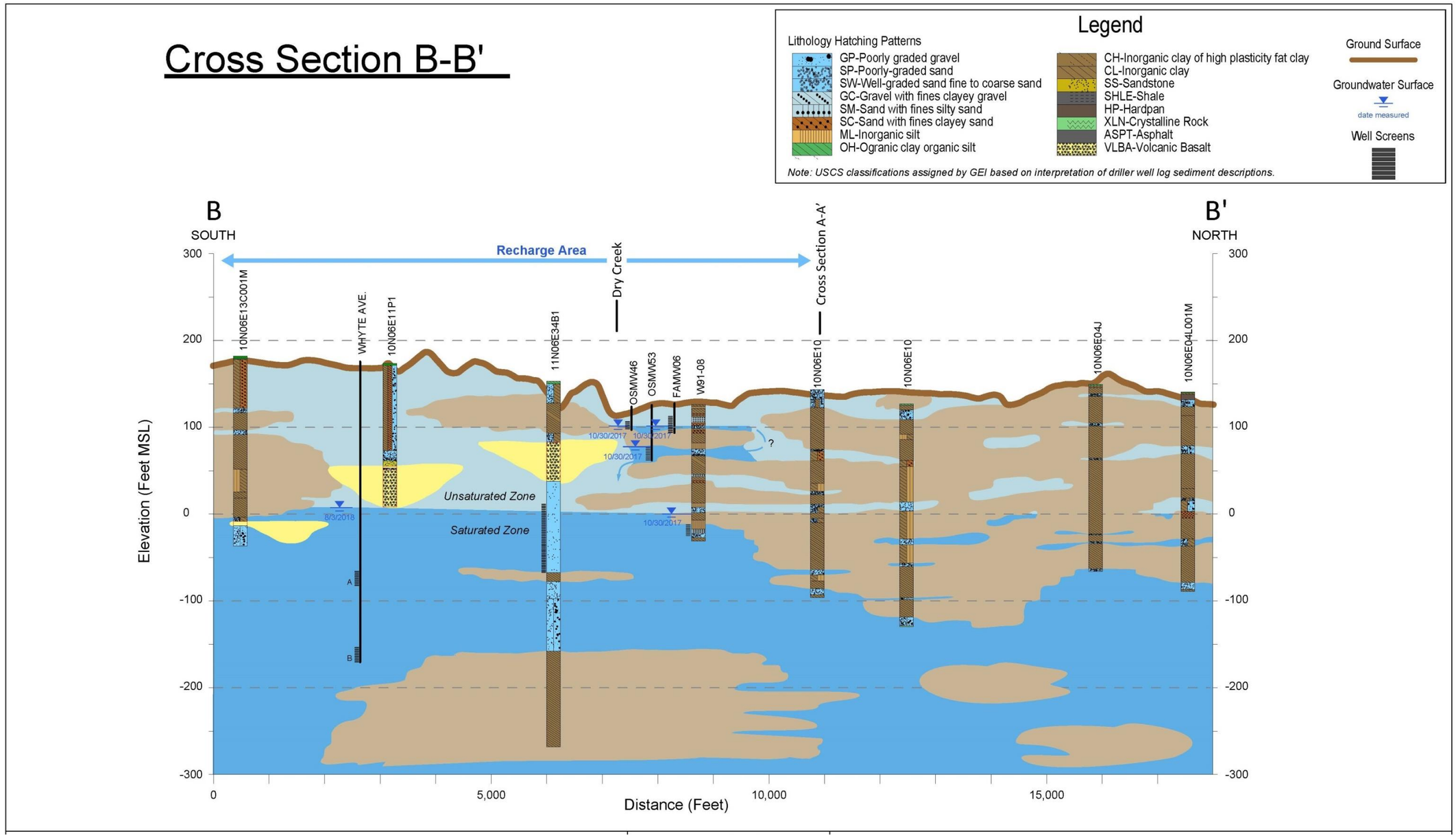

Figure O-13 Geologic Section B-B' Dry Creek Area

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Cross Section C-C'

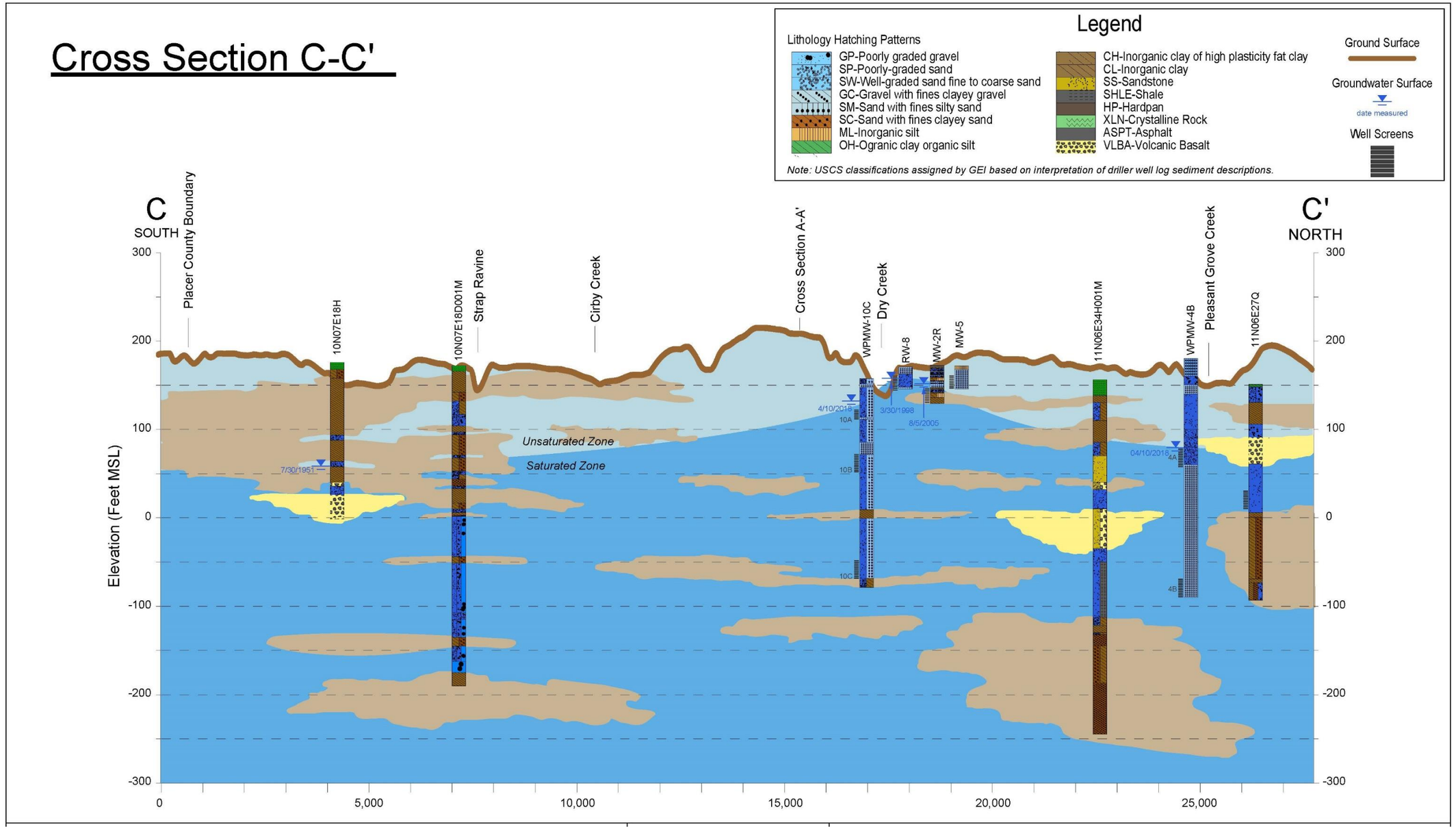

Figure O-14 Geologic Section C-C' Dry Creek Area

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Table O-1. Likely GDE Analyses

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
8	5	1	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Quercus lobata requires a DTW of 24.31 ft[1] and the polygon is located between the 30 ft and 40 ft DTW contour interval. Species is likely dependent on the American River, not groundwater, at this location.	40	none	Flat	N/Flat	N- CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020) N - CASGEM Well 48014 (SGA_MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	none	Quercus lobata	Valley Oak														
8	5	2	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	No GDEs	30-45	none	Flat	N/Flat	N- CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020) N - CASGEM Well 48014 (SGA_MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	none																
8	5	3	American River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Quercus lobata occupies 0.18 acre of the section. (Refer to T8, R5, Section 10). All other species present have root depths that are shallow[1,3] and therefore not dependent on groundwater at this location. Species are likely dependent on the American River.	20-30	Valley Elderberry Longhorned Beetle	Flat	N/Flat	N- CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020) N - CASGEM Well 48014 (SGA_MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Emergent, Nonpersistent, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Acer negundo	Box-elder	Salix exigua	Narrowleaf Willow	Quercus lobata	Valley Oak	Alnus rhombifolia	White Alder						
8	5	4	American River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	All species present have shallow root depths[1,3] and therefore not dependent on groundwater at this location. Species are likely dependent on the American River.	20-30	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	N	N- CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Forested, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow	Salix gooddingii	Goodding's Willow	Alnus rhombifolia	White Alder								
8	5	10	American River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Quercus lobata requires a DTW of 24.31 ft[1] and the polygon is located between the 20 ft and 30 ft DTW contour interval. All other species present have root depths that are shallow[1] and therefore not dependent on groundwater at this location. Species are likely dependent on the American River.	20-30	none w/in NASb boundary	Flat	N/Flat	N- CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020) N - CASGEM Well 48014 (SGA_MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Salix exigua	Narrowleaf Willow	Acer negundo	Box-elder								

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
8	5	11	American River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation Species have rooting depths less than DTW	Quercus lobata is located where DTW is greater than 30 ft. Species are likely dependent on the American River. Can be eliminated because DTW is greater than 30 ft.	25-35	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	N/Flat	N- CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020) N - CASGEM Well 48014 (SGA_MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Scrub-Shrub, Emergent, Persistent, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
8	5	12	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Location of species has DTW at greater than 30 ft. Species are likely dependent on the continuous flow of the American River, not groundwater at this location.	30-40	none	Flat	N/Flat	N- CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020) N - CASGEM Well 48014 (SGA_MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
8	6	4	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	40	none	Flat	N	N - CASGEM Well 9649 (SCGA #24, 09N06E33R001M) avg DTW = 51 (29 points; 2000-2020) N - CASGEM Well 48014 (SGA MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow	Quercus lobata	Valley Oak	Alnus rhombifolia	White Alder						
8	6	5	American River	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	40	Valley Elderberry Longhorned Beetle	Flat	N	N - CASGEM Well 9649 (SCGA #24, 09N06E33R001M) avg DTW = 51 (29 points; 2000-2020) N - CASGEM Well 48014 (SGA MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Acer negundo	Box-elder	Sambucus nigra	Common Elderberry	Juglans hindsii and hybrids*	No Cal Black Walnut						
8	6	6	American River	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	40	Valley Elderberry Longhorned Beetle	Flat	N	N - CASGEM Well 9649 (SCGA #24, 09N06E33R001M) avg DTW = 51 (29 points; 2000-2020) N - CASGEM Well 48014 (SGA MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Alnus rhombifolia	White Alder	Acer negundo	Box-elder						

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
8	6	7	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	40	none	Flat	N	N - CASGEM Well 9649 (SCGA #24, 09N06E33R001M) avg DTW = 51 (29 points; 2000-2020) N - CASGEM Well 48014 (SGA MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Palustrine, Scrub-Shrub, Seasonally Flooded, Palustrine, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
9	3	1	Sacramento River	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Juglans hindsii and hybrids*	No California Black Walnut										
9	3	2	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak												
9	3	12	Sacramento River	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none w/in NASb boundary	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak												
9	4	1	Residential	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	20-30	none	Flat	Flat	Y - CASGEM Well 8921 (SCWA_SGA_001, 09N04E01R001M) avg DTW = 29 (34 points; 2000-2020)	none														
9	4	2	Residential	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	10-20	none	Flat	Flat	Y - CASGEM Well 8921 (SCWA_SGA_001, 09N04E01R001M) avg DTW = 29 (34 points; 2000-2020)	none														
9	4	3	Residential	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	15-25	Swainson's Hawk Giant Gartersnake	Flat	Flat	Y - CASGEM Well 15690 (AB-3 shallow, 10N04E27R004M) avg DTW =17 (164 points; 2000-2020)	none														
9	4	4	Residential	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake (possibly extirpated) - area has been developed since sighted in 1986	Flat	Flat	Y - CASGEM Well 15690 (AB-3 shallow, 10N04E27R004M) avg DTW =17 (164 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
9	4	5	West Drainage Canal	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Salix gooddingii has a rooting depth of 6.89[1]. DTW is deeper than rooting depth. Less than 1.5 acres	10-20	Swainson's Hawk Giant Gartersnake	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix gooddingii	Goodding's Willow												
9	4	6	Unspecified area	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	DTW is less than 30 ft.	<10	none	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Palustrine, Unconsolidated Shore, Seasonally Flooded	Quercus lobata	Valley Oak												
9	4	7	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 29915 (09N04E10C001M) avg DTW = 15 (82 points; 2000-2021)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
						diverse vegetation																							
9	4	8	Sacramento River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 29915 (09N04E10C001M) avg DTW = 15 (82 points; 2000-2021)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Schoenoplectus acutus*	Hardstem Bullrush	Typha angustifolia*	Narrowleaf Cattail	Platanus racemosa	California Sycamore								
9	4	9	Artificial surface water in subdivision?	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft. However, appears to be man-made lake/pond in development	10	Swainson's Hawk Giant Gartersnake	Flat	Flat	Y - CASGEM Well 29915 (09N04E10C001M) avg DTW = 15 (82 points; 2000-2021)	Palustrine, Forested, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Salix gooddingii	Goodding's Willow	Schoenoplectus acutus*	Hardstem Bullrush										
9	4	10	Residential/Commercial	2	Less likely	DTW < 30 ft Critical Species not likely present (possibly extirpated) No vegetation	No GDEs	10-15	Giant Gartersnake (possibly extirpated) - area has been developed since sighted in 1986	Flat	Flat	Y - CASGEM Well 29915 (09N04E10C001M) avg DTW = 15 (82 points; 2000-2021)	none																
9	4	11	Residential/Commercial	2	Less likely	DTW < 30 ft Critical Species not likely present (possibly extirpated) No vegetation	No GDEs	15-20	Giant Gartersnake (possibly extirpated) - area has been developed since sighted in 1987	Flat	Flat	Y - CASGEM Well 29915 (09N04E10C001M) avg DTW = 15 (82 points; 2000-2021)	none																
9	4	12	Residential/Commercial	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15-25	none	Flat	Flat	Y - CASGEM Well 8921 (SCWA_SGA_001, 09N04E01R001M) avg DTW = 29 (34 points; 2000-2020)	none																
9	4	13	Residential/Commercial	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15-25	none	Flat	Flat	Y - CASGEM Well 48040 (Chuckwagon, 09N04E13R001M) avg DTW = 19 (49 points; 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																
9	4	14	Residential/Commercial	2	Less likely	DTW < 30 ft Critical Species not likely present (possibly extirpated) No vegetation	No GDEs	10-15	Swainson's Hawk (possible extirpated) last sighted 2003	Flat	Flat	Y - CASGEM Well 48040 (Chuckwagon, 09N04E13R001M) avg DTW = 19 (49 points; 2011-2020)	none																
9	4	15	Residential/Commercial	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	0-10	none	Flat	Flat	Y - CASGEM Well 48041 (Bannon Ck, 09N04E23R002M) avg DTW = 13 (34 points, 2011-2020)	none																
9	4	16	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0-10	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 29915 (09N04E10C001M) avg DTW = 15 (82 points; 2000-2021)	none																
9	4	17	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Valley Elderberry Longhorned Beetle	Flat	Flat	Y - CASGEM Well 29915 (09N04E10C001M) avg DTW = 15 (82 points; 2000-2021)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Platanus racemosa	California Sycamore												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/21)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
9	4	20	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	Insufficient data	Y - CASGEM Well 8944 (SCWA_SGA_003, 09N04E27F001M) avg DTW = 21 (25 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak																
9	4	21	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	Insufficient data	Y - CASGEM Well 8944 (SCWA_SGA_003, 09N04E27F001M) avg DTW = 21 (25 points; 2000-2020)	none	Quercus lobata	Valley Oak																
9	4	22	Residential	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft. However, appears to be in a developed area	0-10	Swainson's Hawk	Flat	Insufficient data	Y - CASGEM Well 8944 (SCWA_SGA_003, 09N04E27F001M) avg DTW = 21 (25 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Juglans hindsii and hybrids*	No Cal Black Walnut												
9	4	23	Residential	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft. However, vegetation may be part of landscaping	0-10	none	Flat	Flat	Y - CASGEM Well 48041 (Bannon Ck, 09N04E23R002M) avg DTW = 13 (34 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak	Juglans hindsii and hybrids*	No Cal Black Walnut												
9	4	24	Residential	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	10-20	none	Flat	Flat	Y - CASGEM Well 48041 (Bannon Ck, 09N04E23R002M) avg DTW = 13 (34 points, 2011-2020)	none																
9	4	25	American River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	5-20	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	Flat	Y - CASGEM Well 48041 (Bannon Ck, 09N04E23R002M) avg DTW = 13 (34 points, 2011-2020)	Palustrine, Forested, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Forested, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Acer negundo	Box-elder	Vitis californica*	California Grape	Salix exigua	Narrowleaf Willow	Artemisia douglasiana**	Douglas' Wormwood				
9	4	26	Sacramento/American River Confluence	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	Flat	Y - CASGEM Well 48041 (Bannon Ck, 09N04E23R002M) avg DTW = 13 (34 points, 2011-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix lasiolepis	Arroyo Willow										
9	4	27	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	Insufficient data	Y - CASGEM Well 8944 (SCWA_SGA_003, 09N04E27F001M) avg DTW = 21 (25 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												
9	4	28	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	Insufficient data	Y - CASGEM Well 8944 (SCWA_SGA_003, 09N04E27F001M) avg DTW = 21 (25 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore,	Quercus lobata	Valley Oak														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
													Seasonally Flooded															
9	4	29	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	10	Swainson's Hawk	Flat	Insufficient data	Y - CASGEM Well 8944 (SCWA_SGA_003, 09N04E27F001M) avg DTW = 21 (25 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow												
9	4	33	Mostly outside NASb boundary (Yolo) Boundary line within river	0	Not likely	DTW < 30 ft No Critical Species w/in NASb boundary No vegetation w/in NASb boundary	No GDEs	10	none			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded																
9	4	35	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Populus fremontii has a maximum rooting depth of 16.4[1].	20-30	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	Insufficient data	Y - CASGEM Well 8944 (SCWA_SGA_003, 09N04E27F001M) avg DTW = 21 (25 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood														
9	5	1	McClellan AFB	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	125-135	none	Flat	N	N - CASGEM Well 48013 (SGA_MW-5, 09N06E05) avg DTW = 144 (29 points; 2009-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																
9	5	2	McClellan AFB	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	105-125	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded																
9	5	3	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-100	Tri-Colored Blackbird Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix exigua	Narrowleaf Willow	Acer negundo	Box-elder												
9	5	4	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-85	none	Flat	N/Flat	N - CASGEM Well 48010 (SGA_MW02, 10N05E32) avg DTW = 65 (35 points; 2011-2020) N - CASGEM Well 48011 (SGA_MW03, 10N05E32) avg DTW = 70 (35 points; 2011-2020)	Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak														
9	5	5	Dry Creek	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	45-70	Swainson's Hawk Vernal Pool Fairy Shrimp	Flat	N/Flat	N - CASGEM Well 48010 (SGA_MW02, 10N05E32) avg DTW = 65 (35 points; 2011-2020) N - CASGEM Well 48011 (SGA_MW03, 10N05E32) avg DTW = 70 (35 points; 2011-2020)	Palustrine, Scrub-Shrub, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus Lobata	Valley Oak	Juglans hindsii and hybrids*	No California Black Walnut								

