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<b>Project Title:</b>	Darden Clean Energy Project
<b>TN #:</b>	261664
<b>Document Title:</b>	Stormwater Report Appendices
<b>Description:</b>	Preliminary stormwater management report appendices. Although the pertinent information was included in Section 5.13 Water Resources of the original application materials, the CEC requested these documents be docketed.
<b>Filer:</b>	Becky Moores
<b>Organization:</b>	Intersect Power
<b>Submitter Role:</b>	Applicant
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NOAA Atlas 14, Volume 6, Version 2  
Location name: Helm, California, USA\*  
Latitude: 36.5146°, Longitude: -120.1727°  
Elevation: 191.44 ft\*\*  
\* source: ESRI Maps  
\*\* source: USGS



### POINT PRECIPITATION FREQUENCY ESTIMATES

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

NOAA, National Weather Service, Silver Spring, Maryland

[PF\\_tabular](#) | [PF\\_graphical](#) | [Maps\\_&\\_aerials](#)

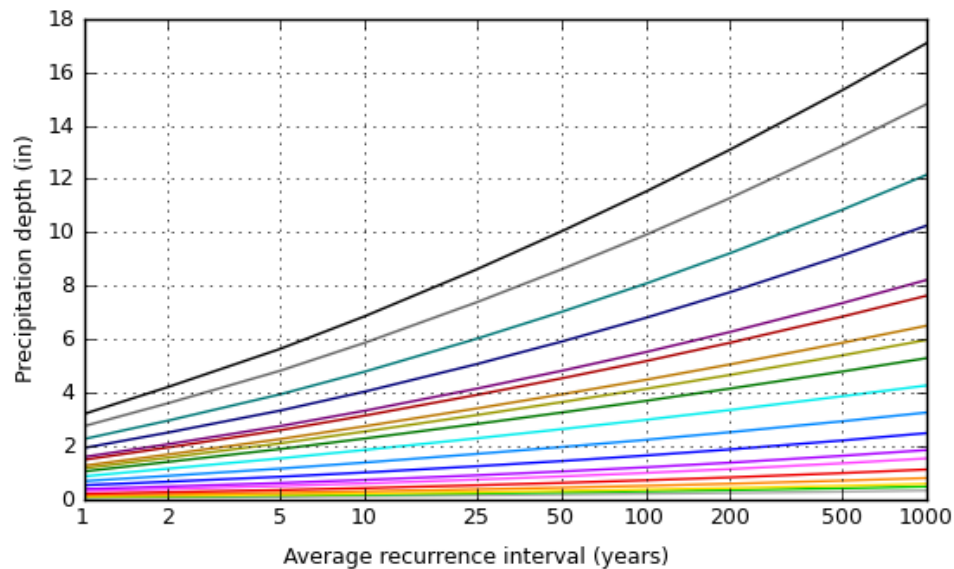
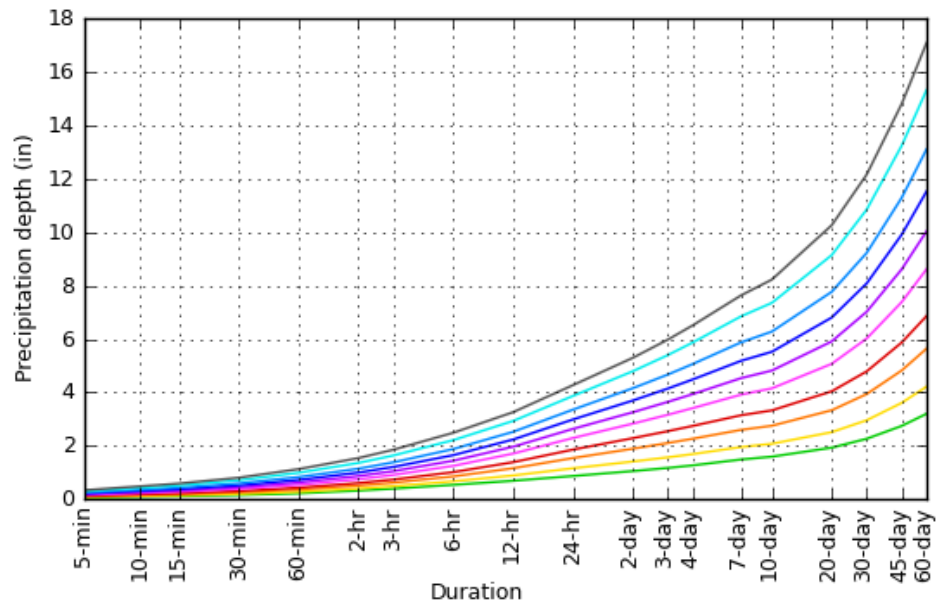
### PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) <sup>1</sup>										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.067 (0.060-0.077)	0.085 (0.075-0.097)	0.110 (0.096-0.126)	0.131 (0.114-0.152)	0.163 (0.137-0.197)	0.190 (0.156-0.235)	0.220 (0.175-0.279)	0.252 (0.194-0.331)	0.300 (0.221-0.413)	0.341 (0.241-0.488)
10-min	0.096 (0.085-0.110)	0.122 (0.107-0.139)	0.157 (0.138-0.180)	0.188 (0.164-0.218)	0.234 (0.196-0.282)	0.273 (0.223-0.336)	0.315 (0.250-0.400)	0.361 (0.278-0.474)	0.430 (0.316-0.592)	0.489 (0.345-0.700)
15-min	0.117 (0.103-0.133)	0.147 (0.130-0.168)	0.190 (0.167-0.218)	0.228 (0.198-0.264)	0.283 (0.237-0.341)	0.330 (0.270-0.407)	0.380 (0.303-0.483)	0.437 (0.336-0.573)	0.521 (0.382-0.716)	0.592 (0.418-0.846)
30-min	0.160 (0.141-0.183)	0.201 (0.178-0.230)	0.260 (0.229-0.299)	0.312 (0.272-0.361)	0.388 (0.325-0.467)	0.451 (0.369-0.557)	0.521 (0.414-0.661)	0.598 (0.461-0.784)	0.713 (0.523-0.980)	0.810 (0.572-1.16)
60-min	0.223 (0.197-0.255)	0.281 (0.248-0.322)	0.363 (0.320-0.417)	0.435 (0.379-0.504)	0.541 (0.454-0.652)	0.630 (0.516-0.778)	0.727 (0.579-0.924)	0.835 (0.643-1.10)	0.995 (0.731-1.37)	1.13 (0.799-1.62)
2-hr	0.326 (0.289-0.373)	0.403 (0.356-0.461)	0.513 (0.451-0.588)	0.609 (0.531-0.706)	0.751 (0.630-0.905)	0.871 (0.713-1.08)	1.00 (0.797-1.27)	1.15 (0.884-1.51)	1.36 (1.00-1.87)	1.55 (1.09-2.21)
3-hr	0.400 (0.353-0.457)	0.493 (0.435-0.564)	0.625 (0.550-0.717)	0.741 (0.646-0.859)	0.913 (0.765-1.10)	1.06 (0.864-1.30)	1.21 (0.965-1.54)	1.39 (1.07-1.82)	1.64 (1.21-2.26)	1.86 (1.31-2.66)
6-hr	0.542 (0.480-0.620)	0.674 (0.595-0.771)	0.858 (0.755-0.985)	1.02 (0.888-1.18)	1.25 (1.05-1.51)	1.45 (1.18-1.78)	1.65 (1.32-2.10)	1.88 (1.45-2.47)	2.22 (1.63-3.05)	2.49 (1.76-3.56)
12-hr	0.695 (0.614-0.794)	0.893 (0.788-1.02)	1.16 (1.02-1.34)	1.39 (1.21-1.61)	1.71 (1.44-2.06)	1.97 (1.61-2.43)	2.24 (1.78-2.84)	2.53 (1.95-3.31)	2.93 (2.15-4.03)	3.26 (2.30-4.67)
24-hr	0.873 (0.789-0.987)	1.16 (1.05-1.31)	1.55 (1.39-1.75)	1.86 (1.66-2.13)	2.30 (1.98-2.72)	2.64 (2.22-3.19)	2.99 (2.46-3.71)	3.36 (2.68-4.29)	3.87 (2.96-5.16)	4.27 (3.15-5.91)
2-day	1.06 (0.954-1.19)	1.42 (1.28-1.60)	1.89 (1.70-2.15)	2.29 (2.04-2.62)	2.83 (2.44-3.36)	3.26 (2.75-3.95)	3.70 (3.04-4.59)	4.16 (3.32-5.32)	4.79 (3.67-6.40)	5.30 (3.91-7.33)
3-day	1.18 (1.06-1.33)	1.57 (1.42-1.78)	2.11 (1.90-2.39)	2.55 (2.28-2.92)	3.17 (2.73-3.75)	3.65 (3.07-4.42)	4.15 (3.41-5.15)	4.67 (3.73-5.97)	5.40 (4.13-7.21)	5.98 (4.41-8.27)
4-day	1.27 (1.15-1.44)	1.69 (1.53-1.92)	2.27 (2.04-2.57)	2.75 (2.45-3.14)	3.41 (2.94-4.04)	3.94 (3.32-4.77)	4.49 (3.69-5.57)	5.06 (4.04-6.47)	5.87 (4.49-7.83)	6.51 (4.80-9.01)
7-day	1.49 (1.35-1.68)	1.96 (1.76-2.21)	2.60 (2.34-2.95)	3.15 (2.81-3.60)	3.92 (3.38-4.64)	4.54 (3.82-5.49)	5.18 (4.26-6.44)	5.87 (4.69-7.51)	6.85 (5.24-9.14)	7.63 (5.63-10.6)
10-day	1.60 (1.44-1.81)	2.08 (1.88-2.35)	2.75 (2.48-3.12)	3.33 (2.97-3.81)	4.15 (3.58-4.92)	4.82 (4.06-5.83)	5.52 (4.54-6.86)	6.28 (5.01-8.03)	7.35 (5.62-9.82)	8.22 (6.07-11.4)
20-day	1.93 (1.75-2.18)	2.51 (2.27-2.84)	3.33 (3.00-3.78)	4.04 (3.61-4.63)	5.07 (4.37-6.01)	5.91 (4.98-7.16)	6.80 (5.59-8.45)	7.77 (6.20-9.93)	9.14 (6.99-12.2)	10.3 (7.57-14.2)
30-day	2.27 (2.05-2.56)	2.96 (2.67-3.35)	3.94 (3.54-4.47)	4.79 (4.27-5.48)	6.02 (5.19-7.13)	7.02 (5.92-8.50)	8.08 (6.64-10.0)	9.22 (7.36-11.8)	10.8 (8.29-14.5)	12.2 (8.97-16.8)
45-day	2.75 (2.48-3.11)	3.61 (3.26-4.09)	4.82 (4.34-5.47)	5.87 (5.23-6.72)	7.38 (6.36-8.75)	8.61 (7.26-10.4)	9.91 (8.14-12.3)	11.3 (9.01-14.4)	13.2 (10.1-17.7)	14.8 (10.9-20.5)
60-day	3.20 (2.89-3.62)	4.22 (3.81-4.77)	5.64 (5.07-6.40)	6.86 (6.12-7.85)	8.61 (7.42-10.2)	10.0 (8.45-12.1)	11.5 (9.47-14.3)	13.1 (10.5-16.8)	15.3 (11.7-20.4)	17.1 (12.6-23.6)
<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.										

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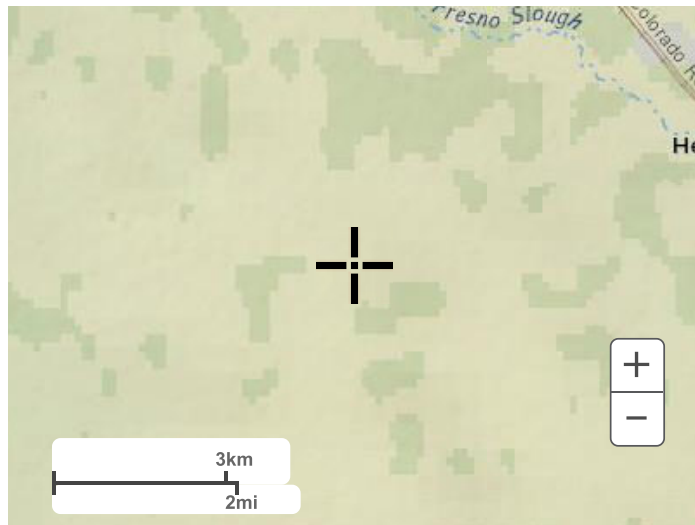
### PF graphical

PDS-based depth-duration-frequency (DDF) curves  
Latitude: 36.5146°, Longitude: -120.1727°