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
9	5	6	Dry Ck/Steelhead Ck confluence	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Location of species has DTW at greater than 30 ft. Species are likely dependent on surface water from Dry Ck/Steelhead Ck, not groundwater, at this location.	35-45	Swainson's Hawk	Flat	N/Flat/Flat	N - CASGEM Well 48010 (SGA_MW02, 10N05E32) avg DTW = 65 (35 points; 2011-2020) N - CASGEM Well 48011 (SGA_MW03, 10N05E32) avg DTW = 70 (35 points; 2011-2020) Y - CASGEM Well 8921 (SCWA_SGA_001, 09N04E01R001M) avg DTW = 29 (34 points; 2000-2020)	Palustrine, Unconsolidated Shore, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail												
9	5	7	Steelhead Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Location of Salix exigua has DTW greater than 30 ft[1]. Species is likely dependent on surface water from Steelhead Ck, not groundwater, at this location.	30-40	none	Flat	Flat	Y - CASGEM Well 8921 (SCWA_SGA_001, 09N04E01R001M) avg DTW = 29 (34 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded	Salix exigua	Narrowleaf Willow														
9	5	8	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	40-60	none			no representative hydrographs within contour interval	none																
9	5	9	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	60-80	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded, California Warm Temperate Marsh/Seep																
9	5	10	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	80-100	none	Flat	Flat	N - CASGEM Well 40050 (DWR_SGA_002, 09N05E14B001M) avg DTW = 103 (125 points; 2000-2021)	none																
9	5	11	McClellan AFB	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	100-120	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 40050 (DWR_SGA_002, 09N05E14B001M) avg DTW = 103 (125 points; 2000-2021)	none																

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
9	5	12	Arcade Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated DTW is greater than 30 ft	110-130	none	Flat	Flat/Y	N - CASGEM Well 40050 (DRW_SGA_002, 09N05E14B001M) avg DTW = 103 (125 points; 2000-2021) N - CASGEM Well 48017 (Well 10, 09N05E13L002M) avg DTW = 106 (47 points; 2010-2020)	none	Quercus lobata	Valley Oak												
9	5	13	Arcade Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated DTW is greater than 100 ft	100-120	none	Flat	Flat/Y	N - CASGEM Well 40050 (DRW_SGA_002, 09N05E14B001M) avg DTW = 103 (125 points; 2000-2021) N - CASGEM Well 48017 (Well 10, 09N05E13L002M) avg DTW = 106 (47 points; 2010-2020)	none	Quercus lobata	Valley Oak												
9	5	14	Arcade Ck - Haggin Oaks Golf Complex	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated DTW is greater than 30 ft	90-110	Vernal Pool Fairy Shrimp	Flat	Flat/Y	N - CASGEM Well 40050 (DRW_SGA_002, 09N05E14B001M) avg DTW = 103 (125 points; 2000-2021) N - CASGEM Well 48017 (Well 10, 09N05E13L002M) avg DTW = 106 (47 points; 2010-2020)	none	Quercus lobata	Valley Oak												
9	5	15	Arcade Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated DTW is greater than 30 ft	85-90	none	Flat	Flat	N - CASGEM Well 40050 (DWR_SGA_002, 09N05E14B001M) avg DTW = 103 (125 points; 2000-2021)	none	Quercus lobata	Valley Oak												
9	5	16	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	No GDEs	60-80	none			no representative hydrographs within contour interval	none	Quercus lobata	Valley Oak												
9	5	17	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	40-60	none			no representative hydrographs within contour interval	none														
9	5	18	Steelhead Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Location has DTW greater than 30 ft. Species are likely dependent on surface water from Steelhead Ck, not groundwater, at this location.	35	none	Flat	Flat	Y - CASGEM Well 48040 (Chuckwagon, 09N04E13R001M) avg DTW = 19 (49 points; 2011-2020)	Palustrine, Forested, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bullrush	Typha angustifolia*	Narrowleaf Cattail										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
9	5	19	Steelhead Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Location has DTW greater than 30 ft. Species are likely dependent on surface water from Steelhead Ck, not groundwater, at this location.	35	Vernal Pool Tadpole Shrimp	Flat	Y/Flat	N - CASGEM Well 9643 (DWR_SGA_005, 09N05E28K001M) avg DTW = 60 (115 points, 2000-2020) Y - CASGEM Well 48040 (Chuckwagon, 09N04E13R001M) avg DTW = 19 (49 points; 2011-2020)	Palustrine, Forested, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail										
9	5	20	Arcade Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW is greater than 30 ft	40-60	none	Flat	Y	N - CASGEM Well 9643 (DWR_SGA_005, 09N05E28K001M) avg DTW = 60 (115 points, 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bullrush	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
9	5	21	Arcade Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-75	none			no representative hydrographs within contour interval	none	Quercus lobata	Valley Oak												
9	5	22	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	75-80	none			no representative hydrographs within contour interval	none	Quercus lobata	Valley Oak												
9	5	23	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	55-90	none	N	Flat	N - CASGEM Well 9641 (DWR_SGA_004, 09N05E25J001M) avg DTW = 95 (213 points, 2000-2021)	none														
9	5	24	Del Paso Country Club	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated DTW is greater than 30 ft	90-105	none	N	Flat	N - CASGEM Well 9641 (DWR_SGA_004, 09N05E25J001M) avg DTW = 95 (213 points, 2000-2021)	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak												
9	5	25	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	70-95	none	N	Flat	N - CASGEM Well 9641 (DWR_SGA_004, 09N05E25J001M) avg DTW = 95 (213 points, 2000-2021)	none														
9	5	26	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	60-90	none	N	Flat	N - CASGEM Well 9641 (DWR_SGA_004, 09N05E25J001M) avg DTW = 95 (213 points, 2000-2021)	none														
9	5	27	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	55-75	none	Flat	Y	N - CASGEM Well 9643 (DWR_SGA_005, 09N05E28K001M) avg DTW = 60 (115 points, 2000-2020)	none														
9	5	28	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	45-70	none	Flat	Y	N - CASGEM Well 9643 (DWR_SGA_005, 09N05E28K001M) avg DTW = 60 (115 points, 2000-2020)	none														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
9	5	29	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	30-55	none	Flat	Y	N - CASGEM Well 9643 (DWR_SGA_005, 09N05E28K001M) avg DTW = 60 (115 points, 2000-2020)	none															
9	5	30	American River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Quercus lobata requires a DTW of 24.31 ft[1]. All other species present (except Juglans hindsii and hybrids) have root depths that are shallow and therefore not dependent on groundwater at this location[1].	20-30	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	Flat	Y - CASGEM Well 48041 (Bannon Ck, 09N04E23R002M) avg DTW = 13 (34 points, 2011-2020)	Palustrine, Forested, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow	Juglans hindsii and hybrids*	No Cal Black Walnut								
9	5	31	American River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	20-30	Valley Elderberry Longhorned Beetle Vernal Pool Fairy Shrimp	Flat	Flat	Y - CASGEM Well 48041 (Bannon Ck, 09N04E23R002M) avg DTW = 13 (34 points, 2011-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Forested, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
9	5	32	American River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Quercus lobata requires a DTW of 24.31 ft.[1] The polygon for Quercus lobata is at the 30 ft contour. All other species present have root depths that are shallow[1,5] and therefore not dependent on groundwater at this location.	20-40	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	Flat	N - CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Forested, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Platanus racemosa	California Sycamore								
9	5	33	American River next to Cal Expo	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Location Quercus lobata is between the 30 ft and 40 ft DTW contour interval. All other species present have root depths that are shallow[1,3] and therefore not dependent on groundwater at this location. Species are likely dependent on the American River.	25-50	Bank Swallow Valley Elderberry Longhorned Beetle	Flat	Flat	N - CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Emergent, Persistent, Seasonally Flooded, Palustrine, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow	Juglans hindsii and hybrids*	No Cal Black Walnut	Salix gooddingii	Goodding's Willow	Acer negundo	Box-elder	Alnus rhombifolia	White Alder	Salix lasiolepis	Arroyo Willow	Sambucus nigra	Common Elderberry

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
9	5	34	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Quercus lobata requires a DTW of 24.31 ft[1]. The polygon for Quercus lobata is at the 30 ft DTW contour. All other species present have root depths that are shallow[1] and therefore not dependent on groundwater at this location. Species are likely dependent on the American River.	30-50	none	Flat	Flat	N - CASGEM Well 48012 (SGA_MW04, 09N05E34) avg DTW = 35 (69 points; 2007-2020)	Palustrine, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Juglans hindsii and hybrids*	No Cal Black Walnut	Quercus lobata	Valley Oak	Acer negundo	Box-elder	Populus fremontii	Fremont Cottonwood								
9	5	35	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	35-70	none	Flat	Flat	N - CASGEM Well 48021 (MW12A, 09N05E35) avg DTW = 62 (27 points, 2010-2020	none																
9	5	36	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	40-80	none	Flat	Flat	N - CASGEM Well 48021 (MW12A, 09N05E35) avg DTW = 62 (27 points, 2010-2020	none																
9	6	1	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	95-110	none			no representative hydrographs within contour interval	none																
9	6	2	North Ridge Country Club	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	105-120	none	Flat	Flat	N - CASGEM Well 48029 (Well N28, 09N06E03C001M) avg DTW = 134 (43 points, 2011-2020)	none																
9	6	3	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	110-130	none	Flat	Flat	N - CASGEM Well 48029 (Well N28, 09N06E03C001M) avg DTW = 134 (43 points, 2011-2020)	none																
9	6	4	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	120-140	none	Flat	N	N - CASGEM Well 48013 (SGA_MW-5, 09N06E05) avg DTW = 144 (29 points; 2009-2020)	none	Populus fremontii	Fremont Cottonwood														
9	6	5	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	130-150	none	Flat	N	N - CASGEM Well 48013 (SGA_MW-5, 09N06E05) avg DTW = 144 (29 points; 2009-2020)	none																
9	6	6	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	130-150	none	Flat	N	N - CASGEM Well 48013 (SGA_MW-5, 09N06E05) avg DTW = 144 (29 points; 2009-2020)	none																
9	6	7	Arcade Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	120-130	none	Flat	N	N - CASGEM Well 48013 (SGA_MW-5, 09N06E05) avg DTW = 144 (29 points; 2009-2020)	none	Quercus lobata	Valley Oak														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
9	6	8	Arcade Ck - American River College	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	110-130	none	Flat	N	N - CASGEM Well 48013 (SGA_MW-5, 09N06E05) avg DTW = 144 (29 points; 2009-2020)	none	Quercus lobata	Valley Oak														
9	6	9	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	105-125	none			no representative hydrographs within contour interval	none																
9	6	10	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	100-120	none			no representative hydrographs within contour interval	none																
9	6	11	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-110	none			no representative hydrographs within contour interval	none																
9	6	12	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	no GDEs	85-100	none			no representative hydrographs within contour interval	none																
9	6	13	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-90	none			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												
9	6	14	American River	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	75-85	Bank Swallow			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix lasiolepis	Arroyo Willow	Salix exigua	Narrowleaf Willow	Acer negundo	Box-elder						
9	6	15	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	80-100	none			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak														
9	6	16	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	85-110	none			no representative hydrographs within contour interval	none																
9	6	17	Chicken Ranch Slough	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	95-115	none	Flat	Y	N - CASGEM Well 48017 (Well 10, 09N05E13L002M) avg DTW = 106 (47 points; 2010-2020)	none	Quercus lobata	Valley Oak														
9	6	18	Arcade Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	100-120	none	Flat	Y	N - CASGEM Well 48017 (Well 10, 09N05E13L002M) avg DTW = 106 (47 points; 2010-2020)	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
9	6	19	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-105	none	Flat	Y	N - CASGEM Well 48017 (Well 10, 09N05E13L002M) avg DTW = 106 (47 points; 2010-2020)	none	Quercus lobata	Valley Oak														
9	6	20	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	75-100	none	N	Flat	N - CASGEM Well 9641 (DWR_SGA_004, 09N05E25J001M) avg DTW = 95 (213 points, 2000-2021)	none	Quercus lobata	Valley Oak														
9	6	21	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	No GDEs	65-100	none	N	Flat	N - CASGEM Well 9641 (DWR_SGA_004, 09N05E25J001M) avg DTW = 95 (213 points, 2000-2021)	none	Quercus lobata	Valley Oak														
9	6	22	American River	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	60-80	Swainson's Hawk			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Heterotheca oregona*	Oregon Goldenaster	Acer negundo	Box-elder	Juglans hindsii and hybrids*	No California Black Walnut								
9	6	23	American River	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	70-80	Valley Elderberry Longhorn Beetle, Bank Swallow			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Heterotheca oregona*	Oregon Goldenaster	Salix exigua	Narrowleaf Willow								
9	6	24	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70	none			no representative hydrographs within contour interval	Palustrine, Forested, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Acer negundo	Box-elder												
9	6	27	American River	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	55-65	Valley Elderberry Longhorned Beetle	Flat	N	N - CASGEM Well 9649 (SCGA #24, 09N06E33R001M) avg DTW = 51 (29 points; 2000-2020) N - CASGEM Well 48014 (SGA MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Quercus lobata	Valley Oak	Heterotheca oregona*	Oregon Goldenaster	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow								
9	6	28	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	55-70	none	Flat	N	N - CASGEM Well 9649 (SCGA #24, 09N06E33R001M) avg DTW = 51 (29 points; 2000-2020) N - CASGEM Well 48014 (SGA MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Heterotheca oregona*	Oregon Goldenaster	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Alnus rhombifolia	White Alder	Salix gooddingii	Goodding's willow						
9	6	29	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	55-85	none	N	Flat	N - CASGEM Well 9641 (DWR_SGA_004, 09N05E25J001M) avg DTW = 95 (213 points, 2000-2021)	none																

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
9	6	30	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	75-95	none	N	Flat	N - CASGEM Well 9641 (DWR_SGA_004, 09N05E25J001M) avg DTW = 95 (213 points, 2000-2021)	none															
9	6	31	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	40-80	none	Flat	Flat	N - CASGEM Well 48021 (MW12A, 09N05E35) avg DTW = 62 (27 points, 2010-2020	none															
9	6	32	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	40-60	none			no representative hydrographs within contour interval	none															
9	6	33	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	45-55	none	Flat	N	N - CASGEM Well 9649 (SCGA #24, 09N06E33R001M) avg DTW = 51 (29 points; 2000-2020) N - CASGEM Well 48014 (SGA MW06, 08N06E05) avg DTW = 40 (72 points; 2007-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow	Quercus lobata	Valley Oak	Acer negundo	Box-elder	Alnus rhombifolia	White Alder						
9	7	3	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Quercus lobata is located where DTW is greater than 30 ft (50 ft)[1]. Populus fremontii has a maximum rooting depth of 16.4[1]. Salix gooddingii and Salix exigua (using rooting depth for S. gooddingii of 6.89 ft) requires surface water and elevated water table[1].	30-50	none			no representative hydrographs within contour interval	Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow										
9	7	4	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	50-100	none			no representative hydrographs within contour interval	none															
9	7	5	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	75-105	none			no representative hydrographs within contour interval	none															
9	7	6	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-105	none			no representative hydrographs within contour interval	none															
9	7	7	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	75-95	none			no representative hydrographs within contour interval	none															
9	7	8	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	60-90	none			no representative hydrographs within contour interval	none															
9	7	9	American River/Folsom Lake Rec Area	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting	Can be eliminated as DTW is greater than 30 ft	40-50	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	Palustrine, Forested, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Schoenoplectus acutus*	Hardstem Bullrush	Salix gooddingii	Goodding's Willow							

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
						depths less than DTW																							
9	7	10	American River/Folsom Lake Rec Area	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation Species has rooting depth less than DTW	Populus fremontii has a maximum rooting depth of 16.4[1].	25-45	none			no representative hydrographs within contour interval	Palustrine, Scrub-Shrub, Seasonally Flooded	Populus fremontii	Fremont Cottonwood															
9	7	15	Alder Creek Development	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation w/in NASb boundary	No GDEs within NASb boundary	30	none			no representative hydrographs within contour interval	none																	
9	7	16	American River	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	40-50	Valley Elderberry Longhorn Beetle			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak													
9	7	17	American River/Sailor Bar	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	55-70	Vernal Pool Fairy Shrimp, Valley Elderberry Longhorn Beetle			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Juglans hindsii and hybrids*	Northern Cal Black Walnut	Alnus rhombifolia	White Alder								
9	7	18	American River Parkway	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-80	none			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak													
10	3	1	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	10-20	Valley Elderberry Longhorn Beetle	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak															

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	3	12	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	10-20	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												
10	3	13	Sacramento River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Giant garter snake Swainson's Hawk	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow										
10	3	23	Teal Bend Golf Course	1	Not likely	Vegetation species location on golf course likely supported by irrigation. Critical Species may be present Lack of diverse vegetation	Teal Bend GC was built in 1997. The current growth pattern of Q. lobata and P. fremontii do not follow the pattern of same species in the area. Vegetation on the golf course is likely supported by artificial irrigation. Aerial photos from 1993 show that the area was used for agriculture.	0-10	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Palustrine, Unconsolidated Bottom, Permanently Flooded, Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												
10	3	24	Teal Bend Golf Course/Sac International Airport	1	Not likely	Vegetation species location on golf course likely supported by irrigation. No Critical Species Lack of diverse vegetation	Teal Bend GC was built in 1997. The current growth pattern of Q. lobata and P. fremontii do not follow the pattern of same species in the area. Vegetation on the golf course is likely supported by artificial irrigation. Aerial photos from 1993 show that the area was used for agriculture.	0-10	none	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Palustrine, Scrub-Shrub, Seasonally Flooded, Palustrine, Aquatic Bed, Permanently Flooded	Quercus lobata	Valley Oak												
10	3	25	Teal Bend Golf Course/Sac International Airport	1	Not likely	Vegetation species location on golf course likely supported by irrigation. Critical Species may be present Lack of diverse vegetation	Teal Bend GC was built in 1997. The current growth pattern of Q. lobata and P. fremontii do not follow the pattern of same species in the area. Vegetation on the golf course is likely supported by artificial irrigation. Aerial photos from 1993 show that the area was used for agriculture.	0-10	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Palustrine, Scrub-Shrub, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak	Salix exigua	Narrowleaf Willow												
10	3	26	Teal Bend Golf Course/Sacramento River	1	Not likely	Vegetation species location on golf course likely supported by irrigation. No Critical Species Lack of diverse vegetation	Teal Bend GC was built in 1997. The current growth pattern of Q. lobata and P. fremontii do not follow the pattern of same species in the area. Vegetation on the golf course is likely supported by artificial	0-10	none	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Platanus racemosa	California Sycamore												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
							irrigation. Aerial photos from 1993 show that the area was used for agriculture.																					
10	3	27	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												
10	3	34	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												
10	3	35	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Platanus racemosa	California Sycamore												
10	3	36	Sacramento International Airport	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	<10	none	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004M) avg DTW =9 (162 points; 2000-2020)	none																
10	4	1	Steelhead Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	30-45	Swainson's Hawk	N	N	N - CASGEM Well 50874 (L-5, 10N04E01) avg DTW = 58 (87 points, 2014-2021)	none																
10	4	2	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	15-30	Giant Gartersnake			no representative hydrographs within contour interval	none																
10	4	3	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15	none	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	none																
10	4	4	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	none																
10	4	5	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	none																

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	4	6	Unnamed drainage	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	1952 Aerial photo shows little native vegetation, ag land predominates. 1981 Aerial photo shows area was a mobile home park surrounded by farm land. Quercus are also located along what appears to be an artificial drainage associated with nearby ag	0-10	none	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	none	Quercus lobata	Valley Oak																
10	4	7	Unnamed drainage	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Populus fremontii has a maximum rooting depth of 16.4[1]. Typha angustifolia habitat is marshy with shallow surface water[2]. Species are located adjacent to a canal and are likely supported by surface water.	10-20	Giant garter snake	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood														
10	4	8	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	none																
10	4	9	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	10	none	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	none																
10	4	10	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 32580 (SCWA_SGA_006, 10N04E23A001M) avg DTW = 6 (42 points, 2000-2020)	none																
10	4	11	Aquaculture (Sterling Caviar)/Natomas Basin Preserve	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Species have shallow rooting depth and are located on and adjacent to aquiculture facility and are likely dependent on artificial surface water sources.	10-20	Giant garter snake	Flat	Flat	Y - CASGEM Well 32580 (SCWA_SGA_006, 10N04E23A001M) avg DTW = 6 (42 points, 2000-2020)	Palustrine, Unconsolidated Shore, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Schoenoplectus acutus*	Hardstem Bullrush												
10	4	12	Aquaculture (Sterling Caviar)/Natomas Basin Preserve	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Species have shallow rooting depth and are located on and adjacent to aquiculture facility and are likely dependent on artificial surface water sources.	20-40	Tri-Colored Blackbird	Flat	Flat	Y - CASGEM Well 15688 (SCWA_SGA_007, 10N04E24B001M) avg DTW = 18 (35 points, 2000-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Schoenoplectus acutus*	Hardstem Bullrush														
10	4	13	Steelhead Ck	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-30	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 15688 (SCWA_SGA_007, 10N04E24B001M) avg DTW = 18 (35 points, 2000-2020)	none																
10	4	14	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	10	none	Flat	Flat	Y - CASGEM Well 32580 (SCWA_SGA_006, 10N04E23A001M) avg DTW = 6 (42 points, 2000-2020)	none																

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	4	15	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 32580 (SCWA_SGA_006, 10N04E23A001M) avg DTW = 6 (42 points, 2000-2020)	none														
10	4	16	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	10	none	Flat	Flat	Y - CASGEM Well 32580 (SCWA_SGA_006, 10N04E23A001M) avg DTW = 6 (42 points, 2000-2020)	none														
10	4	17	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	none														
10	4	18	Unnamed drainage	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Giant garter snake	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak							
10	4	19	Sacramento International Airport	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	No GDEs	<10	Giant garter snake	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix exigua	Narrowleaf Willow												
10	4	20	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant garter snake	Flat	Flat	Y - CASGEM Well 32580 (SCWA_SGA_006, 10N04E23A001M) avg DTW = 6 (42 points, 2000-2020)	none														
10	4	21	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant garter snake	Flat	Flat	Y - CASGEM Well 32580 (SCWA_SGA_006, 10N04E23A001M) avg DTW = 6 (42 points, 2000-2020)	none														
10	4	22	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant garter snake	Flat	Flat	Y - CASGEM Well 32580 (SCWA_SGA_006, 10N04E23A001M) avg DTW = 6 (42 points, 2000-2020)	none														
10	4	23	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant garter snake	Flat	Flat	Y - CASGEM Well 32580 (SCWA_SGA_006, 10N04E23A001M) avg DTW = 6 (42 points, 2000-2020)	none														
10	4	24	Steelhead Ck	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-30	Giant garter snake	Flat	Flat	Y - CASGEM Well 15688 (SCWA_SGA_007, 10N04E24B001M) avg DTW = 18 (35 points, 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
10	4	25	Steelhead Ck	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15-35	none	Flat	Flat	Y - CASGEM Well 15688 (SCWA_SGA_007, 10N04E24B001M) avg DTW = 18 (35 points, 2000-2020)	Palustrine, Emergent, Persistent, Semipermanently Flooded														
10	4	26	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-25	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 15690 (AB-3 shallow, 10N04E27R004M) avg DTW =17 (164 points; 2000-2020)	none														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	4	27	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 15690 (AB-3 shallow, 10N04E27R004 M) avg DTW =17 (164 points; 2000-2020)	none																
10	4	28	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 15690 (AB-3 shallow, 10N04E27R004 M) avg DTW =17 (164 points; 2000-2020)	none																
10	4	29	East of Sacramento International Airport	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004 M) avg DTW =9 (162 points; 2000-2020)	none																
10	4	30	Sacramento International Airport	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	<10	none	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004 M) avg DTW =9 (162 points; 2000-2020)	none																
10	4	31	Sacramento International Airport	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	<10	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004 M) avg DTW =9 (162 points; 2000-2020)	Palustrine, Unconsolidated Shore, Seasonally Flooded																
10	4	32	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 24318 (AB-4 shallow, 10N04E31M004 M) avg DTW =9 (162 points; 2000-2020)	none																
10	4	33	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 15690 (AB-3 shallow, 10N04E27R004 M) avg DTW =17 (164 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	4	34	Residential/Commercial	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDE's	15-25	none	Flat	Flat	Y - CASGEM Well 15690 (AB-3 shallow, 10N04E27R004 M) avg DTW =17 (164 points; 2000-2020)	none																
10	4	35	Residential/Commercial	2	Less likely	DTW < 30 ft Critical Species likely extirpated Lack of diverse vegetation	Populus fremontii has a maximum rooting depth of 16.4 ft[1].	20-30	Giant Gartersnake (possibly extirpated) - area has been developed	Flat	Flat	Y - CASGEM Well 15690 (AB-3 shallow, 10N04E27R004 M) avg DTW =17 (164 points; 2000-2020)	none	Populus fremontii	Fremont Cottonwood														
10	4	36	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	25-30	Giant garter snake Swainson's Hawk	Flat	Flat	Y - CASGEM Well 8921 (SCWA_SGA_001, 09N04E01R001 M) avg DTW = 29 (34 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	5	1	Curry Ck	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	115-130	none	N	N	N - CASGEM Well 48573 (SVMW West - 1A, 11N05E35) avg DTW = 111 (85 points, 2011-2021	none																
10	5	2	Curry Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation		105-115	none	N	N	N - CASGEM Well 48573 (SVMW West - 1A, 11N05E35) avg DTW = 111 (85 points, 2011-2021	Palustrine, Emergent, Persistent, Seasonally Flooded	Schoenoplectus acutus	Hardstem Bullrush														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	5	3	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	95-105	none	N	N	N - CASGEM Well 48573 (SVMW West - 1A, 11N05E35) avg DTW = 111 (85 points, 2011-2021	none														
10	5	4	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	80-90	none			no representative hydrographs within contour interval	none														
10	5	5	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	70-80	none	Flat	Flat	N - CASGEM Well 48009 (SGA_MW01, 10N05E17) avg DTW = 62 (19 points, 2011-2021)	none														
10	5	6	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	45-60	none	Flat	Flat	N - CASGEM Well 48009 (SGA_MW01, 10N05E17) avg DTW = 62 (19 points, 2011-2021)	none														
10	5	7	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	40-60	Swainson's Hawk	Flat	Flat	N - CASGEM Well 48009 (SGA_MW01, 10N05E17) avg DTW = 62 (19 points, 2011-2021)	none														
10	5	8	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	70-80	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 48009 (SGA_MW01, 10N05E17) avg DTW = 62 (19 points, 2011-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded														
10	5	9	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	80-90	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded														
10	5	10	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-100	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded														
10	5	11	Dry Creek	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	110-120	Swainson's Hawk	N	Flat	N - CASGEM Well 48043 (Lone Oak Park, 10N05E13F001M) avg DTW = 122 (30 points, 2011-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak												
10	5	12	Dry Creek	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	115-130	none	N	Flat	N - CASGEM Well 48043 (Lone Oak Park, 10N05E13F001M) avg DTW = 122 (30 points, 2011-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak												
10	5	13	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	125-140	none	N	Flat	N - CASGEM Well 48043 (Lone Oak Park, 10N05E13F001M) avg DTW = 122 (30 points, 2011-2020)	none														
10	5	14	Antelope Greens Golf Course/Gibson Ranch County Park	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	100-110	none	Flat	Flat	N - CASGEM Well 13654 (SCWA_SGA_009, 10N05E26B002M) avg DTW = 107 (40 points, 2000-2021)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	5	15	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	90-100	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 13654 (SCWA_SGA_009, 10N05E26B002 M) avg DTW = 107 (40 points, 2000-2021)	none																
10	5	16	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	80-90	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	5	17	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	60-80	none	Flat	Flat	N - CASGEM Well 48009 (SGA_MW01, 10N05E17) avg DTW = 62 (19 points, 2011-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	5	18	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	35-65	none	Flat	Flat	N - CASGEM Well 48009 (SGA_MW01, 10N05E17) avg DTW = 62 (19 points, 2011-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	5	19	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	30-55	Vernal Pool Fairy Shrimp	Flat	N/Flat	N - CASGEM Well 48010 (SGA_MW02, 10N05E32) avg DTW = 64 (35 points, 2011-2020 Y - CASGEM Well 15688 (SCWA_SGA_007, 10N04E24B001 M) avg DTW = 18 (35 points, 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	5	20	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	55-75	none	Flat	N	N - CASGEM Well 48010 (SGA_MW02, 10N05E32) avg DTW = 64 (35 points, 2011-2020	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	5	21	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	75-90	none			no representative hydrographs within contour interval	none																
10	5	22	Dry Creek	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-100	none	Flat	Flat	N - CASGEM Well 13654 (SCWA_SGA_009, 10N05E26B002 M) avg DTW = 107 (40 points, 2000-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Populus Fremontii	Fremont Cottonwood												
10	5	23	Cherry Island Golf Course/Soccer Complex	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	100-115	none	Flat	Flat	N - CASGEM Well 13654 (SCWA_SGA_009, 10N05E26B002 M) avg DTW = 107 (40 points, 2000-2021)	Palustrine, Scrub-Shrub, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Acer negundo	Box-elder												
10	5	24	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	120-155	none	Flat	Flat	N - CASGEM Well 13654 (SCWA_SGA_009, 10N05E26B002 M) avg DTW = 107 (40 points, 2000-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Persicaria lapathifolia*	Curly-topped knotweed												
10	5	25	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	130-160	none	N	N	N - CASGEM Well 48026 (Well 15, 09N06E06A001 M) avg DTW = 119 (23 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	5	26	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	100-130	none	Flat	Flat	N - CASGEM Well 13654 (SCWA_SGA_009, 10N05E26B002 M) avg DTW = 107 (40 points, 2000-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded																

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	5	27	Dry Creek Parkway	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-100	none	Flat	Flat	N - CASGEM Well 13654 (SCWA_SGA_009, 10N05E26B002 M) avg DTW = 107 (40 points, 2000-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow												
10	5	28	Dry Creek	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-80	none	Flat	Flat	N - CASGEM Well 13654 (SCWA_SGA_009, 10N05E26B002 M) avg DTW = 107 (40 points, 2000-2021)	Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak														
10	5	29	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	55-70	none	Flat	Flat	N - CASGEM Well 48011 (SGA_MW03, 10N05E32) avg DTW = 70 (35 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	5	30	East of Steelhead Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	30-40	none	Flat	Flat	Y - CASGEM Well 8921 (SCWA_SGA_001, 09N04E01R001 M) avg DTW = 29 (34 points; 2000-2020)	Palustrine, Scrub-Shrub, Semipermanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Semipermanently Flooded	Persicaria lapathifolia*	Curlytop Knotweed														
10	5	31	East of Steelhead Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Populus fremontii has a maximum rooting depth of 16.4[1]. DTW is greater than 30 ft. Species is likely dependent on surface water from Steelhead Ck., not groundwater.	30-40	Vernal Pool Fairy Shrimp	Flat	Flat	Y - CASGEM Well 8921 (SCWA_SGA_001, 09N04E01R001 M) avg DTW = 29 (34 points; 2000-2020)	none	Populus fremontii	Fremont Cottonwood														
10	5	32	Dry Creek Parkway	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	60-70	Swainson's Hawk	Flat	Flat	N - CASGEM Well 48011 (SGA_MW03, 10N05E32) avg DTW = 70 (35 points, 2011-2020)	Palustrine, Forested, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak														
10	5	33	Central Park/Central Park Horse Area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-90	none	Flat	Flat	N - CASGEM Well 48011 (SGA_MW03, 10N05E32) avg DTW = 70 (35 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak														
10	5	34	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-110	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	5	35	McClellan AFB	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	110-120	none	N	N	N - CASGEM Well 48026 (Well 15, 09N06E06A001 M) avg DTW = 119 (23 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood														
10	5	36	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	130-160	none	N	N	N - CASGEM Well 48026 (Well 15, 09N06E06A001 M) avg DTW = 119 (23 points, 2011-2020)	none																
10	6	1	Dry Ck	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation Species has rooting depth less than DTW	Populus fremontii has a maximum rooting depth of 16.4[1].	20-35	none	Flat	Flat	Y - CASGEM Well 51287 (WPMW-10A, 10N06E01) avg DTW = 14 (69 points; 2015-2020) Y - CASGEM Well 51286 (WPMW-9A, 10N06E01) avg DTW = 13 (69 points; 2015-2020)	none	Populus fremontii	Fremont Cottonwood														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	6	2	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Populus fremontii has a maximum rooting depth of 16.4[1].	30-65	none			no representative hydrographs within contour interval	none	Populus fremontii	Fremont Cottonwood												
10	6	3	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	65-105	none			no representative hydrographs within contour interval	none														
10	6	4	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	110-140	none	N	N	N - CASGEM Well 13659 (10N06E05H001M) avg DTW = 148 (229 points, 2000-2020)	none														
10	6	5	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	140	none	N	N	N - CASGEM Well 13659 (10N06E05H001M) avg DTW = 148 (229 points, 2000-2020)	none														
10	6	6	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	130-140	none	N	Flat	N - CASGEM Well 48043 (Lone Oak Park, 10N05E13F001M) avg DTW = 122 (30 points, 2011-2020)	none														
10	6	7	Lower Dry Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	130-145	none	N	Flat	N - CASGEM Well 48043 (Lone Oak Park, 10N05E13F001M) avg DTW = 122 (30 points, 2011-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak												
10	6	8	Lower Dry Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	140-150	none	N	N	N - CASGEM Well 48038 (Antelope North (A), 10N06E16) avg DTW = 147 (23 points; 2011-2020) N - CASGEM Well 13659 (10N06E05H001M) avg DTW = 148 (229 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak												
10	6	9	Lower Dry Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	110-140	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 48038 (Antelope North (A), 10N06E16) avg DTW = 147 (23 points; 2011-2020) N - CASGEM Well 13659 (10N06E05H001M) avg DTW = 148 (229 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Juglans hindsii and hybrids*	No California Black Walnut	Salix lasiolepis	Arroyo Willow	Populus fremontii	Fremont Cottonwood						
10	6	10	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-120	none	N	N	N - CASGEM Well 48038 (Antelope North (A), 10N06E16) avg DTW = 147 (23 points; 2011-2020) N - CASGEM Well 13659 (10N06E05H001M) avg DTW = 148 (229 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	6	11	Cirby Ck/Dry Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	40-80	none	Flat	Flat	Y - CASGEM Well 51287 (WPMW-10A, 10N06E01) avg DTW = 14 (69 points; 2015-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Fraxinus latifolia*	Oregon Ash										
10	6	12	Cirby Ck/Linda Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	30-60	none	Flat	Flat	Y - CASGEM Well 51287 (WPMW-10A, 10N06E01) avg DTW = 14 (69 points; 2015-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak														
10	6	13	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	60-85	none			no representative hydrographs within contour interval	none	Quercus lobata	Valley Oak														
10	6	14	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	65-105	none			no representative hydrographs within contour interval	none																
10	6	15	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-130	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded																
10	6	16	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	120-160	none	N	N	N - CASGEM Well 48038 (Antelope North (A), 10N06E16) avg DTW = 147 (23 points, 2011-2020)	none																
10	6	17	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	150-170	none	N	N	N - CASGEM Well 48038 (Antelope North (A), 10N06E16) avg DTW = 147 (23 points, 2011-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded																
10	6	18	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	130-165	none			no representative hydrographs within contour interval	none																
10	6	19	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	145-185	none	N	N	N - CASGEM Well 33087 (SCWA_SGA_010, 10N06E21F002M) avg DTW = 174 (36 points, 2000-2021)	none																

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	6	20	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	165-185	none	N	N	N - CASGEM Well 48030 (Monument A, 10N06E20) avg DTW = 195 (19 points, 2011-2020)	none																
10	6	21	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	135-170	none	N	N	N - CASGEM Well 33087 (SCWA_SGA_010, 10N06E21F002M) avg DTW = 174 (36 points, 2000-2021)	none																
10	6	22	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	105-140	none	N	N	N - CASGEM Well 48042 (Twin Creeks Park, 10N06E27F001M) avg DTW = 133 (25 points, 2011-2020)	Palustrine, Forested, Seasonally Flooded																
10	6	23	Cripple Ck	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-115	none	N	N	N - CASGEM Well 48042 (Twin Creeks Park, 10N06E27F001M) avg DTW = 133 (25 points, 2011-2020)	Palustrine, Forested, Seasonally Flooded																
10	6	24	Madera Park	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	80-90	none	Flat	Flat	N - CASGEM Well 13803 (SGWA_SGA_11, 10N07E20) avg DTW = 117 (19 points, 2011-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak														
10	6	25	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	No GDEs	105-125	none	Flat	Flat	N - CASGEM Well 48015 (SGA_MW08, 10N07E21) avg DTW = 106 (19 points, 2011-2020)	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	6	26	Arcade Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	110-120	none	N	N	N - CASGEM Well 48042 (Twin Creeks Park, 10N06E27F001M) avg DTW = 133 (25 points, 2011-2020)	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak														
10	6	27	Cripple Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	120-140	none	N	N	N - CASGEM Well 48042 (Twin Creeks Park, 10N06E27F001M) avg DTW = 133 (25 points, 2011-2020)	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak														
10	6	28	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	140-170	none	N	N	N - CASGEM Well 48042 (Twin Creeks Park, 10N06E27F001M) avg DTW = 133 (25 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak														
10	6	29	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	170-180	none	N	N	N - CASGEM Well 48030 (Monument A, 10N06E20) avg DTW = 195 (19 points, 2011-2020)	none																
10	6	30	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	160-180	none	N	N	N - CASGEM Well 48030 (Monument A, 10N06E20) avg DTW = 195 (19 points, 2011-2020)	none																
10	6	31	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	150-175	none	N	N	N - CASGEM Well 48026 (Well 15, 09N06E06A001M) avg DTW = 119 (23 points, 2011-2020)	none																
10	6	32	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	145-175	none	Flat	N	N - CASGEM Well 48013 (SGA_MW-5, 09N06E05) avg DTW = 144 (29 points; 2009-2020)	none																
10	6	33	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	135-160	none	Flat	Flat	N - CASGEM Well 48029 (Well N28, 09N06E03C001M) avg DTW = 134 (43 points, 2011-2020)	none	Quercus lobata	Valley Oak														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	6	34	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	125-140	none	Flat	Flat	N - CASGEM Well 48029 (Well N28, 09N06E03C001M) avg DTW = 134 (43 points, 2011-2020)	none	Quercus lobata	Valley Oak												
10	6	35	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	115-125	none	Flat	Flat	N - CASGEM Well 48029 (Well N28, 09N06E03C001M) avg DTW = 134 (43 points, 2011-2020)	none	Quercus lobata	Valley Oak												
10	6	36	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	110	none	N	N	N - CASGEM Well 48042 (Twin Creeks Park, 10N06E27F001M) avg DTW = 133 (25 points, 2011-2020)	none	Quercus lobata	Valley Oak												
10	7	4	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	30-50	none	N	N	Y - CASGEM Well 51283 (WPMW-7A, 10N07E05) avg DTW = 21 (69 points; 2015-2020) Y - CASGEM Well 51284 (WPMW-8A, 10N07E05) avg DTW = 29 (69 points; 2015-2020)	none														
10	7	5	Miner's Ravine	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation Species has rooting depth less than DTW	Salix exigua has shallow rooting depth and generally occurs near surface water	20-30	none	N	N	Y - CASGEM Well 51283 (WPMW-7A, 10N07E05) avg DTW = 21 (69 points; 2015-2020) Y - CASGEM Well 51284 (WPMW-8A, 10N07E05) avg DTW = 29 (69 points; 2015-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Salix exigua	Narrowleaf Willow												
10	7	6	Residential/Commercial	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	20-30	none	N	N	Y - CASGEM Well 51283 (WPMW-7A, 10N07E05) avg DTW = 21 (69 points; 2015-2020) Y - CASGEM Well 51284 (WPMW-8A, 10N07E05) avg DTW = 29 (69 points; 2015-2020)	none														
10	7	7	Linda Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	40-60	none	N	N	no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak												
10	7	8	Strap Ravine/Maidu Regional Park	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	40-60	none	Y/N	Y/N	no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail	Quercus lobata	Valley Oak	Schoenoplectus acutus*	Hardstem Bullrush						