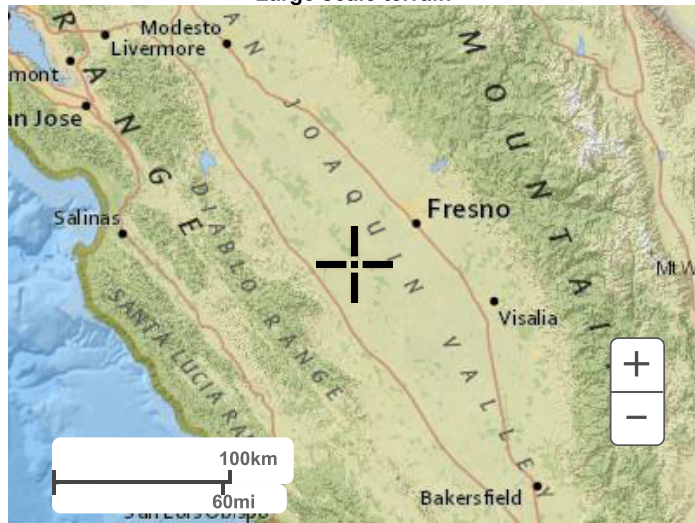


## Maps & aerials

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial





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1325 East West Highway  
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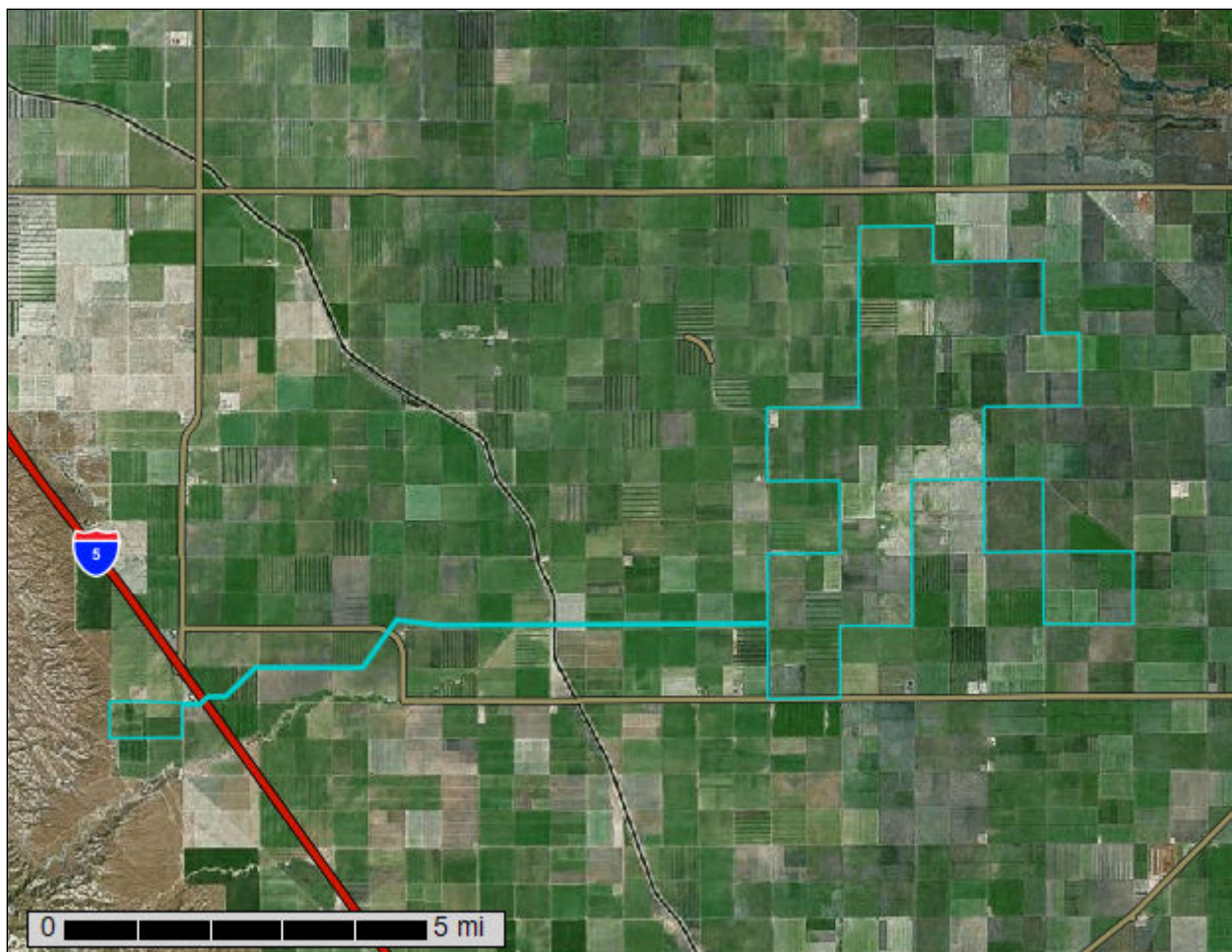
**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Fresno County, California, Western Part**

## IP Darden Soil Report



October 12, 2023

# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil



scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

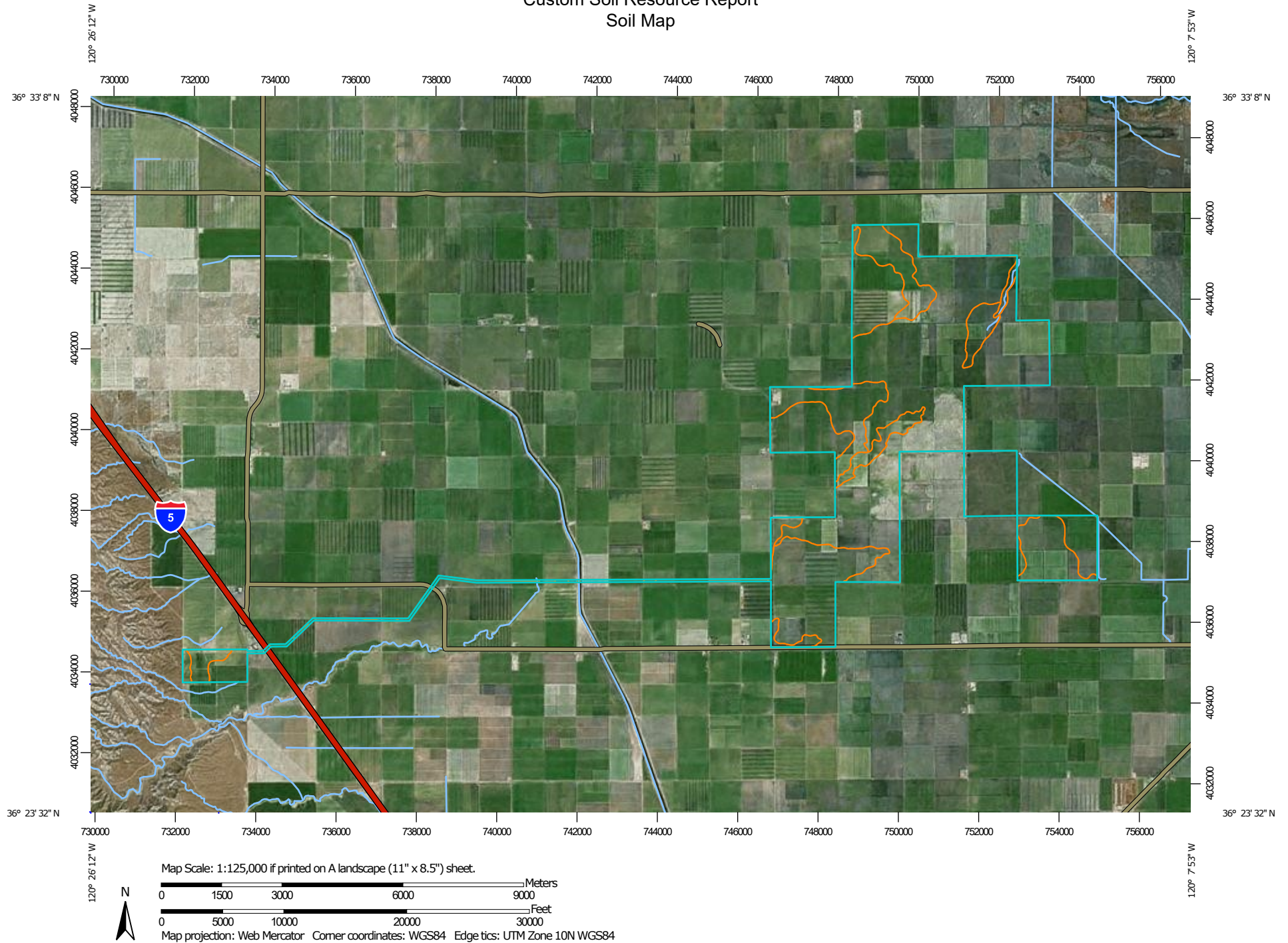
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



## Custom Soil Resource Report


### MAP LEGEND

#### Area of Interest (AOI)

 Area of Interest (AOI)

#### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

#### Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

#### Water Features

 Streams and Canals

#### Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

#### Background

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Fresno County, California, Western Part

Survey Area Data: Version 18, Aug 31, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 16, 2022—Mar 21, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
285	Tranquillity-Tranquillity, wet, complex, saline-sodic, 0 to 1 percent slopes	48.1	0.5%
286	Tranquillity clay, saline-sodic, wet, 0 to 1 percent slopes	5,491.0	53.5%
405	Polvadero-Guijarral complex, 5 to 15 percent slopes	38.6	0.4%
436	Panoche loam, 0 to 2 percent slopes	191.2	1.9%
437	Panoche sandy loam, 0 to 2 percent slopes	126.5	1.2%
442	Panoche clay loam, 0 to 2 percent slopes	45.8	0.4%
459	Ciervo clay, 0 to 2 percent slopes	664.8	6.5%
461	Ciervo clay, saline-sodic, wet, 0 to 1 percent slopes	70.9	0.7%
462	Ciervo, wet-Ciervo complex, saline-sodic, 0 to 1 percent slopes	2,231.0	21.7%
475	Posocharnet clay loam, saline-sodic, wet, 0 to 1 percent slopes	421.8	4.1%
478	Cerini sandy loam, 0 to 2 percent slopes, MLRA 17	6.4	0.1%
479	Cerini clay loam, 0 to 2 percent slopes	10.7	0.1%
482	Calflax clay loam, saline-sodic, wet, 0 to 1 percent slopes, MLRA 17	907.6	8.8%
960	Excelsior, sandy substratum-westhaven association, flooded, 0 to 2 percent slopes	5.9	0.1%
982	Water	0.9	0.0%
<b>Totals for Area of Interest</b>		<b>10,262.1</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named



according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

## Custom Soil Resource Report

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Fresno County, California, Western Part

### 285—Tranquillity-Tranquillity, wet, complex, saline-sodic, 0 to 1 percent slopes

#### Map Unit Setting

*National map unit symbol:* hnz4

*Elevation:* 130 to 360 feet

*Mean annual precipitation:* 7 to 8 inches

*Mean annual air temperature:* 62 to 64 degrees F

*Frost-free period:* 220 to 250 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Tranquillity, clay, saline-sodic, and similar soils:* 60 percent

*Tranquillity, clay, saline-sodic, wet, and similar soils:* 25 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Tranquillity, Clay, Saline-sodic

##### Setting

*Landform:* Fan skirts

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from calcareous sedimentary rock

##### Typical profile

*Ap - 0 to 22 inches:* clay

*Bkss - 22 to 53 inches:* clay

*Bk - 53 to 71 inches:* clay

##### Properties and qualities

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat poorly drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* Very rareNone

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 5 percent

*Gypsum, maximum content:* 3 percent

*Maximum salinity:* Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 20.0

*Available water supply, 0 to 60 inches:* Moderate (about 7.9 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3w

*Land capability classification (nonirrigated):* 7w

*Hydrologic Soil Group:* C

*Ecological site:* R017XY906CA - Non-Alkali San Joaquin Valley Desert

## Custom Soil Resource Report

*Hydric soil rating:* No

### Description of Tranquillity, Clay, Saline-sodic, Wet

#### Setting

*Landform:* Fan skirts

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from calcareous sedimentary rock

#### Typical profile

*Ap1 - 0 to 6 inches:* clay

*Ap2 - 6 to 16 inches:* clay

*Bknssyz1 - 16 to 31 inches:* clay

*Bknssyz2 - 31 to 48 inches:* clay

*Bknyz - 48 to 65 inches:* silty clay

#### Properties and qualities

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat poorly drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low  
(0.00 to 0.06 in/hr)

*Depth to water table:* About 48 to 60 inches

*Frequency of flooding:* Very rareNone

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 5 percent

*Gypsum, maximum content:* 8 percent

*Maximum salinity:* Moderately saline (8.0 to 15.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 50.0

*Available water supply, 0 to 60 inches:* Moderate (about 6.1 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 3w

*Land capability classification (nonirrigated):* 7w

*Hydrologic Soil Group:* D

*Ecological site:* R017XY906CA - Non-Alkali San Joaquin Valley Desert

*Hydric soil rating:* No

### Minor Components

#### Ciervo, clay, saline-sodic, wet

*Percent of map unit:* 5 percent

*Landform:* Fan skirts

*Hydric soil rating:* No

#### Armona, loam, partially drained

*Percent of map unit:* 4 percent

*Landform:* Flood plains on basin floors

*Hydric soil rating:* Yes

#### Calflax, clay loam, saline-sodic, wet

*Percent of map unit:* 2 percent

*Landform:* Fan skirts

*Hydric soil rating:* No

**Tachi, clay**

*Percent of map unit: 2 percent*

*Landform: Flood plains on basin floors*

*Hydric soil rating: Yes*

**Deldota, clay, partially drained**

*Percent of map unit: 2 percent*

*Landform: Fan skirts*

*Hydric soil rating: No*

**286—Tranquillity clay, saline-sodic, wet, 0 to 1 percent slopes**

**Map Unit Setting**

*National map unit symbol: hnz5*

*Elevation: 160 to 260 feet*

*Mean annual precipitation: 7 to 8 inches*

*Mean annual air temperature: 62 to 64 degrees F*

*Frost-free period: 220 to 250 days*

*Farmland classification: Farmland of statewide importance*

**Map Unit Composition**

*Tranquillity, clay, saline-sodic, wet, and similar soils: 85 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Tranquillity, Clay, Saline-sodic, Wet**

**Setting**

*Landform: Fan skirts*

*Landform position (two-dimensional): Footslope*

*Landform position (three-dimensional): Talf*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Alluvium derived from calcareous sedimentary rock*

**Typical profile**

*Ap1 - 0 to 6 inches: clay*

*Ap2 - 6 to 16 inches: clay*

*Bknssyz1 - 16 to 31 inches: clay*

*Bknssyz2 - 31 to 48 inches: clay*

*Bknyz - 48 to 65 inches: silty clay*

**Properties and qualities**

*Slope: 0 to 1 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Somewhat poorly drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low  
(0.00 to 0.06 in/hr)*

## Custom Soil Resource Report

*Depth to water table:* About 48 to 60 inches  
*Frequency of flooding:* RareNone  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 5 percent  
*Gypsum, maximum content:* 8 percent  
*Maximum salinity:* Moderately saline (8.0 to 15.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 50.0  
*Available water supply, 0 to 60 inches:* Moderate (about 6.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3w  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* D  
*Ecological site:* R017XY906CA - Non-Alkali San Joaquin Valley Desert  
*Hydric soil rating:* No