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	7	9	Strap Ravine	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	55-65	Valley Elderberry Longhorn Beetle Tricolored Blackbird	Y/N	Y/N	no representative hydrographs within contour interval	Palustrine, Unconsolidated Bottom, Semipermanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow										
10	7	10	Strap Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	50-60	none	Y/N	Y/N	no representative hydrographs within contour interval	none	Populus fremontii	Fremont Cottonwood														
10	7	15	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	75-100	Valley Elderberry Longhorn Beetle	Flat	Flat	N - CASGEM Well 13803 (SGWA_SGA_11, 10N07E20) avg DTW = 117 (19 points, 2011-2020)	none																
10	7	16	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	70-90	none	Flat	Flat	N - CASGEM Well 13803 (SGWA_SGA_11, 10N07E20) avg DTW = 117 (19 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood	Salix lasiolepis	Arroyo Willow										
10	7	17	Linda Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	60-90	none	Flat	Flat	N - CASGEM Well 13803 (SGWA_SGA_11, 10N07E20) avg DTW = 117 (19 points, 2011-2020)	Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak														
10	7	18	Cripple Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	55-85	none	Flat	Flat	N - CASGEM Well 13803 (SGWA_SGA_11, 10N07E20) avg DTW = 117 (19 points, 2011-2020)	none	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	7	19	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	85-105	none	Flat	Flat	N - CASGEM Well 13803 (SGWA_SGA_11, 10N07E20) avg DTW = 117 (19 points, 2011-2020)	none	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
10	7	20	Linda Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-110	none	Flat	Flat	N - CASGEM Well 13803 (SGWA_SGA_11, 10N07E20) avg DTW = 117 (19 points, 2011-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
10	7	21	Linda Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-110	none	Flat	Flat	N - CASGEM Well 33380 (SCWA_SGA_012, 10N07E29G001M) avg DTW = 109 (39 points, 2000-2020) N - CASGEM Well 48015 (SGA_MW08, 10N07E21) avg DTW = 106 (19 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak										
10	7	22	Bud and Artie Davis Park	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	Can be eliminated as DTW is greater than 30 ft	85-100	none	Flat	Flat	N - CASGEM Well 48015 (SGA_MW08, 10N07E21) avg DTW = 106 (19 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
10	7	23	Adjacent to Folsom Lk	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	75-80	none			no representative hydrographs within contour interval	none														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	7	26	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	50-70	none			no representative hydrographs within contour interval	none														
10	7	27	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	80-100	none	Flat/Y	Flat	N - CASGEM Well 48015 (SGA_MW08, 10N07E21) avg DTW = 106 (19 points, 2011-2020) N - CASGEM Well 48016 (SGA_MW09, 10N07E28) avg DTW = 115 (35 points; 2011-2020)	Palustrine, Forested, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Populus fremontii	Fremont Cottonwood										
10	7	28	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	100-120	none	Flat/Y	Flat	N - CASGEM Well 48015 (SGA_MW08, 10N07E21) avg DTW = 106 (19 points, 2011-2020) N - CASGEM Well 48016 (SGA_MW09, 10N07E28) avg DTW = 115 (35 points; 2011-2020)	Palustrine, Scrub-Shrub, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak	Salix exigua	Narrowleaf Willow	Populus Fremontii	Fremont Cottonwood						
10	7	29	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation		110-120	none	Flat	Flat	N - CASGEM Well 33380 (SCWA_SGA_012, 10N07E29G001M) avg DTW = 109 (39 points, 2000-2020) N - CASGEM Well 48015 (SGA_MW08, 10N07E21) avg DTW = 106 (19 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak										
10	7	30	Arcade Ck	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	105-115	none	Flat	Flat	N - CASGEM Well 33380 (SCWA_SGA_012, 10N07E29G001M) avg DTW = 109 (39 points, 2000-2020) N - CASGEM Well 48015 (SGA_MW08, 10N07E21) avg DTW = 106 (19 points, 2011-2020)	Palustrine, Forested, Seasonally Flooded												
10	7	31	Sunrise Golf Course/Tempo Park	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	110	none	Flat	Flat	N - CASGEM Well 33380 (SCWA_SGA_012, 10N07E29) avg DTW = 109 (41 points, 2000-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
10	7	32	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-120	none	Flat	Flat	N - CASGEM Well 33380 (SCWA_SGA_012, 10N07E29) avg DTW = 109 (41 points, 2000-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded																		
10	7	33	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	75-120	none	Flat/Y	Flat	N - CASGEM Well 48015 (SGA_MW08, 10N07E21) avg DTW = 106 (19 points, 2011-2020) N - CASGEM Well 48016 (SGA_MW09, 10N07E28) avg DTW = 115 (35 points; 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																		
10	7	34	American River/Negro Bar	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	50-60	none			no representative hydrographs within contour interval	none	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood														
10	7	35	American River	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	40-60	none			no representative hydrographs within contour interval	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak	Alnus rhombifolia	White Alder	Populus Fremontii	Fremont Cottonwood												
11	3	1	Main Canal	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0	Giant Gartersnake	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded, California Warm Temperate Marsh/Seep																		
11	3	2	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0	Giant Gartersnake	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	none																		

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	3	3	Sacramento River	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0	none	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak														
11	3	4	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0	Giant Gartersnake	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak														
11	3	9	Feather River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat/N	N*/N	Y - CASGEM Well 12777 (11N03E15C001M) avg DTW = 15 (135 points, 2000-2017) Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (61 points; 2012-2021)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Unconsolidated Bottom, Permanently Flooded	Platanus racemosa	California Sycamore	Salix Gooding	Goodding's Willow	Quercus lobata	Valley Oak										
11	3	10	Feather River	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Flat	N*/N	Y - CASGEM Well 12777 (11N03E15C001M) avg DTW = 15 (135 points, 2000-2017) Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (61 points; 2012-2021)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus Fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
11	3	11	Unspecified area	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation		<10	none	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	none	Salix exigua	Narrowleaf Cattail														
11	3	12	Main Canal	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Giant garter snake	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	none	Typha angustifolia*	Narrowleaf Cattail														
11	3	13	Cross Canal	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	none	Salix gooddingii	Goodding's Willow														
11	3	14	Main Canal and adjacent undisturbed area	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	none	Quercus lobata	Valley Oak														
11	3	15	Feather River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Populus Fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	3	22	Feather River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Bank Swallow Swainson's Hawk Tri-Colored Blackbird Valley Elderberry Longhorned Beetle	Flat	N*	Y - CASGEM Well 12777 (11N03E15C001M) avg DTW = 15 (135 points, 2000-2017)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus Fremontii	Fremont Cottonwood														
11	3	23	Feather River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Populus fremontii has a maximum rooting depth of 16.4 ft and Salix gooddingii has a maximum rooting depth of 6.89[1]. Location of species in on the riparian corridor. Quercus is pre-dominantly located along the Cross Canal and the Main Canal. Salix gooddingii is located an area that appears to be undisturbed as it remains the same in 2020 as aerial photos indicate in 1952	10-20	Swainson's Hawk	Flat	N*	Y - CASGEM Well 12777 (11N03E15C001M) avg DTW = 15 (135 points, 2000-2017)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Unconsolidated Shore, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded	Populus Fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow										
11	3	24	Cross Canal	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	5-15	none	Flat	N*	Y - CASGEM Well 12777 (11N03E15C001M) avg DTW = 15 (135 points, 2000-2017)	none	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow										
11	3	25	Sacramento River	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	10-20	none	Flat	N	Y - CASGEM Well 10509 (11N04E19E002M) avg DTW = 16 (145 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
11	3	26	Sacramento River	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft	10	none	Flat	N	Y - CASGEM Well 10509 (11N04E19E002M) avg DTW = 16 (145 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood												
11	3	36	Sacramento River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	10-20	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 51223 (TNBC Atkinson, 10N04E07) avg DTW = 16 (46 points; 2015-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak												
11	4	1	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	35-55	none	Y	N*/N	N - CASGEM Well 10503 (11N04E01M002M) avg DTW = 46 (177 points; 2000-2018) N - CASGEM Well 10508 (So Sut WD, 11N04E15Q001M) avg DTW = 36 (68 points; 2000-2020)	none														
11	4	2	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	20-40	none	Flat	N	Y - CASGEM Well 17037 (So Sut WD, 12N04E34H001M) avg DTW = 26 (23 points; 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	4	3	King's Slough, unnamed drainage	2	Less likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Salix exigua are typically located at sites that have a generally high water table, and most stands are adjacent to flowing water[1]. Typha angustifolia habitat is marshy with shallow surface water[2].	10-20	none	Flat	Flat	Y - CASGEM Well 25773 (SUT-P1, 11N04E04N004M) avg DTW = 13 (59 points; 2015-2020)	Palustrine, Emergent, Persistent, Seasonally	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow												
11	4	4	Cross Canal	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	Flat	Y - CASGEM Well 25773 (SUT-P1, 11N04E04N004M) avg DTW = 13 (59 points; 2015-2020)	Palustrine, Forested, Seasonally Flooded	Salix gooddingii	Goodding's Willow	Salix exigua	Narrowleaf Willow	Typha angustifolia*	Narrowleaf Cattail	Populus Fremontii	Fremont Cottonwood								
11	4	5	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0-10	Swainson's Hawk, Giant Gartersnake	Flat	Flat	Y - CASGEM Well 25773 (SUT-P1, 11N04E04N004M) avg DTW = 13 (59 points; 2015-2020)	none																
11	4	6	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0-10	Giant Gartersnake	Flat	Flat	Y - CASGEM Well 25773 (SUT-P1, 11N04E04N004M) avg DTW = 13 (59 points; 2015-2020)	none																
11	4	7	Cross Canal	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Giant garter snake	Flat	Flat	Y - CASGEM Well 25773 (SUT-P1, 11N04E04N004M) avg DTW = 13 (59 points; 2015-2020)	none	Salix gooddingii	Goodding's Willow	Populus fremontii	Fremont Cottonwood												
11	4	8	Cross Canal	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Giant garter snake Swainson's Hawk	Flat	Flat	Y - CASGEM Well 25773 (SUT-P1, 11N04E04N004M) avg DTW = 13 (59 points; 2015-2020)	none	Salix gooddingii	Goodding's Willow	Populus fremontii	Fremont Cottonwood												
11	4	9	Unspecified area	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Surface water species < .89 ac, predominantly in Section 4	0-10	Giant garter snake	Flat	N	Y - CASGEM Well 39806 (11N04E09D002M) avg DTW = 14 (172 points; 2000-2020)	none	Salix gooddingii	Goodding's Willow														
11	4	10	Pleasant Grove Creek Canal	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-25	Swainson's Hawk	Flat	N	Y - CASGEM Well 17037 (So Sut WD, 12N04E34H001M) avg DTW = 26 (23 points; 2011-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded																
11	4	11	Pleasant Grove Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Populus fremontii has a maximum rooting depth of 16.4[1]. Quercus lobata has a maximum rooting depth of 24.02[1]. DTW is greater than 30 ft. Species is likely dependent on surface water from Pleasant Grove Ck., not groundwater. Can be eliminated because DTW is grater than 30 ft.	35-40	Vernal Pool Tadpole Shrimp	Y	N*/N	N - CASGEM Well 10503 (11N04E01M002M) avg DTW = 46 (177 points; 2000-2018) N - CASGEM Well 10508 (So Sut WD, 11N04E15Q001M) avg DTW = 36 (68 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	4	12	on Pleasant Grove Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	50-60	Swainson's Hawk	Y	N*/N	N - CASGEM Well 10503 (11N04E01M002M) avg DTW = 46 (177 points; 2000-2018) N - CASGEM Well 10508 (So Sut WD, 11N04E15Q001M) avg DTW = 36 (68 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow										
11	4	13	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	45-65	none	Y	N	N - CASGEM Well 10507 (So Sut WD, 11N04E13R001M) avg DTW = 81 (76 points; 2000-2020)	none														
11	4	14	Pleasant Grove Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Salix gooddingii has a rooting depth of 6.89[1]. DTW is deeper than rooting depth. Typha angustifolia habitat is marshy with shallow surface water[2].	30-45	Swainson's Hawk	Y	N*/N	N - CASGEM Well 10503 (11N04E01M002M) avg DTW = 46 (177 points; 2000-2018) N - CASGEM Well 10508 (So Sut WD, 11N04E15Q001M) avg DTW = 36 (68 points; 2000-2020)	none	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow								
11	4	15	Pleasant Grove Ck Canal	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Salix gooddingii has a rooting depth of 6.89[1]. DTW is deeper than rooting depth. Typha angustifolia habitat is marshy with shallow surface water[2].	15-30	none	Y	N*/N	N - CASGEM Well 10503 (11N04E01M002M) avg DTW = 46 (177 points; 2000-2018) N - CASGEM Well 10508 (So Sut WD, 11N04E15Q001M) avg DTW = 36 (68 points; 2000-2020)	none	Salix gooddingii	Goodding's Willow	Typha angustifolia*	Narrowleaf Cattail										
11	4	16	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	5-20	none	Flat	N	Y - CASGEM Well 39806 (11N04E09D002M) avg DTW = 14 (172 points; 2000-2020)	none														
11	4	17	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	0-10	none	Flat	N	Y - CASGEM Well 39806 (11N04E09D002M) avg DTW = 14 (172 points; 2000-2020)	none														
11	4	18	Cross Canal	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Giant garter snake Swainson's Hawk	Flat	N	Y - CASGEM Well 10509 (11N04E19E002M) avg DTW = 16 (145 points; 2000-2020)	none	Salix gooddingii	Goodding's Willow	Salix exigua	Narrowleaf Willow										
11	4	19	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake	Flat	N	Y - CASGEM Well 10509 (11N04E19E002M) avg DTW = 16 (145 points; 2000-2020)	none														
11	4	20	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake	Flat	N	Y - CASGEM Well 10509 (11N04E19E002M) avg DTW = 16 (145 points; 2000-2020)	none														
11	4	21	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	15-20	Giant Gartersnake	Flat	N	Y - CASGEM Well 10509 (11N04E19E002M) avg DTW = 16 (145 points; 2000-2020)	none														
11	4	22	Curry Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	DTW is greater than 30 ft. Schoenoplectus acutus has rooting depth between 0.33 and 5 ft[3].	20-35	none	Y	N	N - CASGEM Well 10508 (So Sut WD, 11N04E15Q001M) avg DTW = 36 (68 points; 2000-2020)	none	Schoenoplectus acutus*	Hardstem Bulrush												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	4	23	Pleasant Grove Ck Canal and Curry Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	DTW is greater than 30 ft. Schoenoplectus acutus has rooting depth between 0.33 and 5 ft[3].	30-40	Swainson's Hawk	Y	N	N - CASGEM Well 10508 (So Sut WD, 11N04E15Q001M) avg DTW = 36 (68 points; 2000-2020)	none	Schoenoplectus acutus*	Hardstem Bulrush	Typha angustifolia*	Narrowleaf Cattail										
11	4	24	Curry Ck	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	50-65	none	Y	N	N - CASGEM Well 10507 (So Sut WD, 11N04E13R001M) avg DTW = 81 (76 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded														
11	4	25	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Salix gooddingii has a rooting depth of 6.89[3]. DTW is deeper than rooting depth.	60	none	Y	N	N - CASGEM Well 10507 (So Sut WD, 11N04E13R001M) avg DTW = 81 (76 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix gooddingii	Goodding's Willow												
11	4	26	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	DTW is greater than 30 ft. Schoenoplectus acutus has rooting depth between 0.33 and 5 ft[3].	40-45	Vernal Pool Fairy Shrimp Vernal Pool Tadpole Shrimp	Y	N	N - CASGEM Well 10507 (So Sut WD, 11N04E13R001M) avg DTW = 81 (76 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Schoenoplectus acutus*	Hardstem Bullrush												
11	4	27	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	20-30	none	Y	N	N - CASGEM Well 10508 (So Sut WD, 11N04E15Q001M) avg DTW = 36 (68 points; 2000-2020)	none														
11	4	28	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15-20	none			no representative hydrographs within contour interval	none														
11	4	29	North Drainage Canal	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15	none			no representative hydrographs within contour interval	none														
11	4	30	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake			no representative hydrographs within contour interval	none														
11	4	31	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10-15	Giant Gartersnake Tricolored Blackbird			no representative hydrographs within contour interval	none														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	4	32	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	15	Giant Gartersnake			no representative hydrographs within contour interval	none																
11	4	33	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15-20	none			no representative hydrographs within contour interval	none																
11	4	34	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	20-30	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	none																
11	4	35	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	30-45	none			no representative hydrographs within contour interval	none																
11	4	36	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	45-60	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	none																
11	5	1	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	65-80	none			no representative hydrographs within contour interval	none																
11	5	2	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	70-85	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded																
11	5	3	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	75-90	none	Flat	N	N - CASGEM Well 48569 (CVMW-1A, 11N05E14) avg DTW = 90 (81 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																
11	5	4	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	75-90	Vernal Pool Fairy Shrimp	Y	N	N - CASGEM Well 11221 (So Sut WD, 11N05E18R001M) avg DTW = 90 (66 points, 2000-2021	none																
11	5	5	King Slough	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	60-70	Swainson's Hawk Vernal Pool Fairy Shrimp	Flat/Y	Insufficient data/N	N - CASGEM Well 11217 (11N05E06H001M) avg DTW = 61 (39 points; 2000-2015) N - CASGEM Well 32067 (12N05E33C001M) avg DTW = 77 (119 points; 2000-2020)	none	Populus fremontii	Fremont Cottonwood												
11	5	6	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	60-70	none	Y	Insufficient data/N	N - CASGEM Well 11217 (11N05E06H001M) avg DTW = 61 (39 points; 2000-2015) N - CASGEM Well 32067 (12N05E33C001M) avg DTW = 77 (119 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	5	7	Pleasant Grove Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	60-70	Vernal Pool Fairy Shrimp	Y	Insufficient data/Y*	N - CASGEM Well 11217 (11N05E06H001M) avg DTW = 61 (39 points; 2000-2015) N - CASGEM Well 11220 (11N05E17A004M) avg DTW = 99 (107 points; 2000-2019)	Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak												
11	5	8	Pleasant Grove Ck & unnamed drainage ditch	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	80-90	Vernal Pool Fairy Shrimp	Y	Insufficient data/Y*	N - CASGEM Well 11217 (11N05E06H001M) avg DTW = 61 (39 points; 2000-2015) N - CASGEM Well 11220 (11N05E17A004M) avg DTW = 99 (107 points; 2000-2019)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak												
11	5	9	Pleasant Grove Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-100	Vernal Pool Fairy Shrimp	Y	Insufficient data/Y*	N - CASGEM Well 11217 (11N05E06H001M) avg DTW = 61 (39 points; 2000-2015) N - CASGEM Well 11220 (11N05E17A004M) avg DTW = 99 (107 points; 2000-2019)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
11	5	10	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	90-100	Tricolored Blackbird	N	N	N - CASGEM Well 48563 (WPMW-2A, 11N06E07) avg DTW = 81 (86 points, 2011-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail	Salix gooddingii	Goodding's Willow								
11	5	11	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 48563 (WPMW-2A, 11N06E07) avg DTW = 81 (86 points, 2011-2021)	California Warm Temperate Marsh/Seep	Quercus lobata	Valley Oak												
11	5	12	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	80-95	none	N	N	N - CASGEM Well 48563 (WPMW-2A, 11N06E07) avg DTW = 81 (86 points, 2011-2021)	none														
11	5	13	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	85-90	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 54798 (Well 14 MW-A, 11N06E18) avg DTW = 103 (74 points, 2013-2021)	none														
11	5	14	Pleasant Grove Ck and unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-100	none	Flat	N	N - CASGEM Well 48569 (CVMW-1A, 11N05E14) avg DTW = 90 (81 points, 2011-2020)	none	Quercus lobata	Valley Oak												
11	5	15	Pleasant Grove Dk	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	90-100	none	Flat	N	N - CASGEM Well 48569 (CVMW-1A, 11N05E14) avg DTW = 90 (81 points, 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow	Typha angustifolia*	Narrowleaf Cattail								
11	5	16	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-100	none	Y	N	N - CASGEM Well 11221 (So Sut WD, 11N05E18R001M) avg DTW = 90 (66 points, 2000-2021	none														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	5	17	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Quercus lobata requires a DTW of 24.31 ft.[1]	80-90	none	Y	N	N - CASGEM Well 11221 (So Sut WD, 11N05E18R001M) avg DTW = 90 (66 points, 2000-2021	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak														
11	5	18	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	60-80	none	Y	N	N - CASGEM Well 11221 (So Sut WD, 11N05E18R001M) avg DTW = 90 (66 points, 2000-2021	none																
11	5	19	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-80	none	Y	N	N - CASGEM Well 11221 (So Sut WD, 11N05E18R001M) avg DTW = 90 (66 points, 2000-2021	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak														
11	5	20	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	80-90	Vernal Pool Fairy Shrimp, Swainson's Hawk	Y	N	N - CASGEM Well 11221 (So Sut WD, 11N05E18R001M) avg DTW = 90 (66 points, 2000-2021	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bulrush	Salix gooddingii	Goodding's Willow										
11	5	21	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	95-100	none	Y	N	N - CASGEM Well 11221 (So Sut WD, 11N05E18R001M) avg DTW = 90 (66 points, 2000-2021	none																
11	5	22	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	100	none	Flat	N	N - CASGEM Well 48569 (CVMW-1A, 11N05E14) avg DTW = 90 (81 points, 2011-2020)	none																
11	5	23	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-105	none	Flat	N	N - CASGEM Well 48569 (CVMW-1A, 11N05E14) avg DTW = 90 (81 points, 2011-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded																
11	5	24	Pleasant Grove Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-100	Vernal Pool Fairy Shrimp	Flat	N	N - CASGEM Well 48569 (CVMW-1A, 11N05E14) avg DTW = 90 (81 points, 2011-2020)	none	Quercus lobata	Valley Oak														
11	5	25	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	110-125	none	N	N	N - CASGEM Well 48560 (WPMW-1A, 11N05E25) avg DTW = 111 (91 points, 2011-2020)	none																
11	5	26	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	105-115	none	N	N	N - CASGEM Well 48560 (WPMW-1A, 11N05E25) avg DTW = 111 (91 points, 2011-2020)	none																
11	5	27	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	100-105	none	N	N	N - CASGEM Well 48560 (WPMW-1A, 11N05E25) avg DTW = 111 (91 points, 2011-2020)	California Warm Temperate Marsh/Seep																

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	5	28	Curry Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	90-100	none	Flat	N	N - CASGEM Well 48569 (CVMW-1A, 11N05E14) avg DTW = 90 (81 points, 2011-2020)	none	Populus fremontii	Fremont Cottonwood														
11	5	29	Curry Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	80-90	Swainson's Hawk	Y	N	N - CASGEM Well 10507 (So Sut WD, 11N04E13R001M) avg DTW = 81 (76 points; 2000-2020)	none	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow												
11	5	30	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	60-70	Vernal Pool Fairy Shrimp, Swainson's Hawk	Y	N	N - CASGEM Well 10507 (So Sut WD, 11N04E13R001M) avg DTW = 81 (76 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood														
11	5	31	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	60-80	none	Flat	Flat	N - CASGEM Well 48009 (SGA_MW01, 10N05E17) avg DTW = 62 (19 points, 2011-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded																
11	5	32	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	80-90	Swainson's Hawk	Y	N	N - CASGEM Well 11221 (So Sut WD, 11N05E18R001M) avg DTW = 90 (66 points, 2000-2021	Palustrine, Emergent, Persistent, Seasonally Flooded																
11	5	33	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	90-100	none	N	N	N - CASGEM Well 48573 (SVMW West - 1A, 11N05E35) avg DTW = 111 (85 points, 2011-2021	none																
11	5	34	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	105-110	none	N	N	N - CASGEM Well 48573 (SVMW West - 1A, 11N05E35) avg DTW = 111 (85 points, 2011-2021	Palustrine, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Platanus racemosa	California Sycamore												
11	5	35	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	100-110	none	N	N	N - CASGEM Well 48573 (SVMW West - 1A, 11N05E35) avg DTW = 111 (85 points, 2011-2021	none	Quercus lobata	Valley Oak														
11	5	36	Curry Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	130	none	N	N	N - CASGEM Well 48573 (SVMW West - 1A, 11N05E35) avg DTW = 111 (85 points, 2011-2021	none	Typha angustifolia*	Narrowleaf Cattail														
11	6	1	Pleasant Grove Ck w/in residential area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	40-50	none			no representative hydrographs within contour interval	none	Populus fremontii	Fremont Cottonwood														
11	6	2	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	40-50	none			no representative hydrographs within contour interval	none	Quercus lobata	Valley Oak														
11	6	3	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	55-65	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	none																

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	6	4	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	60-70	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	none														
11	6	5	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	65-75	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	none														
11	6	6	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	65-75	none	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	none														
11	6	7	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	75-85	none	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	none														
11	6	8	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	75-85	none	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	none														
11	6	9	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-80	none	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Quercus lobata	Valley Oak										
11	6	10	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	60-70	none	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	none	Salix goodddingii	Goodding's Willow	Typha angustifolia*	Narrowleaf Cattail										
11	6	11	Pleasant Grove Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	50-60	none	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bulrush	Salix exigua	Narrowleaf Willow	Salix goodddingii	Goodding's Willow								
11	6	12	Pleasant Grove Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	40-50	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix goodddingii	Goodding's Willow	Quercus lobata	Valley Oak	Salix exigua	Narrowleaf Willow								
11	6	13	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	40-45	none			no representative hydrographs within contour interval	Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak												
11	6	14	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	40-55	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Schoenoplectus acutus*	Hardstem Bulrush										
11	6	15	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	60-70	none	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	none	Schoenoplectus acutus*	Hardstem Bulrush	Salix exigua	Narrowleaf Willow	Populus fremontii	Fremont Cottonwood								

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	6	16	Residential/Commercial	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	70-80	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	none	Salix exigua	Narrowleaf Willow	Typha angustifolia*	Narrowleaf Cattail										
11	6	17	Pleasant Grove Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	80-90	Swainson's Hawk	N	N	N - CASGEM Well 54798 (Well 14 MW-A, 11N06E18) avg DTW = 103 (74 points, 2013-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak												
11	6	18	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	85-95	none	N	N	N - CASGEM Well 54798 (Well 14 MW-A, 11N06E18) avg DTW = 103 (74 points, 2013-2021)	none														
11	6	19	Multiple Parks and Golf Courses	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	100	Vernal Pool Fairy Shrimp, Swainson's Hawk	N	N	N - CASGEM Well 54798 (Well 14 MW-A, 11N06E18) avg DTW = 103 (74 points, 2013-2021)	none	Quercus lobata	Valley Oak												
11	6	20	So Branch Pleasant Grove Ck/located in open space adjacent to residential area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	85-100	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 54798 (Well 14 MW-A, 11N06E18) avg DTW = 103 (74 points, 2013-2021)	none														
11	6	21	Commercial	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	70-90	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 51290 (Tinker MW, 11N06E09) avg DTW = 75 (82 points, 2013-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded														
11	6	22	Residential/Commercial	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	50-70	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	none														
11	6	23	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	30-55	none			no representative hydrographs within contour interval	none														
11	6	24	Antelope Ck	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated as DTW is less than 30 ft	20-30	none			no representative hydrographs within contour interval	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak												
11	6	25	Antelope Ck	3	Likely	DTW < 30 ft No Critical Species Diverse vegetation	Quercus lobata requires a DTW of 24.31 ft.[1] The polygon for Quercus lobata is at the 30 ft contour. All other species present have root depths that are shallow[1,5] and therefore not dependent on groundwater at this location.	20-30	none	Flat	Flat	Y - CASGEM Well 51287 (WPMW-10A, 10N06E01) avg DTW = 14 (69 points; 2015-2020)	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Typha angustifolia	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow						
11	6	26	Residential/Commercial	3	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Populus fremontii has a maximum rooting depth of 16.4[1]. Salix gooddingii and Salix exigua (using rooting depth for S. gooddingii of 6.89 ft) requires surface water	25-40	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	none	Salix exigua	Narrowleaf Willow	Salix lasiolepis	Arroyo Willow	Salix gooddingii	Goodding's Willow	Populus fremontii	Fremont Cottonwood						

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
							and elevated water table[1].																					
11	6	27	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	40-65	none			no representative hydrographs within contour interval	Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow										
11	6	28	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated as DTW is greater than 30 ft	65-90	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Salix exigua	Narrowleaf Willow	Populus fremontii	Fremont Cottonwood										
11	6	29	Bear Dog and Mahany Regional Park	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	100-120	Vernal Pool Tadpole Shrimp			no representative hydrographs within contour interval	none	Salix exigua	Narrowleaf Willow														
11	6	30	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	120	Swainson's Hawk	N	N	N - CASGEM Well 48560 (WPMW-1A, 11N05E25) avg DTW = 111 (91 points, 2011-2020)	none	Salix lasiolepsis	Arroyo Willow	Salix exigua	Narrowleaf Willow												
11	6	31	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	120-140	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 48560 (WPMW-1A, 11N05E25) avg DTW = 111 (91 points, 2011-2020)	none																
11	6	32	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	110-120	Vernal Pool Fairy Shrimp	Flat	N	N - CASGEM Well 48576 (SVMW East-2A, 11N05E36) avg DTW = 123 (88 points, 2011-2021)	none	Salix exigua	Narrowleaf Willow														
11	6	33	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	No GDEs	65-100	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	none	Populus fremontii	Fremont Cottonwood														
11	6	34	Sierra View Country Club	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	35-65	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak														
11	6	35	Roseville Public Cemetery	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft	20	none	Flat	Flat	Y - CASGEM Well 51287 (WPMW-10A, 10N06E01) avg DTW = 14 (69 points; 2015-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Populus fremontii	Fremont Cottonwood														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
11	6	36	Miner's Ravine	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft	20	none	Flat	Flat	Y - CASGEM Well 51287 (WPMW-10A, 10N06E01) avg DTW = 14 (69 points; 2015-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak												
11	7	5	Clover Valley Ck	0	Not likely	DTW ≥ 30 ft No Critical Species w/in NASb boundary No vegetation	No GDEs	30-40	California Black Rail (located outside NASb boundary)			no representative hydrographs within contour interval	none															
11	7	6	Clover Valley Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	40	none			no representative hydrographs within contour interval	Palustrine, Forested, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak												
11	7	7	Clover Valley Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated as DTW is greater than 30 ft	40	none			no representative hydrographs within contour interval	none	Quercus lobata	Valley Oak													
11	7	18	Antelope Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Quercus lobata has a maximum rooting depth of 24.02[1]. Species is likely dependent on surface water from Pleasant Grove Ck., not groundwater. Can be eliminated because DTW is grater than 30 ft.	30	none			no representative hydrographs within contour interval	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak													
11	7	19	Antelope Ck	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated as DTW is less than 30 ft	20-30	none			no representative hydrographs within contour interval	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood											
11	7	30	Secret Ravine	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated as DTW is less than 30 ft	<20	none	Flat	Flat	Y - CASGEM Well 51282 (WPMW-6A, 11N07E30) avg DTW = -0.77 (57 points, 2015-2021)	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak													
11	7	31	Unnamed drainage	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated as DTW is less than 30 ft	20-30	Vernal Pool Fairy Shrimp	N	N	Y - CASGEM Well 51283 (WPMW-7A, 10N07E05) avg DTW = 21 (69 points; 2015-2020) Y - CASGEM Well 51284 (WPMW-8A, 10N07E05) avg DTW = 29 (69 points; 2015-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow											
11	7	32	Unnamed drainage	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated as DTW is less than 30 ft	20-30	none	N	N	Y - CASGEM Well 51283 (WPMW-7A, 10N07E05) avg DTW = 21 (69 points; 2015-2020) Y - CASGEM Well 51284 (WPMW-8A, 10N07E05) avg DTW = 29 (69 points; 2015-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood													
12	3	1	NASb - Sutter boundary	1	Not likely	DTW < 30 ft No Critical Species w/in NASb boundary No vegetation w/in NASb boundary	Cannot be eliminated as DTW is less than 30 ft	0-10	Swainson's Hawk (outside NASb boundary)	Y	N*	Y - CASGEM Well 17025 (So Sut WD 12N04E05R004M) avg DTW = 19 (104 points, 2000-2019)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded															