### Minor Components

#### **Ciervo, clay, saline-sodic, wet**

*Percent of map unit:* 4 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

#### **Tranquillity, clay, saline-sodic**

*Percent of map unit:* 3 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

#### **Gepford, clay**

*Percent of map unit:* 2 percent  
*Landform:* Flood plains on basin floors  
*Hydric soil rating:* Yes

#### **Calflax, clay loam, saline-sodic, wet**

*Percent of map unit:* 2 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

#### **Tachi, clay**

*Percent of map unit:* 2 percent  
*Landform:* Flood plains on basin floors  
*Hydric soil rating:* Yes

#### **Armona, loam, partially drained**

*Percent of map unit:* 1 percent  
*Landform:* Flood plains on basin floors  
*Hydric soil rating:* Yes

#### **Lethent, silt loam**

*Percent of map unit:* 1 percent  
*Landform:* Fan remnants  
*Hydric soil rating:* No



## **405—Polvadero-Guijaral complex, 5 to 15 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hnzc

*Elevation:* 480 to 1,000 feet

*Mean annual precipitation:* 6 to 8 inches

*Mean annual air temperature:* 63 to 65 degrees F

*Frost-free period:* 250 to 300 days

*Farmland classification:* Farmland of statewide importance

### **Map Unit Composition**

*Polvadero, sandy loam, and similar soils:* 55 percent

*Guijaral, sandy loam, and similar soils:* 30 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Polvadero, Sandy Loam**

#### **Setting**

*Landform:* Fan remnants

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from calcareous sedimentary rock

#### **Typical profile**

*A1 - 0 to 7 inches:* sandy loam

*A2 - 7 to 12 inches:* sandy loam

*Btkn1 - 12 to 30 inches:* sandy clay loam

*Btkn2 - 30 to 52 inches:* sandy clay loam

*C - 52 to 60 inches:* sandy loam

#### **Properties and qualities**

*Slope:* 5 to 15 percent

*Depth to restrictive feature:* 10 to 20 inches to natric

*Drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 30 percent

*Gypsum, maximum content:* 2 percent

*Maximum salinity:* Nonsaline to very slightly saline (1.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 50.0

*Available water supply, 0 to 60 inches:* Very low (about 1.5 inches)

**Interpretive groups**

*Land capability classification (irrigated): 3e*  
*Land capability classification (nonirrigated): 7e*  
*Hydrologic Soil Group: C*  
*Ecological site: R017XG043CA - Loamy 6-8" P.Z.*  
*Hydric soil rating: No*

**Description of Guijarral, Sandy Loam**

**Setting**

*Landform: Fan remnants*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Side slope*  
*Down-slope shape: Concave*  
*Across-slope shape: Linear*  
*Parent material: Alluvium derived from calcareous sedimentary rock*

**Typical profile**

*Ap1 - 0 to 3 inches: sandy loam*  
*Ap2 - 3 to 6 inches: sandy loam*  
*Bw - 6 to 12 inches: sandy loam*  
*Bk1 - 12 to 24 inches: gravelly sandy loam*  
*Bk2 - 24 to 36 inches: gravelly sandy loam*  
*Bk3 - 36 to 60 inches: gravelly loamy sand*

**Properties and qualities**

*Slope: 5 to 15 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Drainage class: Well drained*  
*Runoff class: Low*  
*Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum content: 10 percent*  
*Gypsum, maximum content: 1 percent*  
*Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*  
*Sodium adsorption ratio, maximum: 10.0*  
*Available water supply, 0 to 60 inches: Low (about 5.9 inches)*

**Interpretive groups**

*Land capability classification (irrigated): 3e*  
*Land capability classification (nonirrigated): 7e*  
*Hydrologic Soil Group: A*  
*Ecological site: R017XG043CA - Loamy 6-8" P.Z.*  
*Hydric soil rating: No*

**Minor Components**

**Polvadero, sandy loam, hilly**

*Percent of map unit: 8 percent*  
*Landform: Fan remnants*  
*Hydric soil rating: No*

**Cyvar, loam**

*Percent of map unit: 3 percent*

## Custom Soil Resource Report

*Landform:* Fan remnants  
*Ecological site:* R017XY907CA - Aridic Alkali Desert  
*Hydric soil rating:* No

### **Guijarral, sandy loam, gently sloping**

*Percent of map unit:* 3 percent  
*Landform:* Fan remnants  
*Ecological site:* R017XY907CA - Aridic Alkali Desert  
*Hydric soil rating:* No

### **Yribarren, clay loam**

*Percent of map unit:* 1 percent  
*Landform:* Alluvial fans  
*Ecological site:* R017XY907CA - Aridic Alkali Desert  
*Hydric soil rating:* No

## **436—Panoche loam, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2ycb2  
*Elevation:* 260 to 850 feet  
*Mean annual precipitation:* 7 to 9 inches  
*Mean annual air temperature:* 63 to 65 degrees F  
*Frost-free period:* 311 to 335 days  
*Farmland classification:* Prime farmland if irrigated

### **Map Unit Composition**

*Panoche and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Panoche**

#### **Setting**

*Landform:* Alluvial fans  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from sedimentary rock

#### **Typical profile**

*Ap - 0 to 7 inches:* loam  
*Bw - 7 to 24 inches:* loam  
*Bk - 24 to 60 inches:* loam

#### **Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low

## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low (0.01 to 0.14 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* NoneVery rare

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 3 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 2.0

*Available water supply, 0 to 60 inches:* High (about 9.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 1

*Land capability classification (nonirrigated):* 7c

*Hydrologic Soil Group:* C

*Ecological site:* R017XY905CA - Dry Alluvial Fans and Terraces

*Hydric soil rating:* No

### Minor Components

#### Kimberlina

*Percent of map unit:* 5 percent

*Landform:* Alluvial fans

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Cerini

*Percent of map unit:* 3 percent

*Landform:* Alluvial fans

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Calflax

*Percent of map unit:* 2 percent

*Landform:* Alluvial fans

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Twisselman

*Percent of map unit:* 2 percent

*Landform:* Alluvial fans

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Excelsior

*Percent of map unit:* 2 percent

*Landform:* Alluvial fans

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Kettleman**

*Percent of map unit:* 1 percent

*Landform:* Hills, alluvial fans

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, tread

*Down-slope shape:* Concave, linear

*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

**437—Panoche sandy loam, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hnzp

*Elevation:* 300 to 850 feet

*Mean annual precipitation:* 6 to 8 inches

*Mean annual air temperature:* 62 to 64 degrees F

*Frost-free period:* 250 to 280 days

*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*Panoche, sandy loam, and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Panoche, Sandy Loam**

**Setting**

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from calcareous sedimentary rock

**Typical profile**

*Ap - 0 to 7 inches:* sandy loam

*Bw - 7 to 16 inches:* loam

*Bk1 - 16 to 27 inches:* loam

*Bk2 - 27 to 43 inches:* loam

*Bk3 - 43 to 57 inches:* loam

*Bk4 - 57 to 72 inches:* sandy loam

**Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)

## Custom Soil Resource Report

*Depth to water table:* More than 80 inches  
*Frequency of flooding:* Very rareNone  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 4 percent  
*Gypsum, maximum content:* 2 percent  
*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 8.0  
*Available water supply, 0 to 60 inches:* High (about 9.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 1  
*Land capability classification (nonirrigated):* 7c  
*Hydrologic Soil Group:* B  
*Ecological site:* R017XY906CA - Non-Alkali San Joaquin Valley Desert  
*Hydric soil rating:* No

### Minor Components

#### Kimberlina, sandy loam

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Ecological site:* R017XY904CA - Subirrigated Deep Alluvial Fans  
*Hydric soil rating:* No

#### Cerini, clay loam

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Ecological site:* R017XY904CA - Subirrigated Deep Alluvial Fans  
*Hydric soil rating:* No

#### Westhaven, loam

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Ecological site:* R017XY904CA - Subirrigated Deep Alluvial Fans  
*Hydric soil rating:* No

#### Excelsior, sandy loam

*Percent of map unit:* 3 percent  
*Landform:* Alluvial fans  
*Ecological site:* R017XY904CA - Subirrigated Deep Alluvial Fans  
*Hydric soil rating:* No

## 442—Panoche clay loam, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ycb1  
*Elevation:* 270 to 890 feet  
*Mean annual precipitation:* 6 to 9 inches  
*Mean annual air temperature:* 62 to 65 degrees F  
*Frost-free period:* 305 to 326 days  
*Farmland classification:* Prime farmland if irrigated



**Map Unit Composition**

*Panoche, clay loam, and similar soils: 87 percent*

*Minor components: 13 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Panoche, Clay Loam**

**Setting**

*Landform: Alluvial fans*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Alluvium derived from calcareous sedimentary rock*

**Typical profile**

*Ap - 0 to 7 inches: clay loam*

*Bw - 7 to 16 inches: loam*

*Bk1 - 16 to 27 inches: loam*

*Bk2 - 27 to 43 inches: loam*

*Bk3 - 43 to 57 inches: loam*

*Bk4 - 57 to 72 inches: sandy loam*

**Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Well drained*

*Runoff class: Low*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: NoneVery rare*

*Frequency of ponding: None*

*Calcium carbonate, maximum content: 4 percent*

*Gypsum, maximum content: 2 percent*

*Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)*

*Sodium adsorption ratio, maximum: 8.0*

*Available water supply, 0 to 60 inches: High (about 9.4 inches)*

**Interpretive groups**

*Land capability classification (irrigated): 1*

*Land capability classification (nonirrigated): 7c*

*Hydrologic Soil Group: C*

*Ecological site: R017XY905CA - Dry Alluvial Fans and Terraces*

*Hydric soil rating: No*

**Minor Components**

**Calflax**

*Percent of map unit: 4 percent*

*Landform: Fan skirts*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Hydric soil rating: No*

**Cerini**

*Percent of map unit:* 3 percent  
*Landform:* Alluvial fans  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Posochanet**

*Percent of map unit:* 2 percent  
*Landform:* Fan skirts  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Ciervo**

*Percent of map unit:* 2 percent  
*Landform:* Fan skirts  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Kimberlina**

*Percent of map unit:* 1 percent  
*Landform:* Alluvial fans  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Wasco**

*Percent of map unit:* 1 percent  
*Landform:* Alluvial fans  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**459—Ciervo clay, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hp02  
*Elevation:* 210 to 730 feet  
*Mean annual precipitation:* 6 to 8 inches  
*Mean annual air temperature:* 62 to 64 degrees F  
*Frost-free period:* 240 to 280 days  
*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*Ciervo, clay, and similar soils: 80 percent*

*Minor components: 20 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Ciervo, Clay**

**Setting**

*Landform: Fan skirts*

*Landform position (two-dimensional): Foothlope*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Alluvium derived from calcareous sedimentary rock*

**Typical profile**

*Ap - 0 to 17 inches: clay*

*Bw - 17 to 27 inches: clay*

*Bknyz - 27 to 41 inches: silty clay*

*Bknz - 41 to 60 inches: clay loam*

**Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Moderately well drained*

*Runoff class: Medium*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: NoneVery rare*

*Frequency of ponding: None*

*Calcium carbonate, maximum content: 5 percent*

*Gypsum, maximum content: 5 percent*

*Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)*

*Sodium adsorption ratio, maximum: 12.0*

*Available water supply, 0 to 60 inches: High (about 9.8 inches)*

**Interpretive groups**

*Land capability classification (irrigated): 2s*

*Land capability classification (nonirrigated): 7s*

*Hydrologic Soil Group: C*

*Ecological site: R017XY906CA - Non-Alkali San Joaquin Valley Desert*

*Hydric soil rating: No*

**Minor Components**

**Ciervo, clay loam**

*Percent of map unit: 5 percent*

*Landform: Fan skirts*

*Hydric soil rating: No*

**Ciervo, clay, saline-sodic**

*Percent of map unit: 4 percent*

*Landform: Fan skirts*

*Hydric soil rating: No*

**Ciervo, clay, saline-sodic, wet**

*Percent of map unit: 4 percent*

*Landform:* Fan skirts  
*Hydric soil rating:* No

**Tranquillity, clay, saline-sodic**

*Percent of map unit:* 3 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

**Cerini, clay loam**

*Percent of map unit:* 2 percent  
*Landform:* Alluvial fans  
*Hydric soil rating:* No

**Panoche, clay loam**

*Percent of map unit:* 1 percent  
*Landform:* Alluvial fans  
*Hydric soil rating:* No

**Westhaven, loam**

*Percent of map unit:* 1 percent  
*Landform:* Alluvial fans  
*Hydric soil rating:* No

**461—Ciervo clay, saline-sodic, wet, 0 to 1 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hp03  
*Elevation:* 170 to 330 feet  
*Mean annual precipitation:* 6 to 8 inches  
*Mean annual air temperature:* 62 to 64 degrees F  
*Frost-free period:* 240 to 270 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Ciervo, clay, saline-sodic, wet, and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Ciervo, Clay, Saline-sodic, Wet**

**Setting**

*Landform:* Fan skirts  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from calcareous sedimentary rock

**Typical profile**

*Ap - 0 to 17 inches:* clay  
*Bw - 17 to 27 inches:* clay  
*Bknyz - 27 to 41 inches:* silty clay

## Custom Soil Resource Report

*Bknz - 41 to 60 inches: clay loam*

### Properties and qualities

*Slope: 0 to 1 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Moderately well drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low  
(0.00 to 0.06 in/hr)*

*Depth to water table: About 48 to 60 inches*

*Frequency of flooding: NoneRare*

*Frequency of ponding: None*

*Calcium carbonate, maximum content: 5 percent*

*Gypsum, maximum content: 5 percent*

*Maximum salinity: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)*

*Sodium adsorption ratio, maximum: 50.0*

*Available water supply, 0 to 60 inches: Moderate (about 6.5 inches)*

### Interpretive groups

*Land capability classification (irrigated): 3s*

*Land capability classification (nonirrigated): 7s*

*Hydrologic Soil Group: D*

*Ecological site: R017XY901CA - Clayey Basin Group*

*Hydric soil rating: No*

### Minor Components

#### **Ciervo, clay, saline-sodic**

*Percent of map unit: 6 percent*

*Landform: Fan skirts*

*Ecological site: R017XY907CA - Aridic Alkali Desert*

*Hydric soil rating: No*

#### **Ciervo, clay loam, saline-sodic, wet**

*Percent of map unit: 5 percent*

*Landform: Fan skirts*

*Ecological site: R017XY907CA - Aridic Alkali Desert*

*Hydric soil rating: No*

#### **Tranquillity, clay, saline-sodic, wet**

*Percent of map unit: 5 percent*

*Landform: Fan skirts*

*Ecological site: R017XY907CA - Aridic Alkali Desert*

*Hydric soil rating: No*

#### **Calflax, clay loam, saline-sodic, wet**

*Percent of map unit: 4 percent*

*Landform: Fan skirts*

*Ecological site: R017XY907CA - Aridic Alkali Desert*

*Hydric soil rating: No*

## **462—Ciervo, wet-Ciervo complex, saline-sodic, 0 to 1 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hp04

*Elevation:* 170 to 580 feet

*Mean annual precipitation:* 6 to 8 inches

*Mean annual air temperature:* 62 to 64 degrees F

*Frost-free period:* 240 to 270 days

*Farmland classification:* Farmland of statewide importance

### **Map Unit Composition**

*Ciervo, clay, saline-sodic, wet, and similar soils:* 50 percent

*Ciervo, clay, saline-sodic, and similar soils:* 30 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Ciervo, Clay, Saline-sodic, Wet**

#### **Setting**

*Landform:* Fan skirts

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from calcareous sedimentary rock

#### **Typical profile**

*Ap - 0 to 17 inches:* clay

*Bw - 17 to 27 inches:* clay

*Bknyz - 27 to 41 inches:* silty clay

*Bknz - 41 to 60 inches:* clay loam

#### **Properties and qualities**

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Moderately well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low  
(0.00 to 0.06 in/hr)

*Depth to water table:* About 48 to 60 inches

*Frequency of flooding:* NoneVery rare

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 5 percent

*Gypsum, maximum content:* 5 percent

*Maximum salinity:* Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 50.0

*Available water supply, 0 to 60 inches:* Moderate (about 6.5 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 3s

## Custom Soil Resource Report

*Land capability classification (nonirrigated): 7s*  
*Hydrologic Soil Group: D*  
*Ecological site: R017XY901CA - Clayey Basin Group*  
*Hydric soil rating: No*

### Description of Ciervo, Clay, Saline-sodic

#### Setting

*Landform: Fan skirts*  
*Landform position (two-dimensional): Footslope*  
*Landform position (three-dimensional): Talf*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Parent material: Alluvium derived from calcareous sedimentary rock*

#### Typical profile

*Ap - 0 to 17 inches: clay*  
*Bw - 17 to 27 inches: clay*  
*Bknyz - 27 to 41 inches: silty clay*  
*Bknz - 41 to 60 inches: clay loam*

#### Properties and qualities

*Slope: 0 to 1 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Drainage class: Moderately well drained*  
*Runoff class: High*  
*Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low*  
*(0.00 to 0.06 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: NoneVery rare*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum content: 5 percent*  
*Gypsum, maximum content: 5 percent*  
*Maximum salinity: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)*  
*Sodium adsorption ratio, maximum: 40.0*  
*Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)*

#### Interpretive groups

*Land capability classification (irrigated): 2s*  
*Land capability classification (nonirrigated): 7s*  
*Hydrologic Soil Group: D*  
*Ecological site: R017XY901CA - Clayey Basin Group*  
*Hydric soil rating: No*

### Minor Components

#### Ciervo, clay loam, saline-sodic, wet

*Percent of map unit: 5 percent*  
*Landform: Fan skirts*  
*Hydric soil rating: No*

#### Panoche, clay loam

*Percent of map unit: 3 percent*  
*Landform: Alluvial fans*  
*Hydric soil rating: No*

#### Tranquillity, clay, saline-sodic

*Percent of map unit: 3 percent*

*Landform:* Fan skirts  
*Hydric soil rating:* No

**Ciervo, clay**

*Percent of map unit:* 3 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

**Cerini, clay loam**

*Percent of map unit:* 3 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

**Calflax, clay loam, saline-sodic, wet**

*Percent of map unit:* 3 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

**475—Posochanet clay loam, saline-sodic, wet, 0 to 1 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hp0b  
*Elevation:* 160 to 270 feet  
*Mean annual precipitation:* 6 to 8 inches  
*Mean annual air temperature:* 62 to 63 degrees F  
*Frost-free period:* 230 to 250 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Posochanet, clay loam, saline-sodic, wet, and similar soils:* 88 percent  
*Minor components:* 12 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Posochanet, Clay Loam, Saline-sodic, Wet**

**Setting**

*Landform:* Fan skirts  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from calcareous sedimentary rock

**Typical profile**

*Ap1 - 0 to 7 inches:* clay loam  
*Ap2 - 7 to 15 inches:* clay loam  
*Bw - 15 to 24 inches:* stratified loam to silty clay loam  
*Bknz - 24 to 60 inches:* stratified loam to silty clay loam

**Properties and qualities**

*Slope:* 0 to 1 percent



## Custom Soil Resource Report

*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 48 to 60 inches  
*Frequency of flooding:* NoneRare  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 2 percent  
*Gypsum, maximum content:* 2 percent  
*Maximum salinity:* Slightly saline to strongly saline (4.0 to 20.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 50.0  
*Available water supply, 0 to 60 inches:* Moderate (about 7.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3s  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* C  
*Ecological site:* R017XY906CA - Non-Alkali San Joaquin Valley Desert  
*Hydric soil rating:* No

### Minor Components

#### **Calflax, clay loam, saline-sodic, wet**

*Percent of map unit:* 4 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

#### **Lethent, clay loam**

*Percent of map unit:* 3 percent  
*Landform:* Fan remnants  
*Hydric soil rating:* No

#### **Tranquillity, clay, saline-sodic, wet**

*Percent of map unit:* 3 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

#### **Ciervo, clay, saline-sodic**

*Percent of map unit:* 2 percent  
*Landform:* Fan skirts  
*Hydric soil rating:* No

## **478—Cerini sandy loam, 0 to 2 percent slopes, MLRA 17**

### Map Unit Setting

*National map unit symbol:* 2vnd5  
*Elevation:* 210 to 930 feet  
*Mean annual precipitation:* 6 to 11 inches  
*Mean annual air temperature:* 62 to 66 degrees F  
*Frost-free period:* 240 to 300 days

## Custom Soil Resource Report

*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Cerini and similar soils:* 90 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cerini

#### Setting

*Landform:* Alluvial fans

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from calcareous sedimentary rock

#### Typical profile

*Ap - 0 to 5 inches:* sandy loam

*Bw - 5 to 25 inches:* clay loam

*Bk1 - 25 to 35 inches:* stratified sandy loam to clay loam

*Bk2 - 35 to 79 inches:* stratified sandy loam to clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* NoneVery rare

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 4 percent

*Gypsum, maximum content:* 2 percent

*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 8.0

*Available water supply, 0 to 60 inches:* High (about 9.4 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 1

*Land capability classification (nonirrigated):* 7c

*Hydrologic Soil Group:* C

*Ecological site:* R017XY904CA - Subirrigated Deep Alluvial Fans

*Hydric soil rating:* No

### Minor Components

#### Westhaven, loam

*Percent of map unit:* 3 percent

*Landform:* Alluvial fans

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Excelsior, sandy loam

*Percent of map unit:* 3 percent

*Landform:* Alluvial fans

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Kimberlina, sandy loam**

*Percent of map unit:* 2 percent

*Landform:* Alluvial fans

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Granoso**

*Percent of map unit:* 1 percent

*Landform:* Alluvial fans

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Ciervo, clay**

*Percent of map unit:* 1 percent

*Landform:* Alluvial fans

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

**479—Cerini clay loam, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hp0g

*Elevation:* 160 to 800 feet

*Mean annual precipitation:* 6 to 8 inches

*Mean annual air temperature:* 62 to 64 degrees F

*Frost-free period:* 230 to 290 days

*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*Cerini, clay loam, and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Cerini, Clay Loam**

**Setting**

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from calcareous sedimentary rock

**Typical profile**

*Ap - 0 to 5 inches:* clay loam

## Custom Soil Resource Report

*Bw - 5 to 25 inches:* clay loam

*Bk1 - 25 to 35 inches:* stratified sandy loam to clay loam

*Bk2 - 35 to 62 inches:* stratified sandy loam to clay loam

### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* NoneVery rare

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 4 percent

*Gypsum, maximum content:* 2 percent

*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 8.0

*Available water supply, 0 to 60 inches:* High (about 9.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* 1

*Land capability classification (nonirrigated):* 7c

*Hydrologic Soil Group:* C

*Ecological site:* R017XY906CA - Non-Alkali San Joaquin Valley Desert

*Hydric soil rating:* No

### Minor Components

#### **Ciervo, clay**

*Percent of map unit:* 4 percent

*Landform:* Fan skirts

*Hydric soil rating:* No

#### **Panoche, clay loam**

*Percent of map unit:* 3 percent

*Landform:* Alluvial fans

*Hydric soil rating:* No

#### **Excelsior, sandy loam**

*Percent of map unit:* 2 percent

*Landform:* Alluvial fans

*Hydric soil rating:* No

#### **Kimberlina, sandy loam**

*Percent of map unit:* 2 percent

*Landform:* Alluvial fans

*Hydric soil rating:* No

#### **Westhaven, loam**

*Percent of map unit:* 2 percent

*Landform:* Alluvial fans

*Hydric soil rating:* No

#### **Cerini, sandy loam**

*Percent of map unit:* 2 percent

*Landform:* Alluvial fans

*Hydric soil rating:* No

**482—Calflax clay loam, saline-sodic, wet, 0 to 1 percent slopes, MLRA 17**

**Map Unit Setting**

*National map unit symbol:* 2vncl

*Elevation:* 160 to 340 feet

*Mean annual precipitation:* 7 to 9 inches

*Mean annual air temperature:* 62 to 64 degrees F

*Frost-free period:* 230 to 250 days

*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Calflax, clay loam, saline-sodic, wet, and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Calflax, Clay Loam, Saline-sodic, Wet**

**Setting**

*Landform:* Fan skirts

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from calcareous sedimentary rock

**Typical profile**

*Ap - 0 to 8 inches:* clay loam

*Bw - 8 to 26 inches:* clay loam

*Bny - 26 to 33 inches:* loam

*Bnyz1 - 33 to 47 inches:* silt loam

*Bnyz2 - 47 to 65 inches:* loam

**Properties and qualities**

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Moderately well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* About 48 to 60 inches

*Frequency of flooding:* NoneRare

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 3 percent

*Gypsum, maximum content:* 5 percent

*Maximum salinity:* Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 40.0

*Available water supply, 0 to 60 inches:* Moderate (about 7.3 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 3s

## Custom Soil Resource Report

*Land capability classification (nonirrigated): 7s*  
*Hydrologic Soil Group: C*  
*Ecological site: R017XY907CA - Aridic Alkali Desert*  
*Hydric soil rating: No*

### Minor Components

#### **Ciervo, clay, saline-sodic, wet**

*Percent of map unit: 6 percent*  
*Landform: Fan skirts*  
*Landform position (three-dimensional): Tread*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Hydric soil rating: No*

#### **Cerini, clay loam**

*Percent of map unit: 2 percent*  
*Landform: Alluvial fans*  
*Landform position (three-dimensional): Tread*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Hydric soil rating: No*

#### **Lethent, clay loam**

*Percent of map unit: 2 percent*  
*Landform: Basin floors*  
*Landform position (three-dimensional): Talf*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Hydric soil rating: No*

#### **Posochanet, clay loam, saline-sodic, wet**

*Percent of map unit: 2 percent*  
*Landform: Fan skirts*  
*Landform position (three-dimensional): Tread*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Hydric soil rating: No*

#### **Garces, silt loam**

*Percent of map unit: 1 percent*  
*Landform: Rims on basin floors*  
*Landform position (three-dimensional): Talf*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Hydric soil rating: No*

#### **Twisselman, clay, saline-sodic**

*Percent of map unit: 1 percent*  
*Landform: Rims*  
*Landform position (three-dimensional): Talf*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Hydric soil rating: No*

#### **Kimberlina, fine sandy loam**

*Percent of map unit: 1 percent*  
*Landform: Alluvial fans*

*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**960—Excelsior, sandy substratum-westhaven association, flooded, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hp2l  
*Elevation:* 310 to 850 feet  
*Mean annual precipitation:* 7 to 8 inches  
*Mean annual air temperature:* 62 to 64 degrees F  
*Frost-free period:* 240 to 280 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Excelsior, sandy loam, sandy substratum, and similar soils:* 50 percent  
*Westhaven, loam, and similar soils:* 30 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Excelsior, Sandy Loam, Sandy Substratum**

**Setting**

*Landform:* Alluvial fans, flood plains  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Tread  
*Microfeatures of landform position:* Bars and channels  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from calcareous sedimentary rock

**Typical profile**

*A1 - 0 to 7 inches:* sandy loam  
*A2 - 7 to 23 inches:* sandy loam  
*C1 - 23 to 53 inches:* stratified loamy sand to silt loam  
*C2 - 53 to 72 inches:* loamy sand

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* NoneOccasional  
*Frequency of ponding:* Occasional  
*Calcium carbonate, maximum content:* 3 percent

## Custom Soil Resource Report

*Gypsum, maximum content:* 1 percent  
*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 10.0  
*Available water supply, 0 to 60 inches:* Moderate (about 6.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2w  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* B  
*Ecological site:* R017XY903CA - Stream Channels and Floodplains  
*Hydric soil rating:* No

### Description of Westhaven, Loam

#### Setting

*Landform:* Alluvial fans, flood plains  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Tread  
*Microfeatures of landform position:* Bars and channels  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from calcareous sedimentary rock