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	3	11	Mostly outside NASb boundary (Sutter) Boundary line within river	0	Not likely	DTW < 30 ft No Critical Species w/in NASb boundary No vegetation w/in NASb boundary	No GDEs	0	none w/in NASb boundary	Y	N*	Y - CASGEM Well 17025 (So Sut WD 12N04E05R004M) avg DTW = 19 (104 points, 2000-2019)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded																	
12	3	12	Feather River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated as DTW is less than 30 ft	0-10	Bank Swallow Swainson's Hawk Western Yellow-Billed Cuckoo	Y	N*	Y - CASGEM Well 17033 (12N04E18D001M) avg DTW = 18 (92 points; 2000-2017	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Acer negundo	Box-elder	Platanus racemosa	California Sycamore	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's willow								
12	3	13	Unnamed drainage	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated as DTW is less than 30 ft	0-10	Swainson's Hawk	Y	N*	Y - CASGEM Well 17033 (12N04E18D001M) avg DTW = 18 (92 points; 2000-2017	none	Quercus lobata	Valley Oak																
12	3	14	Feather River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated as DTW is less than 30 ft	0-10	Bank Swallow	Flat	N*	Y - CASGEM Well 17012 (12N03E23N001M) avg DTW = 12 (157 points; 2000-2017)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow										
12	3	22	Feather River	2	Less Likely	DTW < 30 ft No Critical Species w/in NASb boundary Lack of diverse vegetation	Quercus lobata present is likely dependent on surface water	0-10	Bank Swallow (outside NASb boundary)	Flat	N*	Y - CASGEM Well 17012 (12N03E23N001M) avg DTW = 12 (157 points; 2000-2017)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak														
12	3	23	Feather River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated as DTW is less than 30 ft	0-10	Swainson's Hawk	Flat	N*	Y - CASGEM Well 17012 (12N03E23N001M) avg DTW = 12 (157 points; 2000-2017)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak														
12	3	24	Developed Parcel	2	Less Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation Plant Species on developed parcel	Quercus lobata appears to be on private land; may be irrigated	0-10	Swainson's Hawk	Flat	N*	Y - CASGEM Well 17012 (12N03E23N001M) avg DTW = 12 (157 points; 2000-2017)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak														
12	3	25	Unnamed drainage	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated as DTW is less than 30 ft	0-10	Giant Gartersnake	Flat	N*	Y - CASGEM Well 17012 (12N03E23N001M) avg DTW = 12 (157 points; 2000-2017)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix exigua	Narrowleaf Willow														
12	3	26	Feather River	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated as DTW is less than 30 ft	0-10	none	Flat	N*	Y - CASGEM Well 17012 (12N03E23N001M) avg DTW = 12 (157 points; 2000-2017)	none	Quercus lobata	Valley Oak														
12	3	27	Feather River	2	Less Likely	DTW < 30 ft Critical Species outside NASb boundary Lack of diverse vegetation	Cannot be eliminated as DTW is less than 30 ft	0-10	Bank Swallow (outside NASb boundary)	Flat	N*	Y - CASGEM Well 17012 (12N03E23N001M) avg DTW = 12 (157 points; 2000-2017)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	3	34	Feather River	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated as DTW is less than 30 ft	0-10	Swainson's Hawk	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												
12	3	35	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0-10	Giant Gartersnake	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	none																
12	3	36	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0	Giant Gartersnake	Flat	N	Y - CASGEM Well 47776 (Sut Co MW-5A, 11N03E02Q002M) avg DTW = 9 (62 points; 2012-2021)	none																
12	4	1	Raccoon Ck	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Populus fremontii has a maximum rooting depth of 16.4 ft[1]. Similar species to Fraxinus latifolia (F. velutina) has rooting depth of 7 ft[1]	20-30	none	Y	N	Y - CASGEM Well 17019 (12N04E02P001M) avg DTW = 27 (136 points; 2000-2020) Y - CASGEM Well 35624 (So Sut WD, 13N04E35Q002M) avg DTW = 29 (63 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Populus fremontii	Fremont Cottonwood	Fraxinus latifolia*	Oregon Ash										
12	4	2	Raccoon Ck	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Similar species to Fraxinus latifolia (F. velutina) has rooting depth of 7 ft[1].	10-20	none	Y	N	Y - CASGEM Well 17019 (12N04E02P001M) avg DTW = 27 (136 points; 2000-2020) Y - CASGEM Well 35624 (So Sut WD, 13N04E35Q002M) avg DTW = 29 (63 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Forested, Seasonally Flooded	Fraxinus latifolia*	Oregon Ash										
12	4	3	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15-20	none	Y	N*	Y - CASGEM Well 17025 (So Sut WD 12N04E05R004M) avg DTW = 19 (104 points, 2000-2019)	none																
12	4	4	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	10	Swainson's Hawk	Y	N*	Y - CASGEM Well 17025 (So Sut WD 12N04E05R004M) avg DTW = 19 (104 points, 2000-2019)	none																
12	4	5	Unnamed Drainage	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Y	N*	Y - CASGEM Well 17025 (So Sut WD 12N04E05R004M) avg DTW = 19 (104 points, 2000-2019)	none	Quercus lobata	Valley Oak														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	4	6	Feather River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Bank Swallow Swainson's Hawk	Y	N*	Y - CASGEM Well 17025 (So Sut WD 12N04E05R004M) avg DTW = 19 (104 points, 2000-2019)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Juglans hindsii and hybrids*	No Cal Black Walnut										
12	4	7	Feather River & unnamed drainage canal	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Y	N*	Y - CASGEM Well 17025 (So Sut WD 12N04E05R004M) avg DTW = 19 (104 points, 2000-2019)	none w/in NASb boundary	Populus fremontii	Fremont Cottonwood	Acer negundo	Box-elder	Salix gooddingii	Goodding's Willow	Platanus racemosa	California Sycamore	Quercus lobata	Valley Oak						
12	4	8	Unspecified area	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Vernal Pool Tadpole Shrimp Giant Gartersnake	Y	N*	Y - CASGEM Well 17025 (So Sut WD 12N04E05R004M) avg DTW = 19 (104 points, 2000-2019)	none	Quercus lobata	Valley Oak														
12	4	9	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	0-10	none	Y	N*	Y - CASGEM Well 17025 (So Sut WD 12N04E05R004M) avg DTW = 19 (104 points, 2000-2019)	none																
12	4	10	Raccoon Ck	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	10-20	none	Y/Flat	N	N - CASGEM Well 17027 (So Sut WD, 12N04E10D002M) avg DTW = 30 (35 points; 2011-2020) Y - CASGEM Well 17023 (AB-1 shallow, 12N04E03N004M) avg DTW = 21 (154 points; 2000-2020)	none	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Platanus racemosa	California Sycamore	Salix exigua	Narrowleaf Willow								
12	4	11	Raccoon Ck & Buckham Slough	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Salix gooddingii has a maximum rooting depth of 6.89 ft and Populus fremontii has a maximum rooting depths of 16.4[1]. Similar species to Fraxinus latifolia (F. velutina) has rooting depth of 7 ft[1]. Typha angustifolia habitat is marshy with shallow surface water[2].	10-20	Swainson's Hawk	Y	N	Y - CASGEM Well 17019 (12N04E02P001M) avg DTW = 27 (136 points; 2000-2020) Y - CASGEM Well 35624 (So Sut WD, 13N04E35Q002M) avg DTW = 29 (63 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Fraxinus latifolia*	Oregon Ash	Typha angustifolia*	Narrowleaf Cattail	Salix gooddingii	Goodding's Willow								
12	4	12	Unnamed drainage	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Populus fremontii has a maximum rooting depth of 16.4[1]. Valley Oak has a maximum rooting depth of 24.02[1]. Species is likely dependent on surface water from drainage	25-35	none	Y	N	Y - CASGEM Well 17019 (12N04E02P001M) avg DTW = 27 (136 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	4	13	Unnamed drainage	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	25-40	none	Y	N	N - CASGEM Well 39691 (AB-2 Shal, 12N04E26J004M) avg DTW = 34 (157 points, 2000-2020) N - CASGEM Well 24495 (12N04E25N001M) avg DTW = 37 (155 points; 2005-2018)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded														
12	4	14	Buckham Slough/Markham Ravine	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Can be eliminated as Typha angustifolia requires marshy conditions and shallow surface water[2].	20-30	none	Y/N	N	Y - CASGEM Well 17031 (So Sut WD, 12N04E16A004M) avg DTW = 20 (67 points; 2000-2020) N - CASGEM 17027 (So Sut WD, 12N04E10D002M) avg DTW = 30 (35 points; 2011-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Typha angustifolia*	Narrowleaf Cattail												
12	4	15	Raccoon Ck & Eastside Canal	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	10-20	none	Y/N	N	Y - CASGEM Well 17031 (So Sut WD, 12N04E16A004M) avg DTW = 20 (67 points; 2000-2020) N - CASGEM 17027 (12N04E10D002M) avg DTW = 30 (35 points; 2011-2020)	none	Quercus lobata	Valley Oak	Salix exigua	Narrowleaf Willow	Salix gooddingii	Goodding's Willow								
12	4	16	Raccoon Ck	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Can be eliminated as Typha angustifolia requires marshy conditions and shallow surface water[2].	0-10	none	Y/N	N	Y - CASGEM Well 17031 (So Sut WD, 12N04E16A004M) avg DTW = 20 (67 points; 2000-2020) N - CASGEM 17027 (So Sut WD, 12N04E10D002M) avg DTW = 30 (35 points; 2011-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Typha angustifolia*	Narrowleaf Cattail												
12	4	17	Racoon Ck & Ping Slough	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Y/N	N	Y - CASGEM Well 17031 (So Sut WD, 12N04E16A004M) avg DTW = 20 (67 points; 2000-2020) N - CASGEM 17027 (12N04E10D002M) avg DTW = 30 (35 points; 2011-2020)	none	Quercus lobata	Valley Oak												
12	4	18	Raccoon Ck & Ping Slough Confluence	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Diminimis Oaks	0-10	Swainson's Hawk	Flat	N*	Y - CASGEM Well 17033 (12N04E18D001M) avg DTW = 18 (92 points; 2000-2017	none	Quercus lobata	Valley Oak												
12	4	19	Main Canal	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Giant Gartersnake Swainson Hawk	Flat	N*	Y - CASGEM Well 17033 (12N04E18D001M) avg DTW = 18 (92 points; 2000-2017	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix exigua	Narrowleaf Willow	Salix gooddingii	Goodding's Willow	Quercus lobata	Valley Oak								
12	4	20	Unspecified area	2	Less likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0-10	Vernal Pool Tadpole Shrimp	Flat	N*	Y - CASGEM Well 17033 (12N04E18D001M) avg DTW = 18 (92 points; 2000-2017	none												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	4	21	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	5-15	none	Flat	N*	Y - CASGEM Well 17033 (12N04E18D001M) avg DTW = 18 (92 points; 2000-2017	none														
12	4	22	East Side Canal	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Might be eliminated as Salix exigua and Typha angustifolia require surface water or elevated water table[1,2].	10-20	none	Y	N*	N - CASGEM Well 17035 (12N04E24M002M) avg DTW = 34 (142 points 2000-2017)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix exigua	Narrowleaf Willow	Typha angustifolia*	Narrowleaf Cattail										
12	4	23	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	20-30	none	Y	N*	N - CASGEM Well 17035 (12N04E24M002M) avg DTW = 34 (142 points 2000-2017)	none														
12	4	24	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	30-40	none	Y	N*	N - CASGEM Well 17035 (12N04E24M002M) avg DTW = 34 (142 points 2000-2017)	none														
12	4	25	Auburn Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Populus fremontii has a maximum rooting depth of 16.4[1]. Quercus lobata has a maximum rooting depth of 24.02[1]. DTW is greater than 30 ft. Species is likely dependent on surface water from Auburn Ravine, not groundwater.	30-45	none	Y	N	N - CASGEM Well 39691 (AB-2 Shal, 12N04E26J004M) avg DTW = 34 (157 points, 2000-2020) N - CASGEM Well 24495 (12N04E25N001M) avg DTW = 37 (155 points; 2005-2018)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
12	4	26	Unspecified area	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Populus fremontii has a maximum rooting depth of 16.4[1]. Salix exigua (using rooting depth for S. gooddingii of 6.89 ft) requires surface water and elevated water table. Quercus lobata may be reliant on groundwater in this area.	20-30	none	Y	N	N - CASGEM Well 39691 (AB-2 Shal, 12N04E26J004M) avg DTW = 34 (157 points, 2000-2020) N - CASGEM Well 24495 (12N04E25N001M) avg DTW = 37 (155 points; 2005-2018)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow	Quercus lobata	Valley Oak										
12	4	27	East Side Canal	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Location of Salix exigua appears artificial. 1962 aerial photo does not have this feature. Populus fremontii has a maximum rooting depth of 16.4[1] and is probably dependent on surface water from the Auburn Ravine.	10-20	none	Flat	N	Y - CASGEM Well 25784 (So Sut WD, 12N04E29J001M) avg DTW = 9 (61 points; 2005-2020) Y - CASGEM 17037 (So Sut WD, 12N04E34H001M) avg DTW = 26 (23 points; 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow	Schoenoplectus acutus*	Hardstem Bullrush										
12	4	28	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	10	none	Flat	N	Y - CASGEM Well 25784 (So Sut WD, 12N04E29J001M) avg DTW = 9 (61 points; 2005-2020) Y - CASGEM 17037 (So Sut WD, 12N04E34H001M) avg DTW = 26 (23 points; 2011-2020)	none														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	4	29	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0-10	Swainson's Hawk	Flat	N	Y - CASGEM Well 25784 (So Sut WD, 12N04E29J001M) avg DTW = 9 (61 points; 2005-2020) Y - CASGEM 17037 (So Sut WD, 12N04E34H001M) avg DTW = 26 (23 points; 2011-2020)	none																
12	4	30	Unspecified area	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0-10	Swainson's Hawk, Giant Gartersnake	Flat	N	Y - CASGEM Well 25784 (So Sut WD, 12N04E29J001M) avg DTW = 9 (61 points; 2005-2020)	none																
12	4	31	Unnamed drainage	2	Less Likely	DTW < 30 ft Critical Species may be present No vegetation	No GDEs	0-10	Giant Gartersnake	Flat	N	Y - CASGEM Well 25784 (So Sut WD, 12N04E29J001M) avg DTW = 9 (61 points; 2005-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																
12	4	32	Unspecified area	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Salix gooddingii may be dependent on groundwater. However, vegetation appears to be sparse and located in agricultural drainage. Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	N	Y - CASGEM Well 25784 (So Sut WD, 12N04E29J001M) avg DTW = 9 (61 points; 2005-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bullrush	Salix gooddingii	Goodding's Willow												
12	4	33	Unspecified area	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Salix exigua is located along the East Side Canal and likely dependent on surface water	0-10	none	Flat	N	Y - CASGEM Well 17037 (So Sut WD, 12N04E34H001M) avg DTW = 26 (23 points; 2011-2020)	none	Salix exigua	Narrowleaf Willow														
12	4	34	East Side Canal	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Species present have shallow rooting depths (less than 10 ft)[1,2].	10-20	Swainson's Hawk	Flat	N	Y - CASGEM Well 17037 (So Sut WD, 12N04E34H001M) avg DTW = 26 (23 points; 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix gooddingii	Goodding's Willow	Salix exigua	Narrowleaf Willow	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail								
12	4	35	King Slough	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Species present have shallow rooting depths (less than 10 ft)[1,2].	20-30	none	Flat	N	Y - CASGEM Well 17037 (So Sut WD, 12N04E34H001M) avg DTW = 26 (23 points; 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix gooddingii	Goodding's Willow														
12	4	36	King Slough	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Species present have shallow rooting depths (less than 10 ft)[1,2].	35-50	none	Flat	N	Y - CASGEM Well 17037 (So Sut WD, 12N04E34H001M) avg DTW = 26 (23 points; 2011-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix gooddingii	Goodding's Willow														
12	5	1	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	35-40	none	Flat	Flat	N - CASGEM Well 32899 (12N05E01D002M) avg DTW = 32 (113 points; 2000-2020) N - CASGEM Well 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	none	Quercus lobata	Valley Oak														
12	5	2	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	35-40	Swainson's Hawk	Flat	Flat	N - CASGEM Well 32899 (12N05E01D002M) avg DTW = 32 (113 points; 2000-2020) N - CASGEM Well 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded																

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	5	3	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	35-45	none	Flat	Flat	N - CASGEM Well 32899 (12N05E01D002M) avg DTW = 32 (113 points; 2000-2020) N - CASGEM Well 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded														
12	5	4	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	35-45	none	Flat	Flat	N - CASGEM Well 32899 (12N05E01D002M) avg DTW = 32 (113 points; 2000-2020) N - CASGEM Well 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	none														
12	5	5	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft. Populus fremontii has a maximum rooting depth of 16.4[1].	35-40	none	Y	N	N - CASGEM Well 17043 (12N05E06R001M) avg DTW = 53 (84 points; 2000-2020) Y - CASGEM Well 40137 (So Sut WD, 13N05E31K001M) avg DTW = 27 (94 points, 2000-2020)	Palustrine, Scrub-Shrub, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood												
12	5	6	Raccoon Ck	2	Less Likely	DTW < 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft. Populus fremontii has a maximum rooting depth of 16.4[1]. Typha angustifolia requires shallow surface water[2].	25-35	none	Y	N	N - CASGEM Well 17043 (12N05E06R001M) avg DTW = 53 (84 points; 2000-2020) Y - CASGEM Well 40137 (So Sut WD, 13N05E31K001M) avg DTW = 27 (94 points, 2000-2020)	Palustrine, Forested, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail										
12	5	7	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because Typha angustifolia requires shallow surface water[2].	30-40	none	Y	N	N - CASGEM Well 17043 (12N05E06R001M) avg DTW = 53 (84 points; 2000-2020) Y - CASGEM Well 40137 (So Sut WD, 13N05E31K001M) avg DTW = 27 (94 points, 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail												
12	5	8	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft.	35-45	none	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Semipermanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Typha angustifolia*	Narrowleaf Cattail	Schoenoplectus acutus*	Hardstem Bullrush	Populus fremontii	Fremont Cottonwood								
12	5	9	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	45-50	none	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail												
12	5	10	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	40-50	none	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Salix gooddingii	Goodding's Willow										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	5	11	Dammed unnamed drainages	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	40-51	Conservancy Fairy Shrimp Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 49942 (Airport 4 MW, 12N06E07) avg DTW = 45 (86 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Salix gooddingii	Goodding's Willow												
12	5	12	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	35-40	none	Flat	Flat	N - CASGEM Well 49942 (Airport 4 MW, 12N06E07) avg DTW = 45 (86 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
12	5	13	Markham Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft.	40-50	none	Flat	Flat	N - CASGEM Well 49942 (Airport 4 MW, 12N06E07) avg DTW = 45 (86 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Salix exigua	Narrowleaf Willow	Typha angustifolia*	Narrowleaf Cattail	Schoenoplectus acutus*	Hardstem Bullrush	Populus fremontii	Fremont Cottonwood						
12	5	14	Markham Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft.	45-50	none	Flat	Flat	N - CASGEM Well 49942 (Airport 4 MW, 12N06E07) avg DTW = 45 (86 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Unconsolidated Shore, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak						
12	5	15	Markham Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft.	45-55	none	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded, Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Typha angustifolia*	Narrowleaf Cattail	Salix gooddingii	Goodding's Willow	Populus fremontii	Fremont Cottonwood						
12	5	16	Markham Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft.	45-55	none	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Scrub-Shrub, Seasonally Flooded	Salix exigua	Narrowleaf Willow	Typha angustifolia*	Narrowleaf Cattail	Salix gooddingii	Goodding's Willow						
12	5	17	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft.	45-55	Tricolored Blackbird	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix gooddingii	Goodding's Willow	Salix exigua	Narrowleaf Willow	Typha angustifolia*	Narrowleaf Cattail						
12	5	18	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	40-50	Tricolored Blackbird	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix gooddingii	Goodding's Willow										
12	5	19	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	50	none	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bullrush										
12	5	20	Unspecified area	0	Not Likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	50-65	none	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	5	21	Unspecified area	0	Not Likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	55-65	none	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	none														
12	5	22	Unspecified area	0	Not Likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	60-70	none	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bullrush												
12	5	23	Lincoln Communication Annex	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	50-55	Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp	Y	N	N - CASGEM Well 32903 (12N05E17A002M) avg DTW = 58 (254 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak												
12	5	24	Unspecified area	0	Not Likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	50	none	N	N	N - CASGEM Well 49927 (MW 1-1, 12N06E30) avg DTW = 57 (85 points; 2012-2020)	none	Quercus lobata	Valley Oak												
12	5	25	Auburn Ravine	1	Not Likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft.	50-60	Swainson's Hawk Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 49927 (MW 1-1, 12N06E30) avg DTW = 57 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Unconsolidated Shore, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow						
12	5	26	Auburn Ravine	1	Not Likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft.	55-65	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 49927 (MW 1-1, 12N06E30) avg DTW = 57 (85 points; 2012-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Salix exigua	Narrowleaf Willow	Typha angustifolia*	Narrowleaf Cattail						
12	5	27	Auburn Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	60-70	none	Y	N	N - CASGEM Well 32067 (12N05E33C001M) avg DTW = 77 (119 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail										
12	5	28	Auburn Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	60-70	none	Y	N	N - CASGEM Well 32066 (12N05E29D001M) avg DTW = 57 (122 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	5	29	Auburn Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	60-70	none	Y	N	N - CASGEM Well 32066 (12N05E29D001M) avg DTW = 57 (122 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Populus fremontii	Fremont Cottonwood												
12	5	30	Auburn Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	55-65	none	Y	N	N - CASGEM Well 32066 (12N05E29D001M) avg DTW = 57 (122 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood												
12	5	31	King Slough	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	50-65	none	Y	N	N - CASGEM Well 32066 (12N05E29D001M) avg DTW = 57 (122 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
12	5	32	King Slough	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	65-75	none	Y	N	N - CASGEM Well 32066 (12N05E29D001M) avg DTW = 57 (122 points; 2000-2020)	none														
12	5	33	King Slough	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	70-80	none	Y	N	N - CASGEM Well 32067 (12N05E33C001M) avg DTW = 77 (119 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
12	5	34	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Typha angustifolia is dependent on shallow groundwater[2]	65-75	none	Y	N	N - CASGEM Well 32067 (12N05E33C001M) avg DTW = 77 (119 points; 2000-2020)	none	Typha angustifolia*	Narrowleaf Cattail												
12	5	35	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	60-75	none	Y	N	N - CASGEM Well 32067 (12N05E33C001M) avg DTW = 77 (119 points; 2000-2020)	none														
12	5	36	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	55-70	none	Y	N	N - CASGEM Well 32067 (12N05E33C001M) avg DTW = 77 (119 points; 2000-2020)	none														
12	6	2	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft. Quercus lobata has a rooting depth of 24.02[1].	30	none	Flat	Flat	N - CASGEM Well 51329 (Swainson, 12N06E05) avg DTW = 30 (60 points; 2015-2020)	Palustrine, Unconsolidated Shore, Seasonally Flooded, Californian Warm Temperate Marsh/Seep Group	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
12	6	3	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	30	none	Flat	Flat	N - CASGEM Well 51329 (Swainson, 12N06E05) avg DTW = 30 (60 points; 2015-2020)	none														
12	6	4	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	All species present have root depths that are shallow[1,2,3]. Species are likely dependent on the seeps and seasonal flooding, not groundwater.	30	Tri-Colored Blackbird	Flat	Flat	N - CASGEM Well 51329 (Swainson, 12N06E05) avg DTW = 30 (60 points; 2015-2020) N - CASGEM Well 13162 (12N06E06A001M) avg DTW = 32 (75 points; 2012-2020) N - CASGEM 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Emergent, Persistent, Semipermanently Flooded, California Warm Temperate Marsh/Seep	Typha angustifolia*	Narrowleaf Cattail	Schoenoplectus acutus*	Hardstem Bullrush	Populus fremontii	Fremont Cottonwood								

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12	6	5	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Quercus lobata (less than 3 acres) is located along W. Wise Rd and likely not dependent on groundwater, but on irrigation from adjacent ag operation (alfalfa). GDEs in this section are sparse.	30	Tri-Colored Blackbird Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 51329 (Swainson, 12N06E05) avg DTW = 30 (60 points; 2015-2020) N - CASGEM Well 13162 (12N06E06A001M) avg DTW = 32 (75 points; 2012-2020) N - CASGEM 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bullrush	Quercus lobata	Valley Oak												
12	6	6	Lincoln Regional Airpark	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	30-35	none	Flat	Flat	N - CASGEM Well 51329 (Swainson, 12N06E05) avg DTW = 30 (60 points; 2015-2020) N - CASGEM Well 13162 (12N06E06A001M) avg DTW = 32 (75 points; 2012-2020) N - CASGEM 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
12	6	7	Lincoln Regional Airpark	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	35-40	none	Flat	Flat	N - CASGEM Well 49942 (Airport 4 MW, 12N06E07) avg DTW = 45 (86 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
12	6	8	Residential/Commercial	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	35-40	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 49942 (Airport 4 MW, 12N06E07) avg DTW = 45 (86 points; 2012-2020)	California Warm Temperate Marsh/Seep	Typha angustifolia*	Narrowleaf Cattail	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow	Populus fremontii	Fremont Cottonwood						
12	6	9	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	35-50	Swainson's Hawk	Flat	Flat	N - CASGEM Well 49942 (Airport 4 MW, 12N06E07) avg DTW = 45 (86 points; 2012-2020)	California Warm Temperate Marsh/Seep	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow	Quercus lobata	Valley Oak						
12	6	10	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	35-40	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 51329 (Swainson, 12N06E05) avg DTW = 30 (60 points; 2015-2020)	California Warm Temperate Marsh/Seep, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Emergent, Persistent, Semipermanently Flooded	Schoenoplectus acutus*	Hardstem Bullrush	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood								

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	6	11	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Quercus lobata has a rooting depth of 24.02[1]. Species in northern portion of the section may be dependent on groundwater. The southern portion of the section has DTW greater than 30 ft	30-35	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	Arid West freshwater emergent marsh, Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
12	6	12	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Quercus lobata has a rooting depth of 24.02[1].	30-35	none	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	none	Quercus lobata	Valley Oak												
12	6	13	Turkey Creek Golf Club	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Quercus lobata has a rooting depth of 24.02[1].	35	none	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	none	Quercus lobata	Valley Oak												
12	6	14	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Quercus lobata has a rooting depth of 24.02[1]. Can be eliminated because DTW is greater than 30 ft.	35-40	none	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail								
12	6	15	Residential/Commercial	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Quercus lobata has a rooting depth of 24.02[1].	40-50	none	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Schoenoplectus acutus*	Hardstem Bullrush								
12	6	16	Residential	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Quercus lobata has a rooting depth of 24.02[1]. Can be eliminated because DTW is greater than 30 ft.	45-55	none	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, California Warm Temperate Marsh/Seep	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow								
12	6	17	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	50	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 49934 (MW 3-1, 12N06E17) avg DTW = 55 (85 points; 2012 - 2020)	Palustrine, Unconsolidated Bottom, Permanently Flooded, California Warm Temperate Marsh/Seep	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow	Typha angustifolia*	Narrowleaf Cattail						
12	6	18	Markham Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	40-50	none	Flat	Flat	N - CASGEM Well 49942 (Airport 4 MW, 12N06E07) avg DTW = 45 (86 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, California Warm Temperate Marsh/Seep	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail	Juglans hindsii and hybrids*	No Cal Black Walnut	Populus fremontii	Fremont Cottonwood						