#### Typical profile

*Ap - 0 to 7 inches:* loam  
*Bw - 7 to 17 inches:* loam  
*Bk1 - 17 to 42 inches:* stratified loam to silty clay loam  
*Bk2 - 42 to 65 inches:* stratified loamy sand to silty clay loam  
*C - 65 to 72 inches:* stratified loam to silty clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* NoneOccasional  
*Frequency of ponding:* Occasional  
*Calcium carbonate, maximum content:* 4 percent  
*Gypsum, maximum content:* 1 percent  
*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 12.0  
*Available water supply, 0 to 60 inches:* High (about 9.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2w  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* C  
*Ecological site:* R017XY903CA - Stream Channels and Floodplains  
*Hydric soil rating:* No

### Minor Components

#### Ciervo, clay

*Percent of map unit:* 10 percent



## Custom Soil Resource Report

*Landform:* Fan skirts

*Ecological site:* R017XY903CA - Stream Channels and Floodplains

*Hydric soil rating:* No

### **Excelsior, sandy loam**

*Percent of map unit:* 5 percent

*Landform:* Alluvial fans, flood plains

*Microfeatures of landform position:* Bars and channels

*Ecological site:* R017XY903CA - Stream Channels and Floodplains

*Hydric soil rating:* No

### **Cerini, clay loam**

*Percent of map unit:* 3 percent

*Landform:* Alluvial fans

*Ecological site:* R017XY903CA - Stream Channels and Floodplains

*Hydric soil rating:* No

### **Anela, very gravelly sandy loam**

*Percent of map unit:* 2 percent

*Landform:* Flood plains

*Ecological site:* R017XY903CA - Stream Channels and Floodplains

*Hydric soil rating:* No

## **982—Water**

### **Map Unit Composition**

*Water:* 100 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

# References

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## Custom Soil Resource Report

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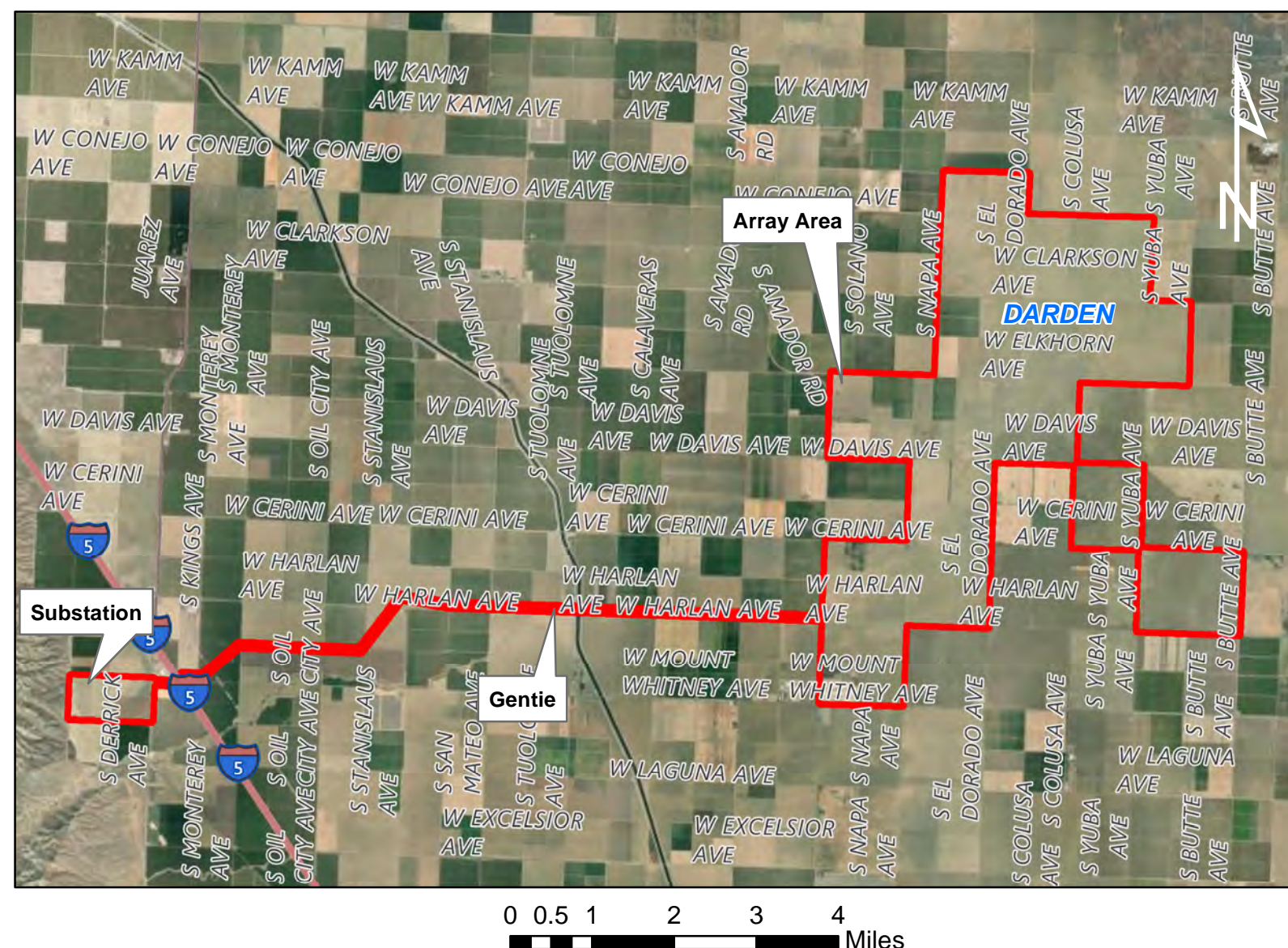
United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

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# Intersect Power

**STUDY AREA: IP DARDEN**  
**LOCATION: FRESNO COUNTY, CA**  
**TOTAL ACREAGE: 10,261**  
**CLASSIFICATION: 100YR-24HR FLOOD (MAX DEPTH)**  
**COORDINATE SYSTEM: NAD 83 STATE PLANE - CA ZN04**  
**DATE PRODUCED: OCTOBER 2023**



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

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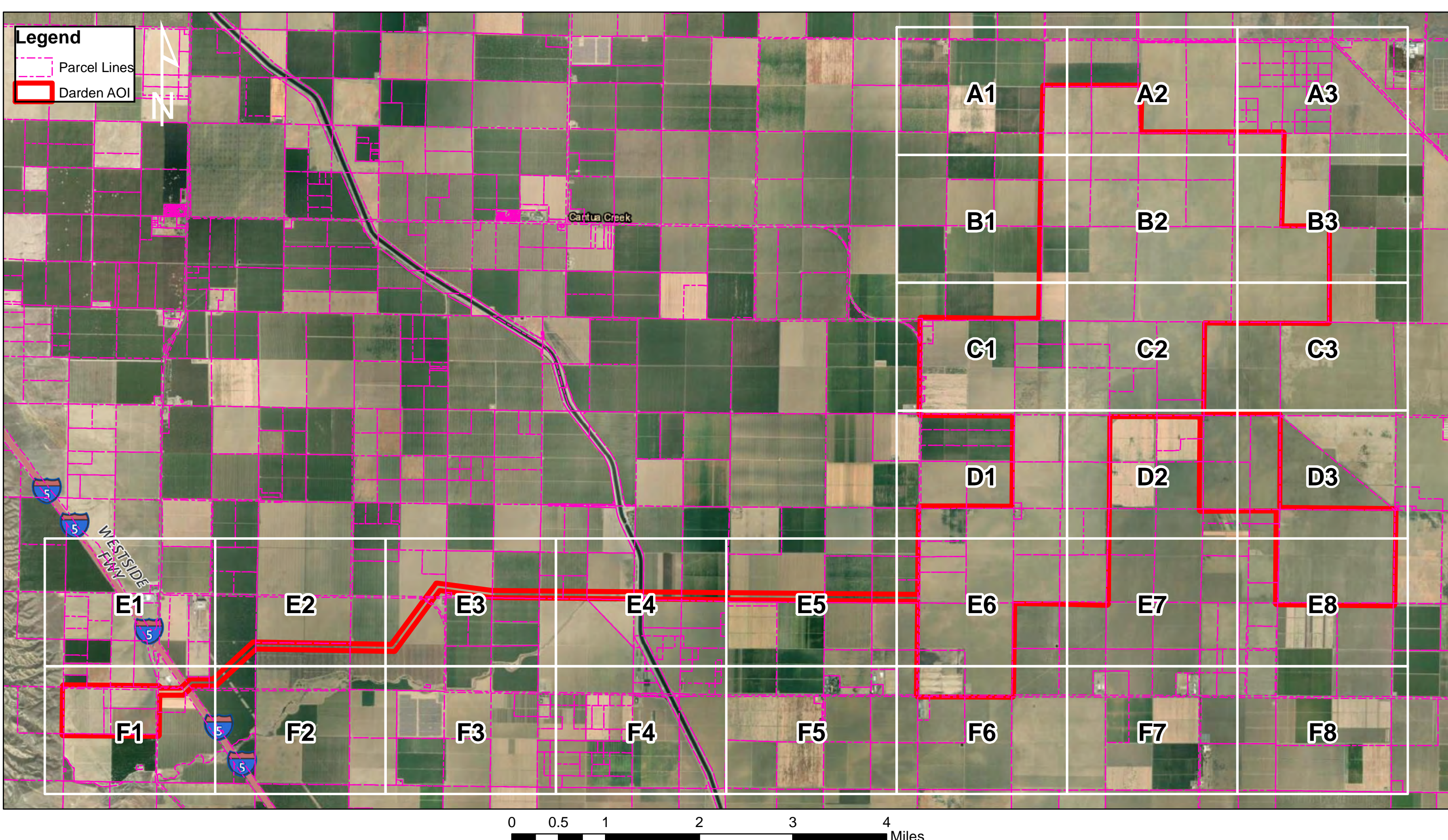
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MAX FLOOD DEPTH CLASSIFICATION**

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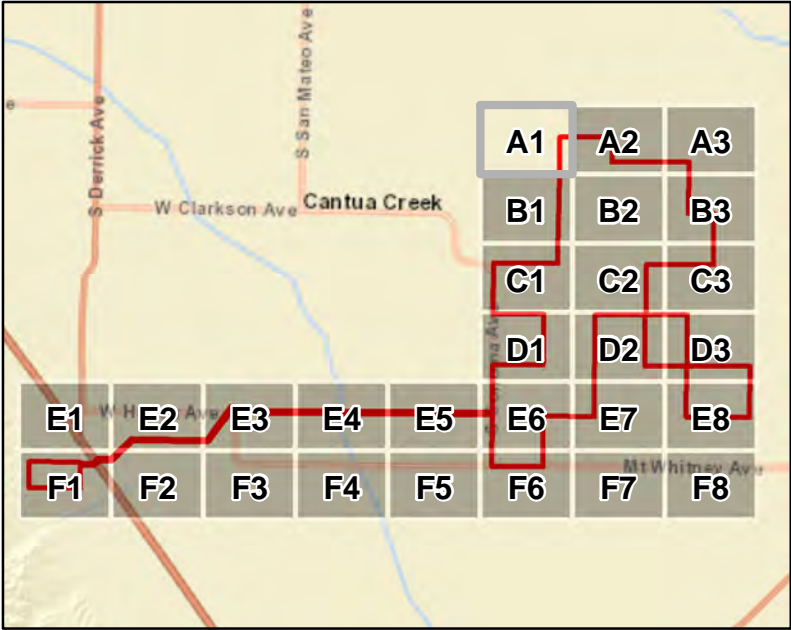
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BY:  
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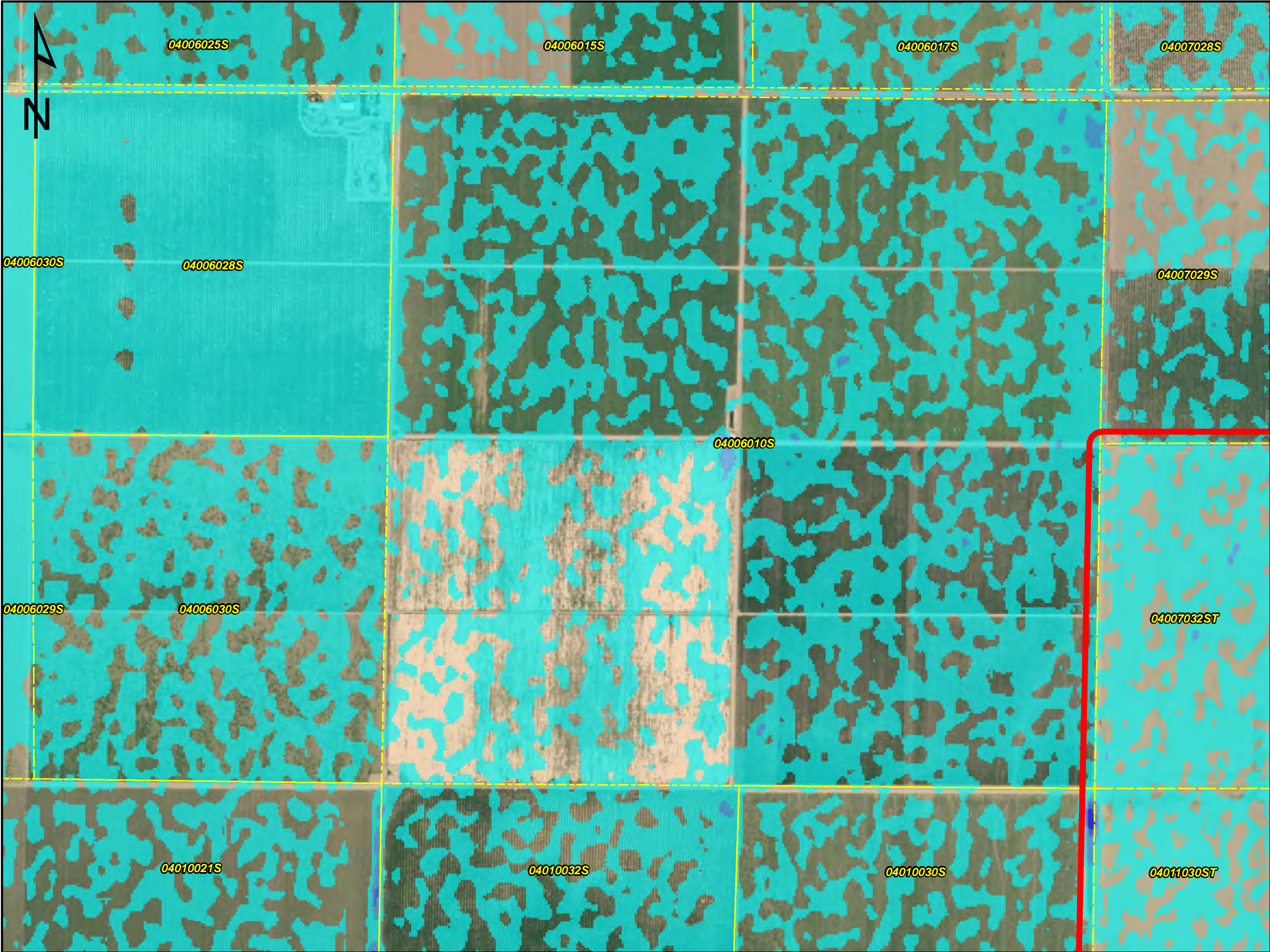
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- Darden Study Area
- Parcel Lines