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	6	19	Auburn Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	50	none	N	N	N - CASGEM Well 49927 (MW 1-1, 12N06E30) avg DTW = 57 (85 points; 2012-2020)	Palustrine, Forested, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, California Warm Temperate Marsh/Seep	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow										
12	6	20	Auburn Ravine	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft	50	Tri-Colored Blackbird Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 49941 (SLC - 3, 12N06E29) avg DTW = 65 (70 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak														
12	6	21	Auburn Ravine	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	50	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	California Warm Temperate Marsh/Seep, Palustrine, Emergent, Persistent, Seasonally Flooded	Juglans hindsii*	No Cal Black Walnut	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow										
12	6	22	Residential/Commercial	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	45-50	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Acer negundo	Box-elder	Populus fremontii	Fremont Cottonwood										
12	6	23	Ingram Slough	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft.	40	none	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail														
12	6	24	Ingram Slough	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft.	40	none	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Typha angustifolia*	Narrowleaf Cattail														
12	6	25	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft.	40	none	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	California Warm Temperate Marsh/Seep, Palustrine, Forested, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail	Salix gooddingii	Goodding's Willow										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
12	6	26	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft.	45-50	none	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, California Warm Temperate Marsh/Seep	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow	Salix gooddingii	Goodding's Willow										
12	6	27	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft.	50	Tricolored Blackbird, Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 49937 (MW 5-1, 12N06E21) avg DTW = 40 (85 points; 2012-2020) N - CASGEM Well 49938 (MW 5-2, 12N06E21) avg DTW = 36 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail												
12	6	28	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	55	Tricolored Blackbird, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp	N	N	N - CASGEM Well 49941 (SLC - 3, 12N06E29) avg DTW = 65 (70 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
12	6	29	Ingram Slough	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft	55-60	Tri-Colored Blackbird	N	N	N - CASGEM Well 49941 (SLC - 3, 12N06E29) avg DTW = 65 (70 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bullrush												
12	6	30	Orchard Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	50	none	N	N	N - CASGEM Well 49927 (MW 1-1, 12N06E30) avg DTW = 57 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow								
12	6	31	Orchard Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft	55-65	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 49927 (MW 1-1, 12N06E30) avg DTW = 57 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood												
12	6	32	Orchard Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft	55-65	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 49927 (MW 1-1, 12N06E30) avg DTW = 57 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood												
12	6	33	Orchard Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft	55-65	Tri-Colored Blackbird Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 49927 (MW 1-1, 12N06E30) avg DTW = 57 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix exigua	Narrowleaf Willow												
12	6	34	Orchard Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	50-60	Tri-Colored Blackbird	N	N	N - CASGEM Well 49941 (SLC - 3, 12N06E29) avg DTW = 65 (70 points; 2012-2020)	none	Salix exigua	Narrowleaf Willow	Salix gooddingii	Goodding's Willow	Typha angustifolia*	Narrowleaf Cattail								

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12	6	35	Residential	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	45-55	Tri-Colored Blackbird Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 49940 (SLC - 2, 12N06E29) avg DTW = 72 (79 points, 2012-2020	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
12	6	36	Residential	0	Not Likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated DTW greater than 30 ft	40-45	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow	Quercus lobata	Quercus lobata								
12	7	19	Unspecified area	0	Not Likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs within NASb boundary	40	none			no representative hydrographs within contour interval	none																
12	7	29	Most of section is outside NASb boundary - Foothills	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs within NASb boundary	40	none			no representative hydrographs within contour interval	none																
12	7	30	Unspecified area	0	Not Likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft	40	none			no representative hydrographs within contour interval	Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak														
12	7	31	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated DTW greater than 30 ft	40	none			no representative hydrographs within contour interval	none	Quercus lobata	Valley Oak														
12	7	32	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	40	none			no representative hydrographs within contour interval	none																
13	4	11	Bear River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk Valley Elderberry Longhorned Beetle	Flat	Flat	Y - CASGEM Well 38351 (BR-1A, 13N04E11R005M) avg DTW = 14 (131 points; 2003-2020)	none w/in NASb boundary	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow	Salix exigua	Narrowleaf Willow										
13	4	12	Bear River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Valley Elderberry Longhorned Beetle	Flat	Flat	Y - CASGEM Well 38351 (BR-1A, 13N04E11R005M) avg DTW = 14 (131 points; 2003-2020)	none w/in NASb boundary	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow	Populus fremontii	Fremont Cottonwood	Salix lasiolepis	Arroyo Willow								
13	4	13	Yankee Slough	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Flat	Flat	Y - CASGEM Well 38351 (BR-1A, 13N04E11R005M) avg DTW = 14 (131 points; 2003-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow	Quercus lobata	Valley Oak										
13	4	14	Yankee Slough	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Flat	Flat	Y - CASGEM Well 38351 (BR-1A, 13N04E11R005M) avg DTW = 14 (131 points; 2003-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Juglans hindsii and hybrids*	No Cal Black Walnut	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow	Populus fremontii	Fremont Cottonwood						
13	4	15	Bear River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Y	N	Y - CASGEM Well 17191 (So Sut WD, 13N04E22D001M) avg DTW = 22 (76 points; 2000-2020)	none w/in NASb boundary	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix lasiolepis	Arroyo Willow	Acer negundo	Box-elder								
13	4	16	Bear River	4	Likely	DTW < 30 ft Critical Species may be present	Cannot be eliminated because DTW is less than 30 ft.	0-10	Giant garter snake Swainson's Hawk	Flat	N	Y - CASGEM Well 17188 (13N04E16N001M) avg DTW = 17 (164 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
						Diverse vegetation																					
13	4	17	Bear River - NASb - So Yuba boundary	3	Likely	DTW < 30 ft Critical Species may be present Lack of diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	N	Y - CASGEM Well 17188 (13N04E16N001M) avg DTW = 17 (164 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak											
13	4	20	Bear River - NASb - So Yuba boundary	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	N	Y - CASGEM Well 17188 (13N04E16N001M) avg DTW = 17 (164 points; 2000-2020)	none	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow									
13	4	21	Yankee Slough	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	N	Y - CASGEM Well 17188 (13N04E16N001M) avg DTW = 17 (164 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow	Salix exigua	Narrowleaf Willow	Populus fremontii	Fremont Cottonwood							
13	4	22	Yankee Slough	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Y	N	Y - CASGEM Well 17191 (So Sut WD, 13N04E22D001M) avg DTW = 22 (76 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Juglans hindsii and hybrids*	Northern California Black Walnut	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail									
13	4	23	Unspecified area	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Flat	N	Y - CASGEM Well 17193 (13N04E23A002M) avg DTW = 18 (152 points; 2000-2021)	Palustrine, Emergent, Persistent, Seasonally Flooded	Schoenoplectus acutus*	Hardstem Bullrush	Salix exigua	Narrowleaf Willow											
13	4	24	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	10-20	none	Flat	N	Y - CASGEM Well 17193 (13N04E23A002M) avg DTW = 18 (152 points; 2000-2021)	none															
13	4	25	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	10-20	none	Flat	N	Y - CASGEM Well 17193 (13N04E23A002M) avg DTW = 18 (152 points; 2000-2021)	none															
13	4	26	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	5-15	none	Flat	N	Y - CASGEM Well 17193 (13N04E23A002M) avg DTW = 18 (152 points; 2000-2021)	none															
13	4	27	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	0-10	none	Flat	N	N - CASGEM Well 24452 (So Sut, 13N04E33J002M) avg DTW = 33 (46 points, 2008-2020)	Palustrine, Emergent, Persistent, Semipermanently Flooded															
13	4	28	Ping Slough	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Flat	N	N - CASGEM Well 24452 (So Sut, 13N04E33J002M) avg DTW = 33 (46 points, 2008-2020)	Palustrine, Emergent, Persistent, Semipermanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Broad-Leaved-Evergreen, Seasonally Flooded, Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Typha angustifolia*	Narrowleaf Cattail	Quercus lobata	Valley Oak	Schoenoplectus acutus*	Hardstem Bullrush	Salix gooddingii	Goodding's Willow							

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
13	4	29	Yankee and Ping Sloughs	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Y	N	Y - CASGEM Well 35623 (13N04E32G001M) avg DTW = 25 (71 points; 2000-2020)	Palustrine, Forested, Broad-Leaved-Evergreen, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Unconsolidated Bottom, Semipermanently Flooded	Schoenoplectus acutus*	Hardstem Bullrush	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow								
13	4	30	Feather River/Yankee and Ping Sloughs	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk	Y	N	Y - CASGEM Well 35623 (13N04E32G001M) avg DTW = 25 (71 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow										
13	4	31	Yankee & Ping Sloughs	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	Swainson's Hawk Tricolored Blackbird (possibly extirpated)	Y	N	Y - CASGEM Well 35623 (13N04E32G001M) avg DTW = 25 (71 points; 2000-2020)	Palustrine, Aquatic Bed, Semipermanently Flooded, Palustrine, Unconsolidated Bottom, Semipermanently Flooded, Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Juglans hindsii and hybrids*	No Cal Black Walnut										
13	4	32	Unspecified area	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminate as DTW is less than 30 ft	0-10	none	Y	N	Y - CASGEM Well 35623 (13N04E32G001M) avg DTW = 25 (71 points; 2000-2020)	none	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												
13	4	33	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	0-10	none	Flat	N	N - CASGEM Well 24452 (So Sut, 13N04E33J002M) avg DTW = 33 (46 points, 2008-2020)	none																
13	4	34	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	5-15	none	Flat	N	N - CASGEM Well 24452 (So Sut, 13N04E33J002M) avg DTW = 33 (46 points, 2008-2020)	none																
13	4	35	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	10-20	none	Y	N	Y - CASGEM Well 35624 (So Sut WD, 13N04E35Q002M) avg DTW = 29 (63 points, 2000-2020)	none																
13	4	36	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15-25	none	Y	N	Y - CASGEM Well 35624 (So Sut WD, 13N04E35Q002M) avg DTW = 29 (63 points, 2000-2020)	none																
13	5	1	Bear River	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	35-45	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak												
13	5	2	Bear River	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of	Can be eliminated because DTW is greater than 30 ft	30-35	none	N	N	N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points, 2016-2020)	none	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
						diverse vegetation																					
13	5	3	Bear River - no GDEs within NASb boundary	1	Not likely	DTW < 30 ft No Critical Species w/in NASb boundary No vegetation w/in NASb boundary	No GDEs within NASb boundary	20-30	none	N	N	N - CASGEM Well 47857 (PMW-27, 14N05E34F003 M) avg DTW = 59 (2765 points; 2007-2020) N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020)	none														
13	5	7	Bear River	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	All species present have root depths that are shallow[1]. Based on average DTW in nearby wells DTW is greater than 30 ft.	10-20	none	Flat/Y	N	Y - CASGEM Well 35627 (YCWA-13, 13N05E06R004 M) avg DTW = 29 (107 points; 2011-2020) Y - CASGEM Well 17209 (So Sut WD, 13N05E18C001 M) avg DTW = 28 (73 points; 2000-2020)	none	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow	Salix exigua	Narrowleaf Willow								
13	5	8	Bear River	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft	10-20	none	Flat/Y	N	Y - CASGEM Well 35627 (YCWA-13, 13N05E06R004 M) avg DTW = 29 (107 points; 2011-2020) Y - CASGEM Well 17209 (So Sut WD, 13N05E18C001 M) avg DTW = 28 (73 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow	Arundo donax**	Giant Reed	Salix exigua	Narrowleaf Willow						
13	5	9	Bear River	3	Likely	DTW < 30 ft No Critical Species Diverse Vegetation	Quercus lobata maximum rooting depth is 24.31[1]; cannot be eliminated	20-25	none	Flat/Y	N	Y - CASGEM Well 35627 (YCWA-13, 13N05E06R004 M) avg DTW = 29 (107 points; 2011-2020) Y - CASGEM Well 17209 (So Sut WD, 13N05E18C001 M) avg DTW = 28 (73 points; 2000-2020)	none	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow	Populus fremontii	Fremont Cottonwood	Arundo donax**	Giant Reed						
13	5	10	Bear River	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Quercus lobata maximum rooting depth is 24.31[1]; cannot be eliminated.	25-30	Swainson's Hawk Vernal Pool Fairy Shrimp Valley Elderberry Longhorned Beetle	Y	N*/N	Y - CASGEM Well 17206 (13N05E09R001 M) avg DTW = 27 (87 points; 2000-2017) Y - CASGEM 17209 (So Sut WD, 13N05E18C001 M) avg DTW = 28 (73 points; 2000-2020)	California Warm Temperate Marsh/Seep, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Salix gooddingii	Goodding's Willow	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak						
13	5	11	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Populus fremontii has a maximum rooting depth of 16.4 ft[1].	30-45	none	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	California Warm Temperate Marsh/Seep	Populus fremontii	Fremont Cottonwood												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
13	5	12	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	35-45	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
13	5	13	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	30-50	none	N	N	N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points, 2016-2020)	none														
13	5	14	Unspecified area	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Populus fremontii has a maximum rooting depth of 6.89[1].	25-30	none	N	N	N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points, 2016-2020)	none	Populus fremontii	Fremont Cottonwood												
13	5	15	Unspecified area	4	Likely	DTW < 30 ft Critical Species may be present Diverse vegetation	Populus fremontii has a maximum rooting depth of 6.89[1]. All other species have shallow rooting depth[1,2].	25	Vernal Pool Fairy Shrimp	Y	N/N*	Y - CASGEM Well 17210 (13N05E22C003M) avg DTW = 27 (78 points; 2000-2020) Y - CASGEM Well 17206 (13N05E09R001M) avg DTW = 27 (87 points; 2000-2017)	Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, California Warm Temperate Marsh/Seep	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow								
13	5	16	Yankee Slough	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Populus fremontii has a maximum rooting depth of 16.4 ft[1].	20-25	none	Y	N/N*	Y - CASGEM Well 17210 (13N05E22C003M) avg DTW = 27 (78 points; 2000-2020) Y - CASGEM Well 17206 (13N05E09R001M) avg DTW = 27 (87 points; 2000-2017)	none	Populus fremontii	Fremont Cottonwood												
13	5	17	Yankee Slough	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Populus fremontii has a maximum rooting depth of 16.4 ft[1].	25	none	Flat	N	N - CASGEM Well 17208 (13N05E17R001M) avg DTW = 31 (135 points, 2000-2021)	none	Populus fremontii	Fremont Cottonwood												
13	5	18	Yankee Slough	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Cannot be eliminated because DTW is less than 30 ft.	0-10	none	Y	N	Y - CASGEM Well 17209 (So Sut WD, 13N05E18C001M) avg DTW = 28 (73 points; 2000-2020)	none	Salix exigua	Narrowleaf Willow												
13	5	19	Unspecified area	1	Not Likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	15-25	none	Y	N	Y - CASGEM Well 17209 (So Sut WD, 13N05E18C001M) avg DTW = 28 (73 points; 2000-2020)	California Warm Temperate Marsh/Seep														
13	5	20	Unspecified area	1	Not Likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	20-30	none	Flat	N	N - CASGEM Well 17208 (13N05E17R001M) avg DTW = 31 (135 points, 2000-2021)	none														
13	5	21	Yankee Slough	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Populus fremontii has a maximum rooting depth of 16.4 ft[1].	25	none	Flat	N	Y - CASGEM Well 24451 (13N05E16F001M) avg DTW = 27 (36 points; 2008-2020) N - CASGEM Well 17208 (13N05E17R001M) avg DTW = 31 (135 points; 2000-2021)	none	Populus fremontii	Fremont Cottonwood												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
13	5	22	Yankee Slough	0	Not Likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Populus fremontii has a maximum rooting depth of 16.4 ft[1].	30-35	none	Y	N	Y - CASGEM Well 17210 (13N05E22C003 M) avg DTW = 27 (78 points; 2000-2020) N - CASGEM Well 17208 (13N05E17R001 M) avg DTW = 31 (135 points; 2000-2021)	none	Populus fremontii	Fremont Cottonwood												
13	5	23	Surface water ponds?	0	Not Likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Populus fremontii has a maximum rooting depth of 16.4 ft and Salix gooddingii has a maximum rooting depth of 6.89[1].	30-35	none	N	N	N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points, 2016-2020)	none	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood	Schoenoplectus acutus*	Hardstem Bullrush	Salix gooddingii	Goodding's Willow						
13	5	24	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can eliminate because DTW is greater than 30 ft.	35-40	Tri-Colored Blackbird	N	N	N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points, 2016-2020)	California Warm Temperate Marsh/Seep, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Emergent, Persistent, Semipermanently Flooded	Schoenoplectus acutus*	Hardstem Bullrush	Populus fremontii	Fremont Cottonwood										
13	5	25	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	40	none	N	N	N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points, 2016-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
13	5	26	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	35-40	none	Flat	Flat	N - CASGEM Well 32899 (12N05E01D002 M) avg DTW =32 (84 points, 2000-2020	California Warm Temperate Marsh/Seep														
13	5	27	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	35	none	Y	N	N - CASGEM Well 35633 (13N 05E34P001M) avg DTW =49 (95 points, 2000-2020)	none														
13	5	28	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	30-35	none	Y	N	N - CASGEM Well 35633 (13N 05E34P001M) avg DTW =49 (95 points, 2000-2020)	none														
13	5	29	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	25-35	none	Flat	N	N - CASGEM Well 17208 (13N05E17R001 M) avg DTW = 31 (135 points, 2000-2021)	none														
13	5	30	Unspecified area	1	Not likely	DTW < 30 ft No Critical Species No vegetation	No GDEs	20-30	none	Y	N	Y - CASGEM Well 40137 (So Sut WD, 13N05E31K001 M) avg DTW = 29 (94 points; 2000-2020)	none														
13	5	31	Raccoon Ck	2	Less Likely	DTW < 30 ft No Critical Species Lack of Diverse Vegetation	Salix gooddingii has a maximum rooting depth of 6.89[1]	25-30	none	Y	N/N*	Y- CASGEM Well 40137 (So Sut WD, 13N05E31K001 M) avg DTW = 29 (94 points; 2000-2020) N- CASGEM Well 35632 (13N05E30A001 M) avg DTW = 43 (100 points, 2000-2019)	Palustrine, Forested, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Salix gooddingii	Goodding's Willow										

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
13	5	32	Raccoon Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	30-35	none	Y	N	Y - CASGEM Well 40137 (So Sut WD, 13N05E31K001M) avg DTW = 29 (94 points; 2000-2020) N - CASGEM Well 35633 (13N05E34P001M) avg DTW = 49 (97 points; 2000-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Salix gooddingii	Goodding's Willow	Populus fremontii	Fremont Cottonwood												
13	5	33	Raccoon Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft	35	none	Y	N	Y - CASGEM Well 40137 (So Sut WD, 13N05E31K001M) avg DTW = 29 (94 points; 2000-2020) N - CASGEM Well 35633 (13N05E34P001M) avg DTW = 49 (97 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail	Platanus racemosa	California Sycamore	Salix gooddingii	Goodding's Willow						
13	5	34	Raccoon Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	35	none	Y/Flat	N/Flat	N - CASGEM Well 35633 (13N05E34P001M) avg DTW = 41 (97 points; 2000-2020) N - CASGEM Well 32899 (12N05E01D002M) avg DTW = 32 (115 points; 2000-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow												
13	5	35	Raccoon Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	35	none	Y/Flat	N/Flat	N - CASGEM Well 35633 (13N05E34P001M) avg DTW = 41 (97 points; 2000-2020) N - CASGEM Well 32899 (12N05E01D002M) avg DTW = 32 (115 points; 2000-2020)	Palustrine, Forested, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak												
13	5	36	Raccoon Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	35	none	Flat	Flat	N - CASGEM Well 32899 (12N05E01D002M) avg DTW =32 (84 points, 2000-2020	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Quercus lobata	Valley Oak												
13	6	5	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	45	none	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	California Warm Temperate Marsh/Seep												