**Floodplain Max Depth (ft)**

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

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Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



**B1**

**A2**



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

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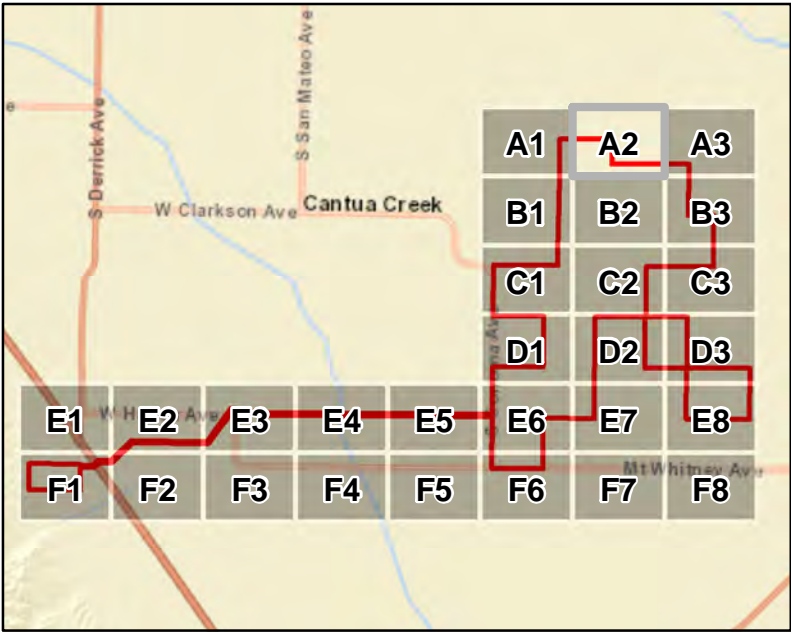
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100 Year - 24 Hour Storm (1% Annual Chance)**

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CALIFORNIA

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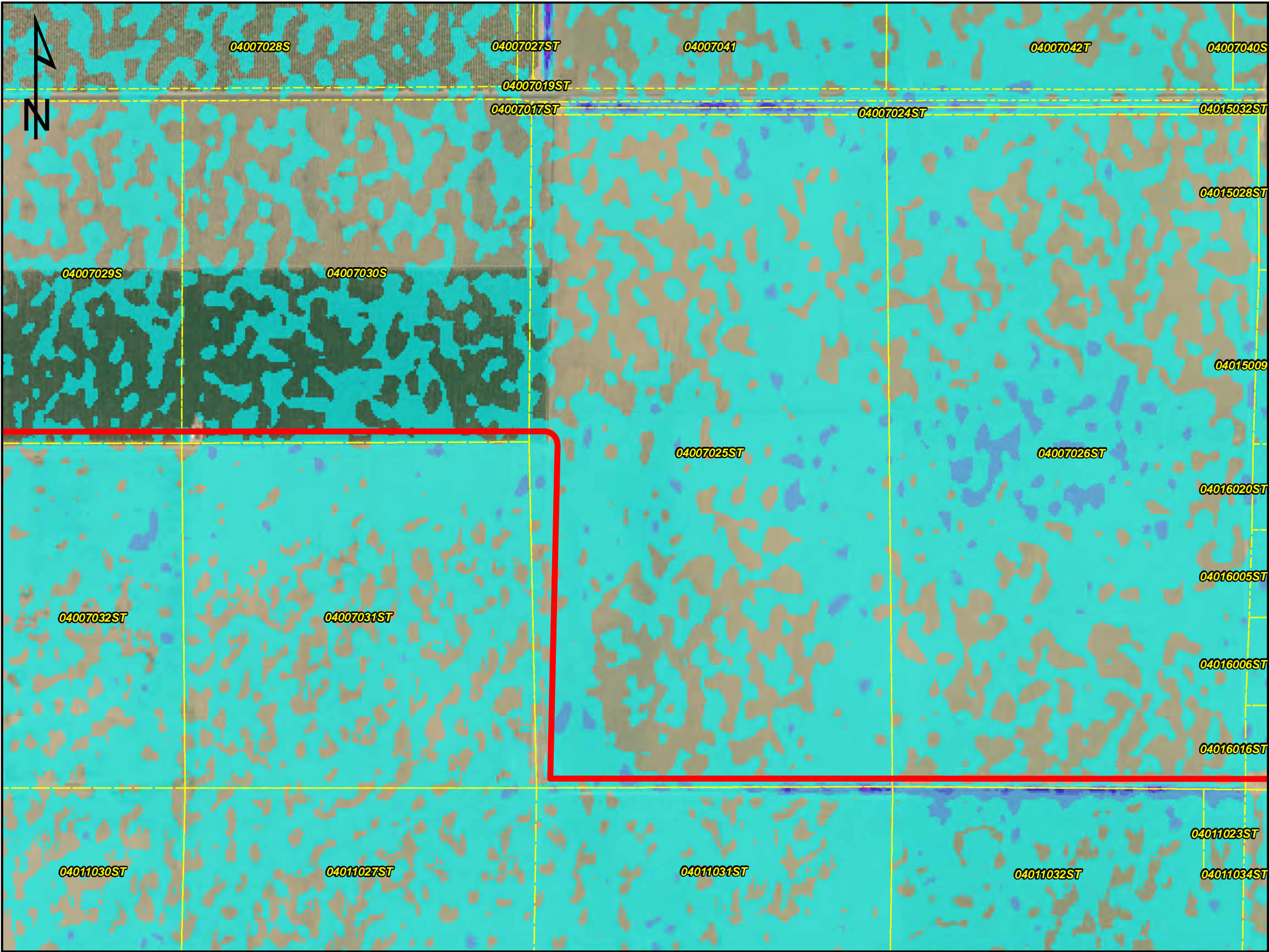
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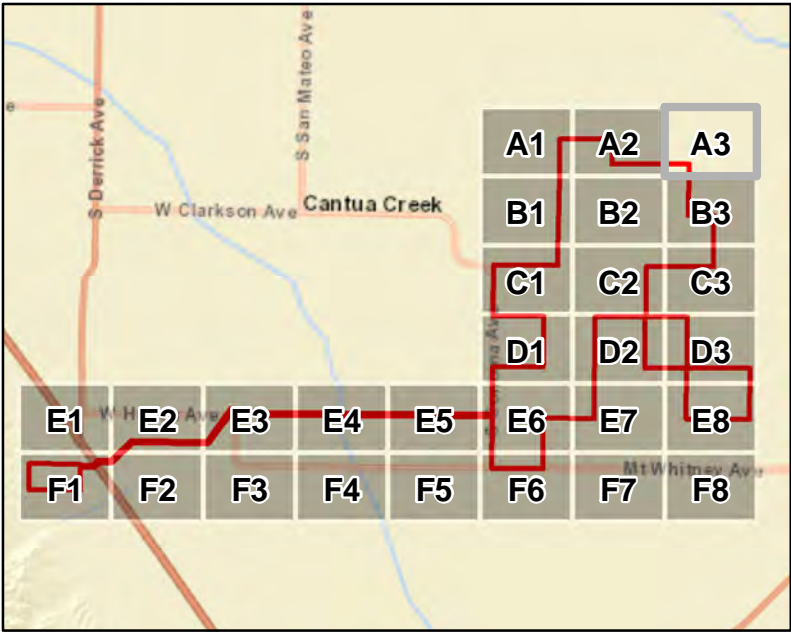


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- Darden Study Area
- Parcel Lines

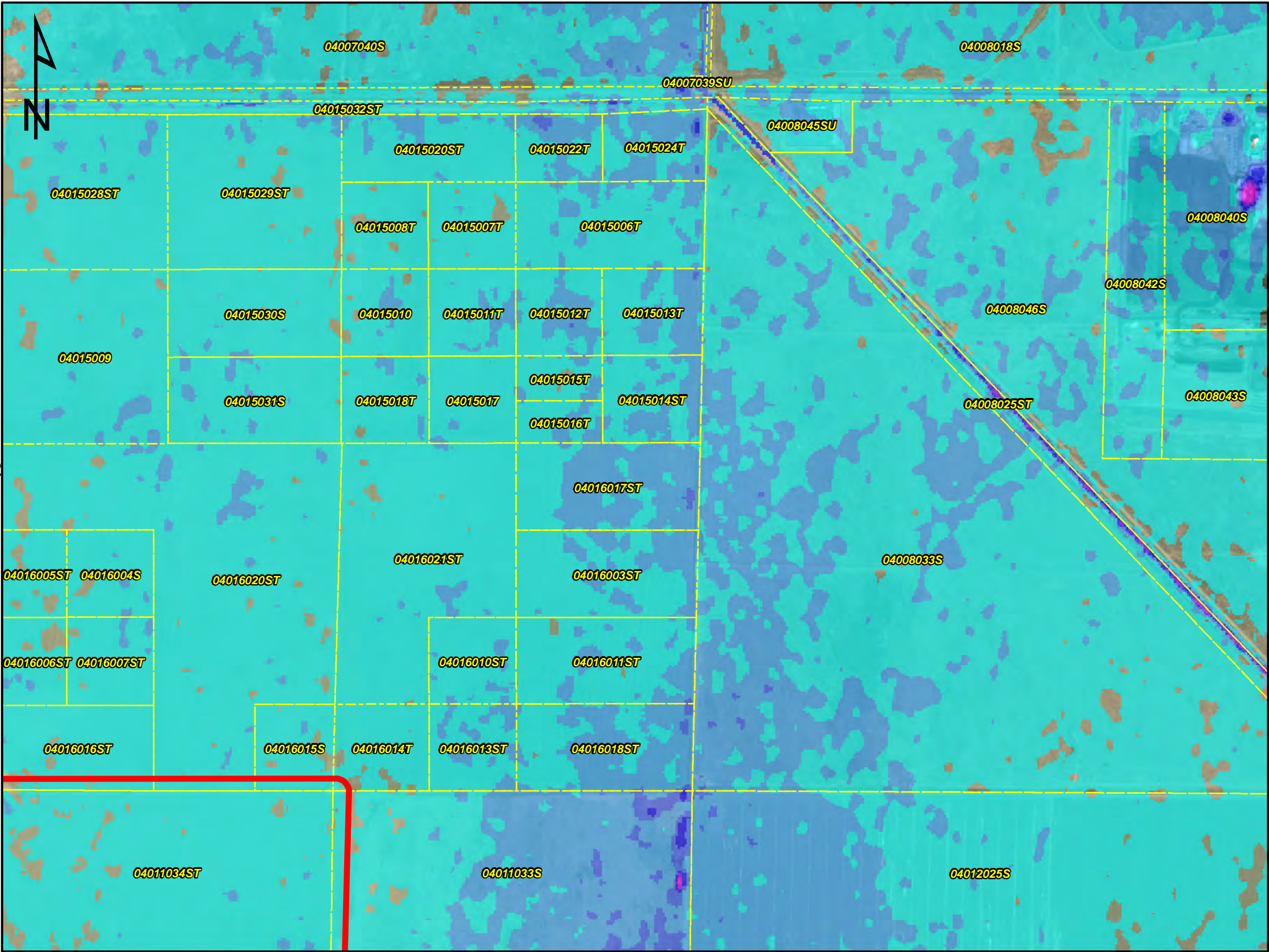
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A2



B3



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

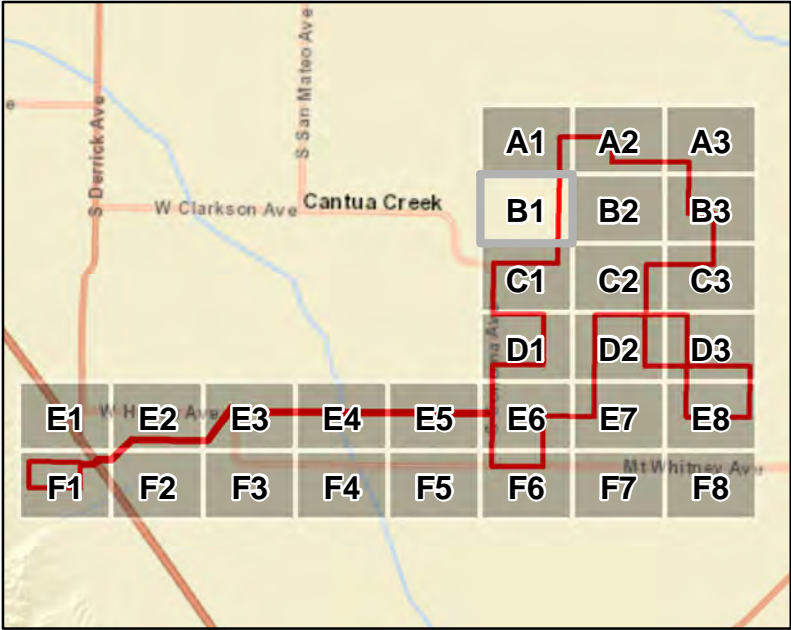
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Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

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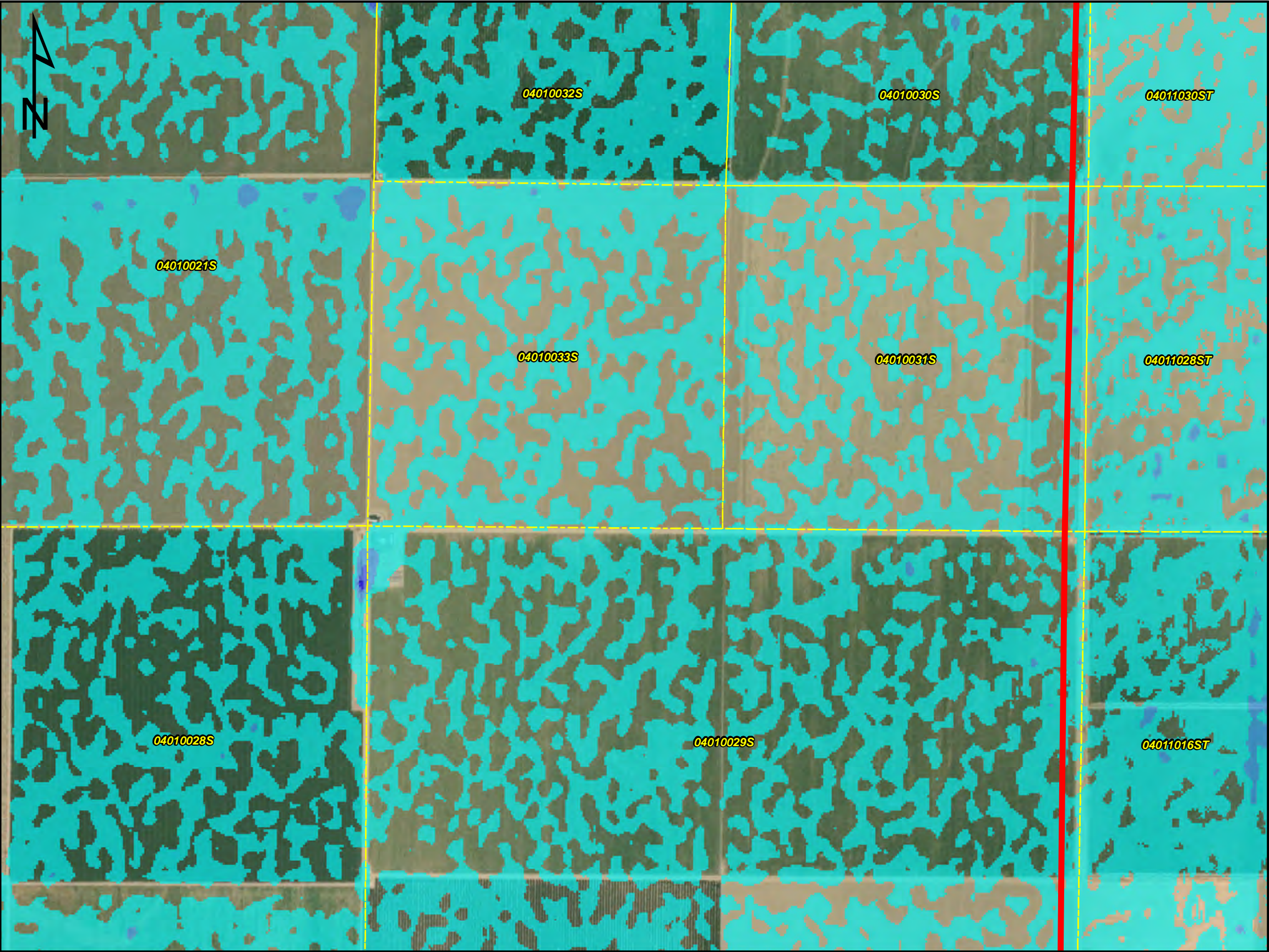
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-  Darden Study Area
-  Parcel Lines

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-  0.0 - 1.0
-  1.1 - 2.0
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-  2.6 - 3.0
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**UPPER DRY SUB-BASIN  
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FRESNO COUNTY, CA**

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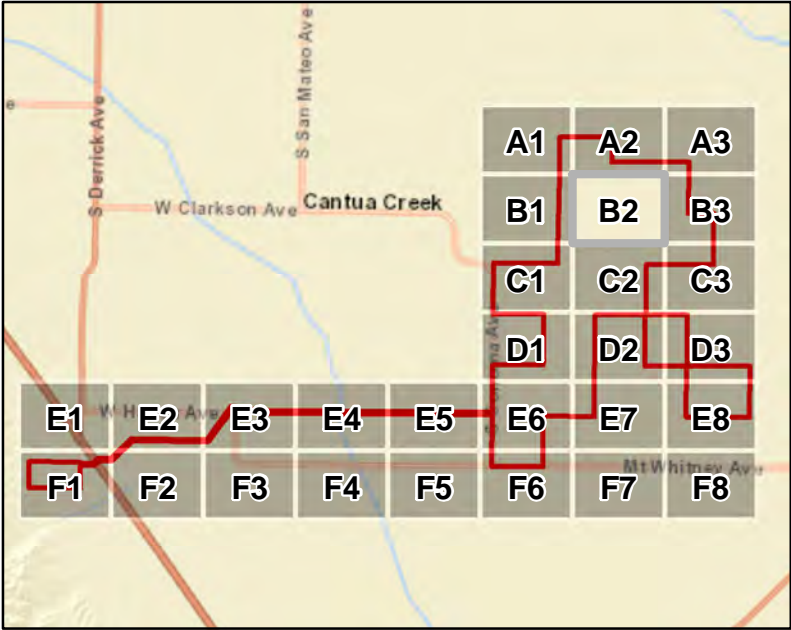
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- Darden Study Area
- Parcel Lines

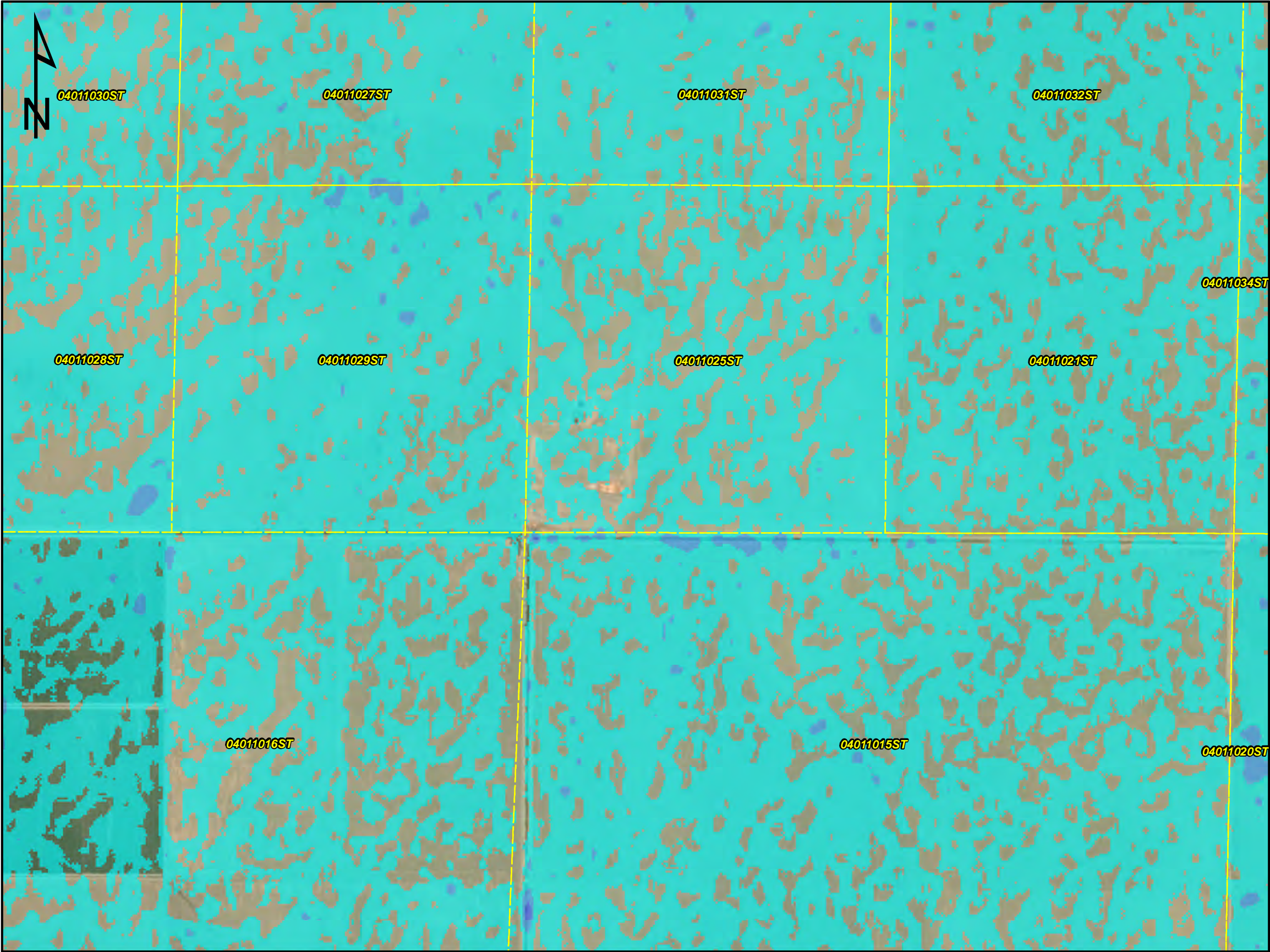
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C2



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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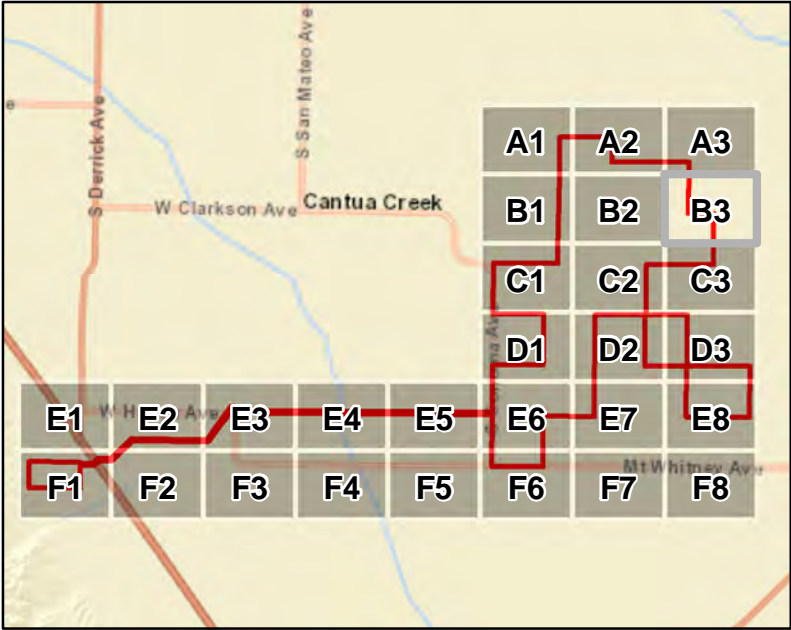
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-  Darden Study Area
-  Parcel Lines

Floodplain Max Depth (ft)

-  0.0 - 1.0
-  1.1 - 2.0
-  2.1 - 2.5
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-  3.1 - 3.5
-  3.6 - 4.0
-  > 4.0

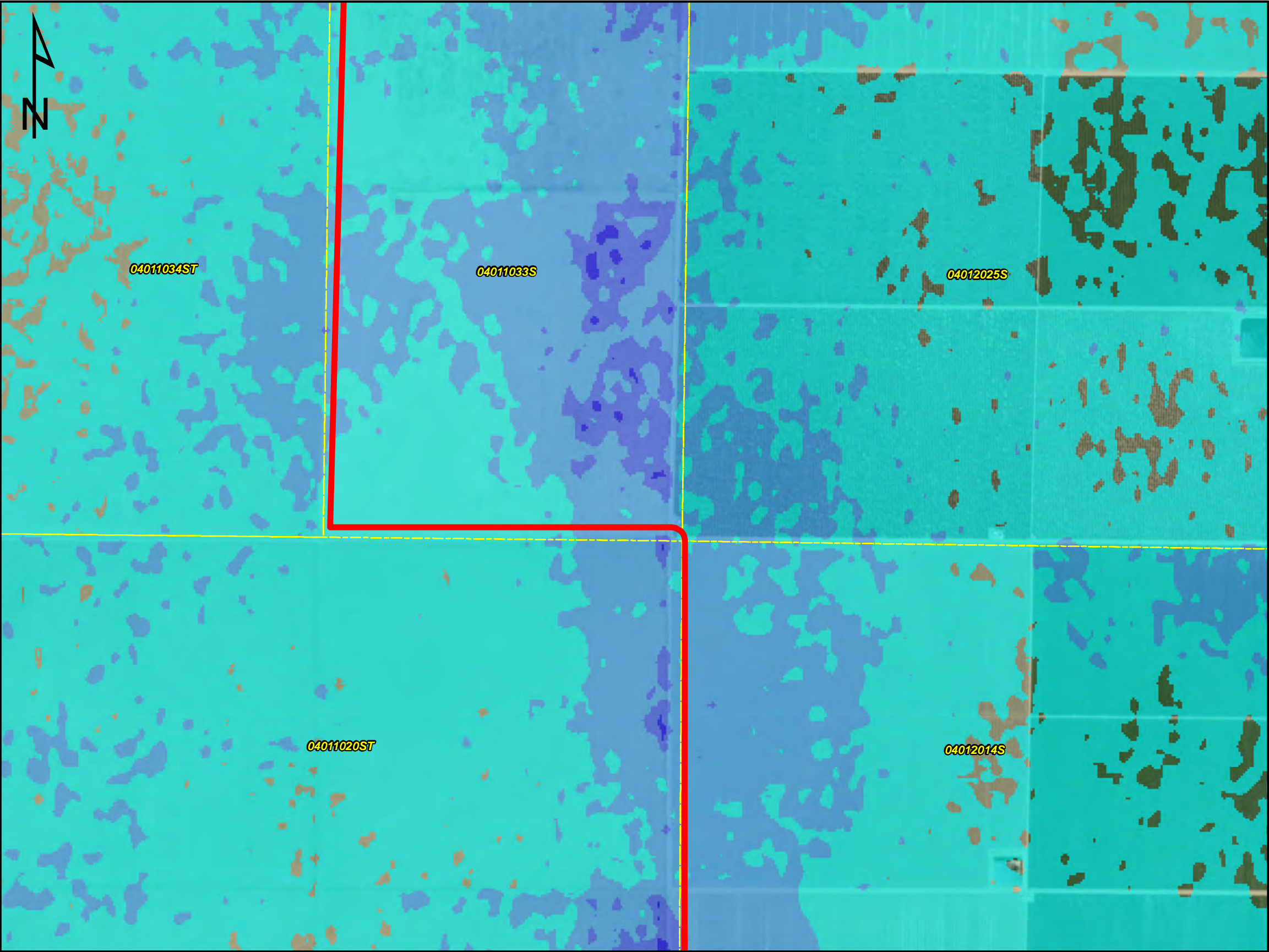
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UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