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
13	6	6	Unspecified area	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	45	none	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	none																
13	6	7	appears to be artificial pond - no nearby drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	45	none	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Salix gooddingii	Goodding's Willow														
13	6	8	Racoon Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	50	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak														
13	6	9	Racoon Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	45	none	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow												
13	6	10	Most of section is outside NASb boundary - Foothills	0	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs (Himalayan Blackberry)	40	none			no representative hydrographs within contour interval	none																
13	6	15	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs - Himalayan Blackberry	40	Tricolored Blackbird			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded																
13	6	16	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	40	none	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	California Warm Temperate Marsh/Seep, Palustrine, Emergent, Persistent, Semipermanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood												
13	6	17	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft	50	California Black Rail Tri-Colored Blackbird	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	Palustrine, Emergent, Persistent, Semipermanently Flooded, Palustrine, Scrub-Shrub, Seasonally Flooded, Palustrine, Forested, Seasonally Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded, California Warm	Schoenoplectus acutus*	Hardstem Bullrush	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak								

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
													Temperate Marsh/Seep															
13	6	18	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	50	Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	Palustrine, Emergent, Persistent, Seasonally	Schoenoplectus acutus*	Hardstem Bullrush												
13	6	19	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft	50	Tri-Colored Blackbird Vernal Pool Fairy Shrimp	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	California Warm Temperate Marsh/Seep	Schoenoplectus acutus*	Hardstem Bullrush	Salix exigua	Narrowleaf Willow	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail						
13	6	20	Unnamed drainage	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	40-55	Vernal Pool Fairy Shrimp Swainson's Hawk	N	N	N - CASGEM Well 52555 (Spencer, 13N05E12) avg DTW = 52 (59 points; 2016-2020) N - CASGEM Well 51330 (MW-1, 13N05E13) avg DTW = 35 (58 points; 2016-2020)	Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
13	6	21	Raccoon Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft	40	Swainson's Hawk			no representative hydrographs within contour interval	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Salix gooddingii	Goodding's Willow								
13	6	22	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Quercus lobata has a rooting depth of 24.31[1]. Other species required shallower DTW. Species likely dependent on surface water[1,2].	30-35	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow	Quercus lobata	Valley Oak	Salix gooddingii	Goodding's Willow						
13	6	26	Most of section is outside NASb boundary - Foothills	0	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	30	none			no representative hydrographs within contour interval	none														

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/21)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
13	6	27	Unnamed drainage	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Quercus lobata has a rooting depth of 24.31[1]. Other species required shallower DTW. Species likely dependent on surface water[1,2].	30	none			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Salix exigua	Narrowleaf Willow	Quercus lobata	Valley Oak								
13	6	28	Unnamed drainage & Doty Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Quercus lobata has a rooting depth of 24.31[1]. Other species required shallower DTW. Species likely dependent on surface water[1,2].	30-40	Tricolored Blackbird	Flat	Flat	N - CASGEM Well 13162 (12N06E06A001M) avg DTW = 32 (75 points; 2012-2020) Y - CASGEM Well 49931 (MW 2-1, 12N06E06) avg DTW = 13 (85 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail	Salix exigua	Narrowleaf Willow							
13	6	29	Raccoon Ck	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Quercus lobata has a rooting depth of 24.31[1]. Populus fremontii has a maximum rooting depth of 16.4[1]. Species likely dependent on surface water.	30-35	none	Flat	Flat	N - CASGEM Well 13162 (12N06E06A001M) avg DTW = 32 (75 points; 2012-2020) N - CASGEM 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
13	6	30	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present No vegetation	No GDEs	35-45	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 13162 (12N06E06A001M) avg DTW = 32 (75 points; 2012-2020) N - CASGEM 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded														
13	6	31	Raccoon Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Quercus lobata maximum rooting depth is 24.31[1]	30-35	none	Flat	Flat	N - CASGEM Well 13162 (12N06E06A001M) avg DTW = 32 (75 points; 2012-2020) N - CASGEM 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Juglans hindsii and hybrids*	California Walnut							
13	6	32	Raccoon Ck & Doty Ck	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Quercus lobata maximum rooting depth is 24.31[1]	30-35	none	Flat	Flat	N - CASGEM Well 13162 (12N06E06A001M) avg DTW = 32 (75 points; 2012-2020) N - CASGEM 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded, Riverine, Unknown Perennial, Unconsolidated Bottom, Semipermanently Flooded, Palustrine, Forested, Seasonally Flooded	Quercus lobata	Valley Oak	Typha angustifolia*	Narrowleaf Cattail	Populus fremontii	Fremont Cottonwood							

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[9]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
13	6	33	Doty Ravine	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Quercus lobata maximum rooting depth is 24.312	30	Vernal Pool Fairy Shrimp	Flat	Flat	N - CASGEM Well 13162 (12N06E06A001M) avg DTW = 32 (75 points; 2012-2020) N - CASGEM 49933 (MW 2-3, 12N06E06) avg DTW = 33 (84 points; 2012-2020)	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Emergent, Persistent, Semipermanently Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Typha angustifolia*	Narrowleaf Cattail								
13	6	34	Doty Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Quercus lobata maximum rooting depth is 24.313	30	none	Flat	Flat	N - CASGEM Well 51329 (Swainson, 12N06E05) avg DTW = 30 (60 points; 2015-2020)	California Warm Temperate Marsh/Seep, Palustrine, Emergent, Persistent, Seasonally Flooded	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood	Platanus racemosa	California Sycamore								
13	6	35	Doty Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Quercus lobata maximum rooting depth is 24.314	30	none	Flat	Flat	N - CASGEM Well 51329 (Swainson, 12N06E05) avg DTW = 30 (60 points; 2015-2020)	California Warm Temperate Marsh/Seep, Palustrine, Emergent, Persistent, Semipermanently Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
13	6	36	Doty Ravine	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Quercus lobata maximum rooting depth is 24.315	30	none			no representative hydrographs within contour interval	none	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
14	5	25	Bear River - NASb - So Yuba boundary	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	35-40	none	N	N	N - CASGEM Well 47857 (PMW-27 14N05E34F003M) avg DTW = 59 (2765 points; 2007-2020)	none	Quercus lobata	Valley Oak	Populus fremontii	Fremont Cottonwood										
14	5	35	Bear River - NASb - So Yuba boundary	0	Not likely	DTW ≥ 30 ft No Critical Species No vegetation	No GDEs	40	none	N	N	N - CASGEM Well 47857 (PMW-27 14N05E34F003M) avg DTW = 59 (2765 points; 2007-2020)	none														
14	5	36	Bear River w/in NASb boundary	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	40	none	N	N	N - CASGEM Well 47857 (PMW-27 14N05E34F003M) avg DTW = 59 (2765 points; 2007-2020)	Palustrine, Scrub-Shrub, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood												
14	6	29	Bear River	0	Not likely	DTW ≥ 30 ft No Critical Species Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft	40	none			no representative hydrographs within contour interval	California Warm Temperate Marsh/Seep, Palustrine, Scrub-Shrub, Emergent, Persistent, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak										
14	6	30	Dammed section of Bear River & adjacent to Camp Far West Resv	0	Not likely	DTW ≥ 30 ft No Critical Species Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft	40	none			no representative hydrographs within contour interval	California Warm Temperate Marsh/Seep, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded, Palustrine, Emergent, Persistent, Unconsolidated Shore, Seasonally Flooded	Quercus lobata	Valley Oak	Salix exigua	Narrowleaf Willow	Salix gooddingii	Goodding's Willow	Populus fremontii	Fremont Cottonwood	Salix lasiolepis	Arroyo Willow	Sambucus Nigra	Common Elderberry		

T	R	Sec	Location	Score	GDE - Likely, Not Likely, Less likely	Rationale	Rationale Comments	DTW Contour Interval (ft)[7]	Critical species[8]	Water Levels Declining (all data points)	Water Levels Declining (2015-2020/2021)	GW - SW Connection (verified by Hydrograph within 3.1 mi)	Wetland Designation[9]	Plants-dominant[0]		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant		Plants-sub-dominant	
14	6	31	Dammed section of Bear River & adjacent to Camp Far West Resv	1	Not likely	DTW ≥ 30 ft Critical Species may be present Diverse vegetation have rooting depths less than DTW	Can be eliminated because DTW is greater than 30 ft.	40	Bank Swallow			no representative hydrographs within contour interval	Palustrine, Emergent, Persistent, Seasonally Flooded, Palustrine, Emergent, Persistent, Unconsolidated Shore, Seasonally Flooded, Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded	Populus fremontii	Fremont Cottonwood	Quercus lobata	Valley Oak	Salix lasiolepis	Arroyo Willow	Schoenoplectus acutus*	Hardstem Bulrush	Salix exigua	Narrowleaf Willow						
14	6	32	Unspecified area	1	Not likely	DTW ≥ 30 ft Critical Species may be present Lack of diverse vegetation	Can be eliminated because DTW is greater than 30 ft.	40	Vernal Pool Fairy Shrimp			no representative hydrographs within contour interval	none	Schoenoplectus acutus*	Hardstem Bulrush														

Scoring:

DTW < 30 ft = 2

Critical Species Identified = 1

Diverse vegetation (3 or more plant species) = 1

DTW ≥ 30 ft = 0

No vegetation present = -1

Lack of diverse vegetation = 0

Diverse vegetation with rooting depths less than DTW = 0

"Vegetation" = vegetation listed in the NCCAG dataset

*Data does not extend to 2020/2021

Used avg static DTW

Proposed GSP monitoring wells

May not be dependent on groundwater

May be dependent on groundwater

*Not on TNC CA Phreatophyte Rooting List; on Comprehensive Root Depth List

**Not on TNC CA Phreatophyte Rooting List or Comprehensive Root Depth List

[1] TNC Plant Rooting Depth Database (Acer negundo, Fraxinus latifolia (used F.velutin), Populus fremontii, Quercus lobata, Salix gooddingii, Salix exigua (used rooting depth for S. gooddingii, Salix lasiolepis)

[2] CalFlora.org (Heterotheca oregona, Typha angustifolia)

[3] USDA FEIS Database (Alnus rhombifolia, Sambucus nigra, Schoenoplectus acutus, Vitas californica)

[4] https://www.fws.gov/sacramento/es_species/Accounts/Invertebrates/valley_elderberry_longhorn_beetle/

[5] https://plants.usda.gov (Platanus racemosa)

[6] https://www.habitatmatters.org/narrow-leaf-cattail.html)

[7] NASb Spring 2019 DTW

[8] https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data - RareFind 5

[9] https://gis.water.ca.gov/app/NCDatasetViewer/

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Table O-2. Groundwater Contouring Monitoring Well Construction Details

CASGEM SITE_CODE	LATITUDE	LONGITUDE	CommonName	MSMT_DATE	WSE	WLM_ORG_NAME	Screened Interval (ft bgs)	Total Depth (ft bgs)
388893N1212847W001	38.889283	-121.28468	MW 4	4/15/2020 7:57	162.28	Sacramento Groundwater Authority	15-25	25
389774N1213728W001	38.977408	-121.372844	MW-3	4/15/2020 8:56	76.69	Placer County	19.5-34.5	35
387515N1212725W001	38.751494	-121.272511	WPMW-10A	4/15/2020 12:05	137.21	City of Roseville	26-36	36
387517N1212727W001	38.751667	-121.272656	WPMW-9A	4/15/2020 12:05	140.66	City of Roseville	26-36	36
389785N1213713W001	38.97846	-121.37132	MW-1	4/15/2020 8:36	77.47	Placer County	30-40	40
389764N1213710W001	38.976427	-121.371001	MW-2	4/15/2020 8:42	77.17	Placer County	24.3-44.3	45
	38.639539	-121.561543	URS71000-700+00F	3/19/2020 9:30	6.53	Sacramento Groundwater Authority	Unknown	45
	38.639704	-121.562435	URS71000-700+00C	3/19/2020 9:15	7.47	Sacramento Groundwater Authority	Unknown	45
	38.774911	-121.597535	SREL-1-27-F1	3/19/2020 8:00	14.06	Sacramento Groundwater Authority	Unknown	46
389950N1214148W002	38.994987	-121.414793	RDMW-103	3/19/2020 12:00	68.09	Placer County	28-43	48
389919N1214141W002	38.991944	-121.414066	RDMW-104	3/19/2020 12:00	67.2	Placer County	28-43	48
386160N1215054W001	38.61603	-121.5054	Bannon Creek Park	4/8/2020 9:54	1.66	Sacramento Groundwater Authority	33-48	48
389857N1214880W004	38.9857	-121.488	BR-1A	3/11/2020 11:05	47.25	Yuba County Water Agency	28-48	48
	38.882937	-121.611051	RDMW-101	3/19/2020	19.65	Sutter County	28-43	48
	38.879869	-121.588533	RDMW-102	3/19/2020	19.43	Sutter County	28-43	48
387510N1212390W001	38.750989	-121.23895	WPMW-8A	4/15/2020 12:52	203.57	City of Roseville	30-50	50
386292N1214877W001	38.62921	-121.4877	Chuckwagon Park	4/8/2020 10:11	-7.19	Sacramento Groundwater Authority	27-37	52
388476N1212872W001	38.847609	-121.28719	WPMW-3A	4/15/2020 10:13	147.57	City of Roseville	48-53	53
388826N1213078W002	38.882583	-121.30775	MW 5-2	4/15/2020 8:19	110.51	City of Lincoln	52-62	62
385841N1214185W001	38.58414	-121.41852	SGA_MW04	4/8/2020 9:11	2.59	Sacramento Groundwater Authority	55-65	65
385841N1214185W001	38.58414	-121.41852	SGA_MW04	4/8/2020 9:11	2.59	Sacramento Groundwater Authority	55-65	65
385828N1213385W001	38.58281	-121.33846	SGA_MW06	4/8/2020 8:36	12.59	Sacramento Groundwater Authority	62-72	72
388971N1213301W002	38.897133	-121.330083	MW 3-2	4/15/2020 7:46	77.25	City of Lincoln	65-75	75
389669N1214897W001	38.9669	-121.4897	13N04E23A002M	3/2/2020 0:00	45.28	Department of Water Resources	Unknown	83
389255N1213566W003	38.925467	-121.356633	MW 2-3	4/15/2020 7:19	95.19	City of Lincoln	75-85	85
388604N1213544W004	38.860383	-121.354383	MW 1-4	4/15/2020 10:00	58.17	City of Lincoln	82-92	92
389185N1213268W001	38.918461	-121.326842	Swainson	4/15/2020 9:58	112.59	Placer County	44.1-91.9	92
389867N1213654W002	38.9867	-121.365	Spencer	4/15/2020 9:36	84.66	Placer County	96-107	107
387218N1214677W001	38.72178	-121.46771	SGA_MW01	4/8/2020 10:52	-15.66	Sacramento Groundwater Authority	100-110	110
386836N1214536W001	38.68362	-121.45363	SGA_MW02	4/8/2020 10:40	-13.36	Sacramento Groundwater Authority	100-110	110
389740N1213606W001	38.974027	-121.360615	Cemetery	4/15/2020 9:17	78.66	Placer County	70-111	111
387786N1213737W001	38.778603	-121.373698	WPMW-1A	4/15/2020 9:27	-0.07	City of Roseville	110-120	120
388260N1215394W004	38.826	-121.5394	SUT-P1	3/10/2020 10:49	19.23	Sutter County	110-120	120
387626N1213651W001	38.762629	-121.365099	SVMW East-2A	4/15/2020 9:44	2.02	City of Roseville	125-135	140
387000N1212180W001	38.69998	-121.21795	SGA_MW08	4/8/2020 14:17	107.21	Sacramento Groundwater Authority	130-140	140
387623N1213915W001	38.762324	-121.39153	SVMW West - 1A	4/15/2020 8:36	-12.35	City of Roseville	120-140	145
388235N1216079W001	38.823235	-121.60763	Sutter County MW-5A	4/23/2020 8:20	17.15	Department of Water Resources	130-160	160
386874N1212206W001	38.68739	-121.22058	SGA_MW09	4/8/2020 14:26	109.92	Sacramento Groundwater Authority	150-160	160
388882N1214005W002	38.888164	-121.400463	WPMW-11A	4/15/2020 7:31	22.47	Placer County	132-152	162
387216N1213842W001	38.72163	-121.38417	Lone Oak Park	4/8/2020 11:12	-10.53	Sacramento Groundwater Authority	151-161	166
386280N1213493W001	38.628	-121.349	WCMSS	4/8/2020 8:15	-15.26	Sacramento Groundwater Authority	130-150	170
388116N1213054W001	38.811594	-121.305387	Tinker MW	4/15/2020 9:40	61.14	City of Roseville	117-177	177
389116N1215238W003	38.9116	-121.5238	AB-1 shallow	3/11/2020 11:45	34.32	Department of Water Resources	170-180	190
386964N1213120W001	38.6964	-121.31203	Twin Creeks Park	4/8/2020 13:37	-6.4	Sacramento Groundwater Authority	183-193	193
386547N1215320W001	38.6547	-121.532	386547N1215320W001	3/2/2020 0:00	4.21	Department of Water Resources	140-200	200
389791N1213727W001	38.979133	-121.372694	Old Well #2	4/15/2020 8:24	78.3	Placer County	144-209	209
386635N1213486W001	38.66347	-121.34859	SGA_MW05	4/8/2020 12:01	-13.68	Sacramento Groundwater Authority	205-215	215
388145N1213491W001	38.814497	-121.349144	WPMW-2A	4/15/2020 10:15	29.25	City of Roseville	215-225	225
387222N1212920W001	38.7222	-121.292	Whyte A	4/8/2020 13:21	10.21	Sacramento Groundwater Authority	200-220	226
386016N1213761W001	38.6016	-121.3761	DWR_SGA_004	3/5/2020 0:00	-19.10	Department of Water Resources	Unknown	238
388406N1215627W001	38.840601	-121.562699	S&O #17	4/25/2020 0:00	18.17	Sutter County	152-240	240
386038N1214357W001	38.6038	-121.4357	DWR_SGA_005	3/5/2020 0:00	-21.86	Department of Water Resources	Unknown	250
387511N1213389W001	38.7511	-121.3389		3/4/2020 0:00	5.02	Department of Water Resources	150-256	256
386310N1213864W001	38.63101	-121.38641	Well 10	4/28/2020 9:00	-25.91	Sacramento Groundwater Authority	210-262	265
386038N1213882W002	38.6038	-121.38815	MW11B	4/3/2020 12:30	-20.09	Sacramento Groundwater Authority	258-268	278
387957N1213813W001	38.795655	-121.38126	CVMW-1A	4/15/2020 9:14	1.61	City of Roseville	260-280	285
385947N1213985W001	38.59472	-121.39847	WPMW12A	4/3/2020 9:20	-16.3	Sacramento Groundwater Authority	260-280	300
388029N1214145W001	38.8029	-121.4145		3/4/2020 0:00	-10.04	Department of Water Resources	135-460	460
389292N1214056W001	38.9292	-121.4056		3/2/2020 0:00	50.50	Department of Water Resources	NA	NA
388667N1214513W001	38.8667	-121.4513	12N05E29D001M	3/4/2020 0:00	8.52	Department of Water Resources	NA	NA
387859N1216565W001	38.7859	-121.6565	RD 1500 Karnak	3/10/2020 0:00	17.03	Department of Water Resources	Unknown	Unknown