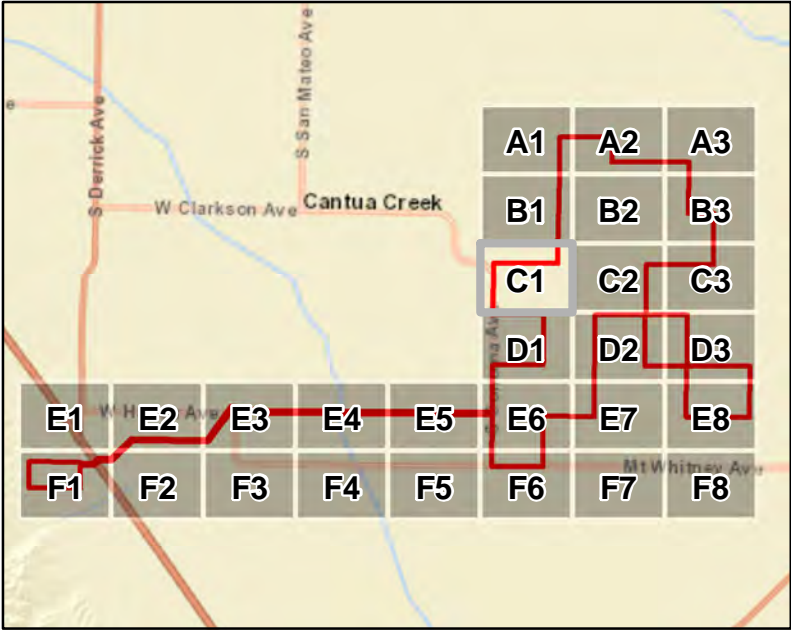
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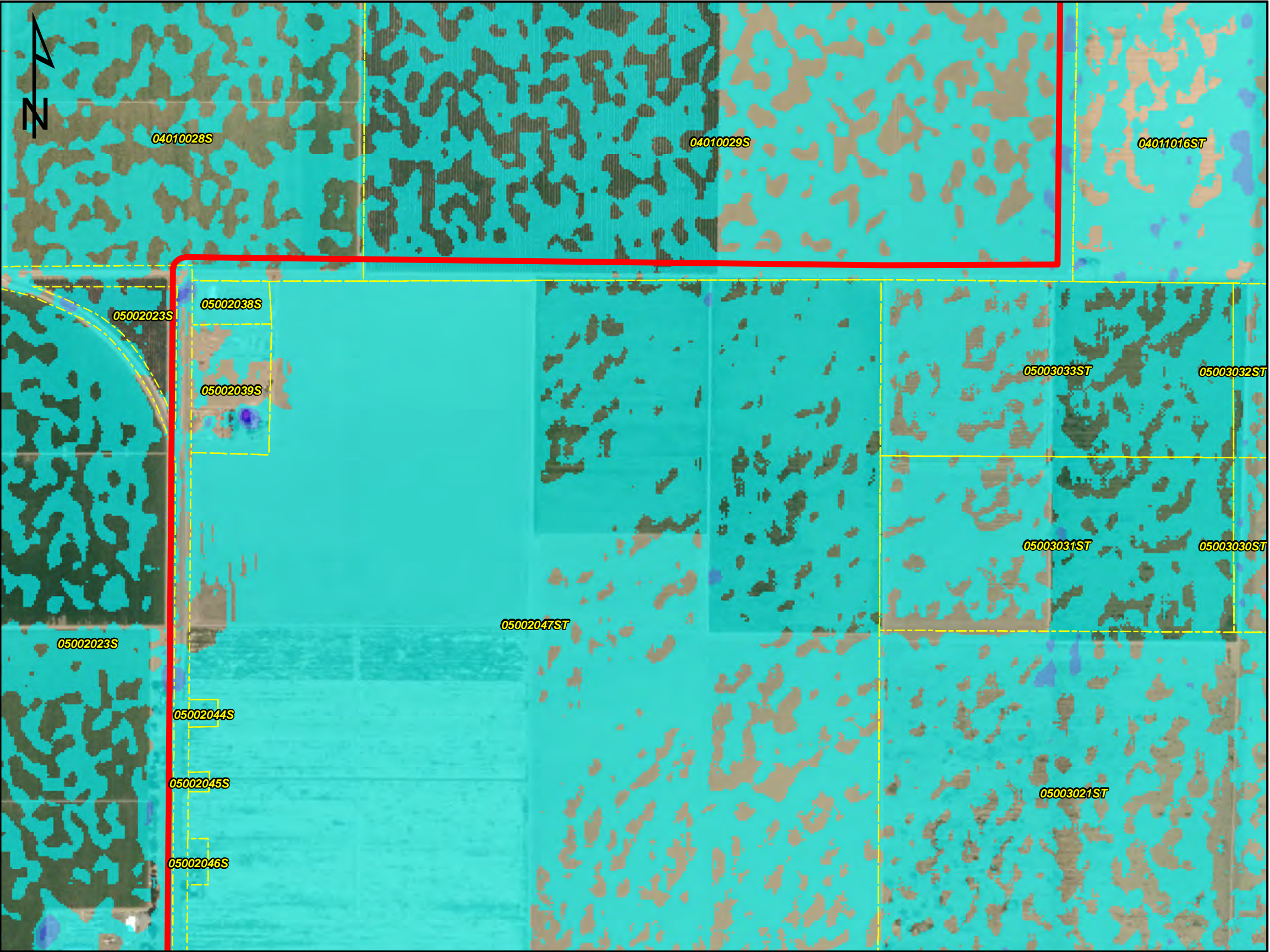
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- Darden Study Area
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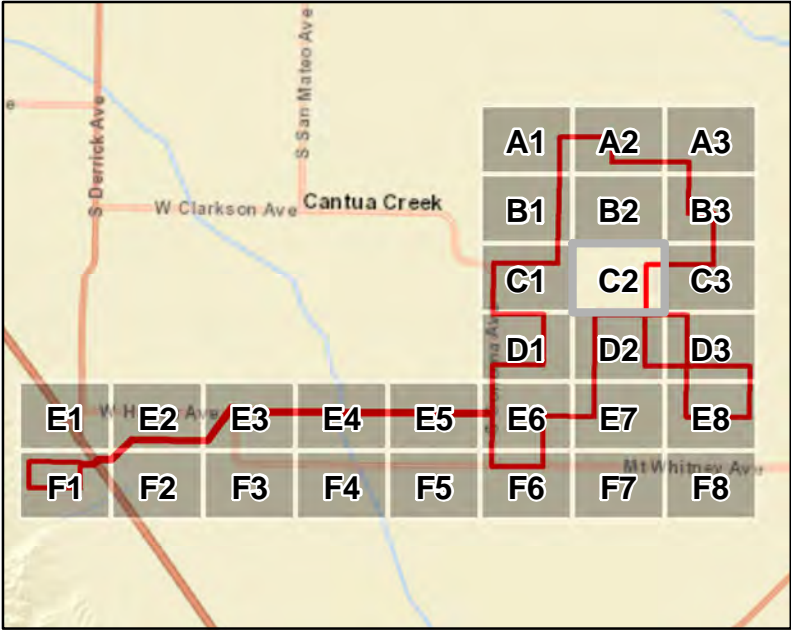
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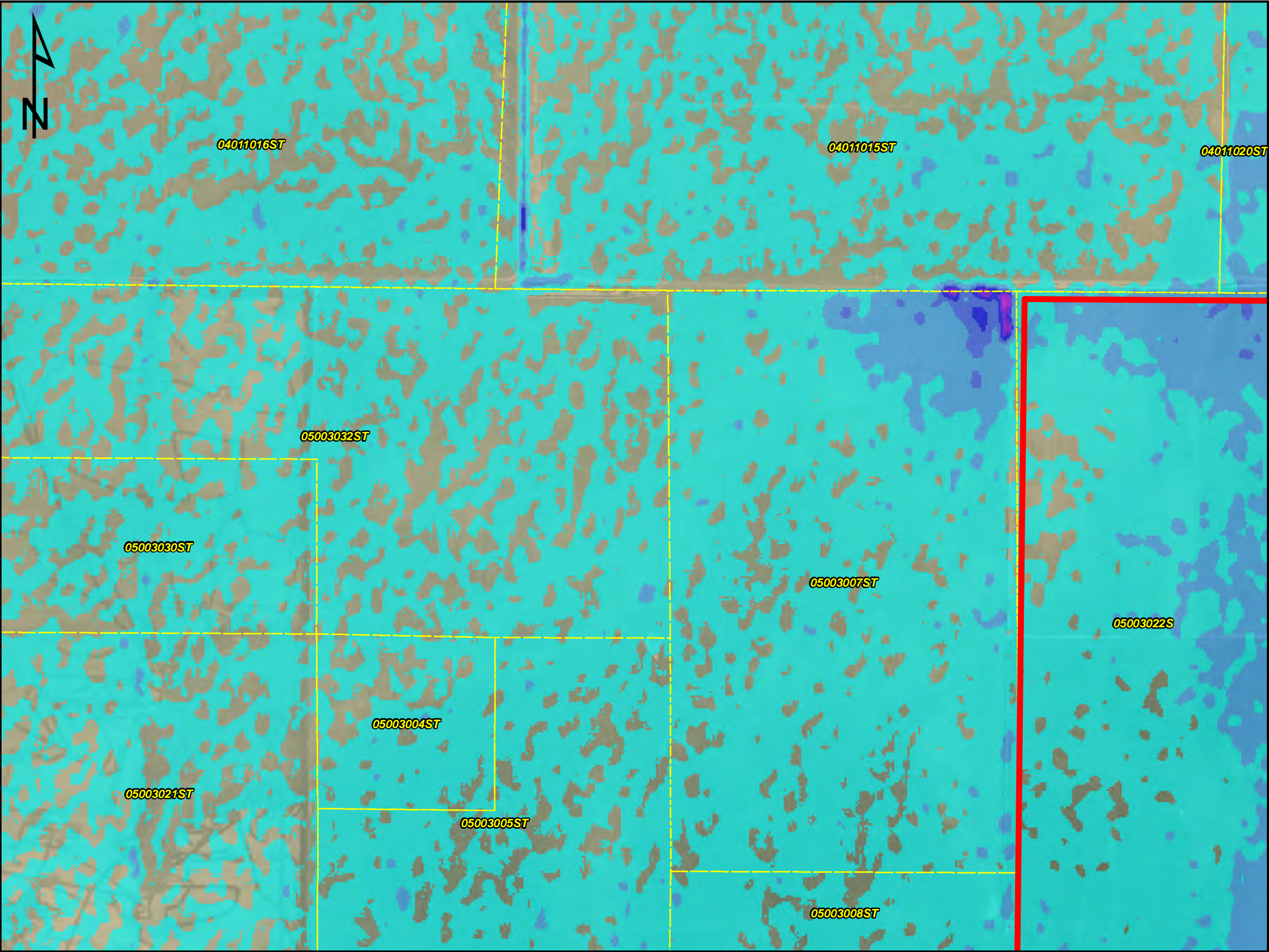
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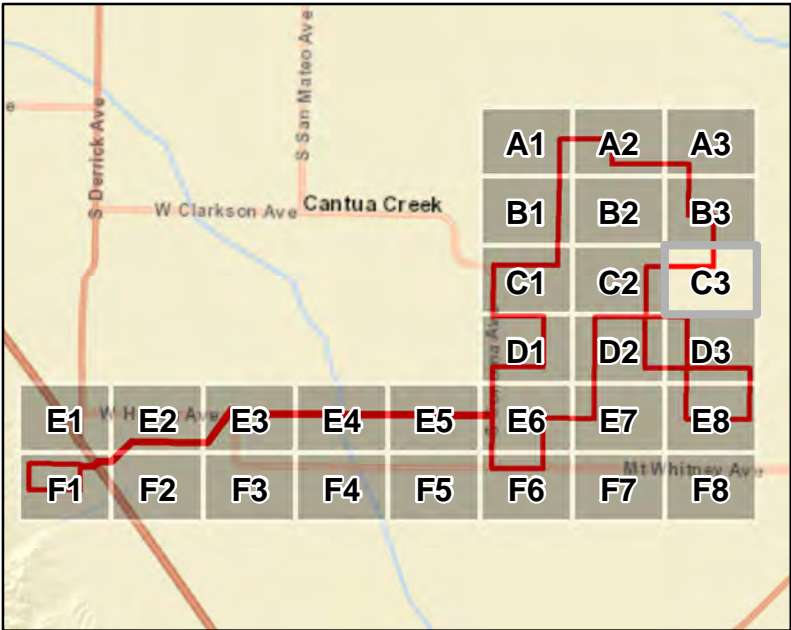
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Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

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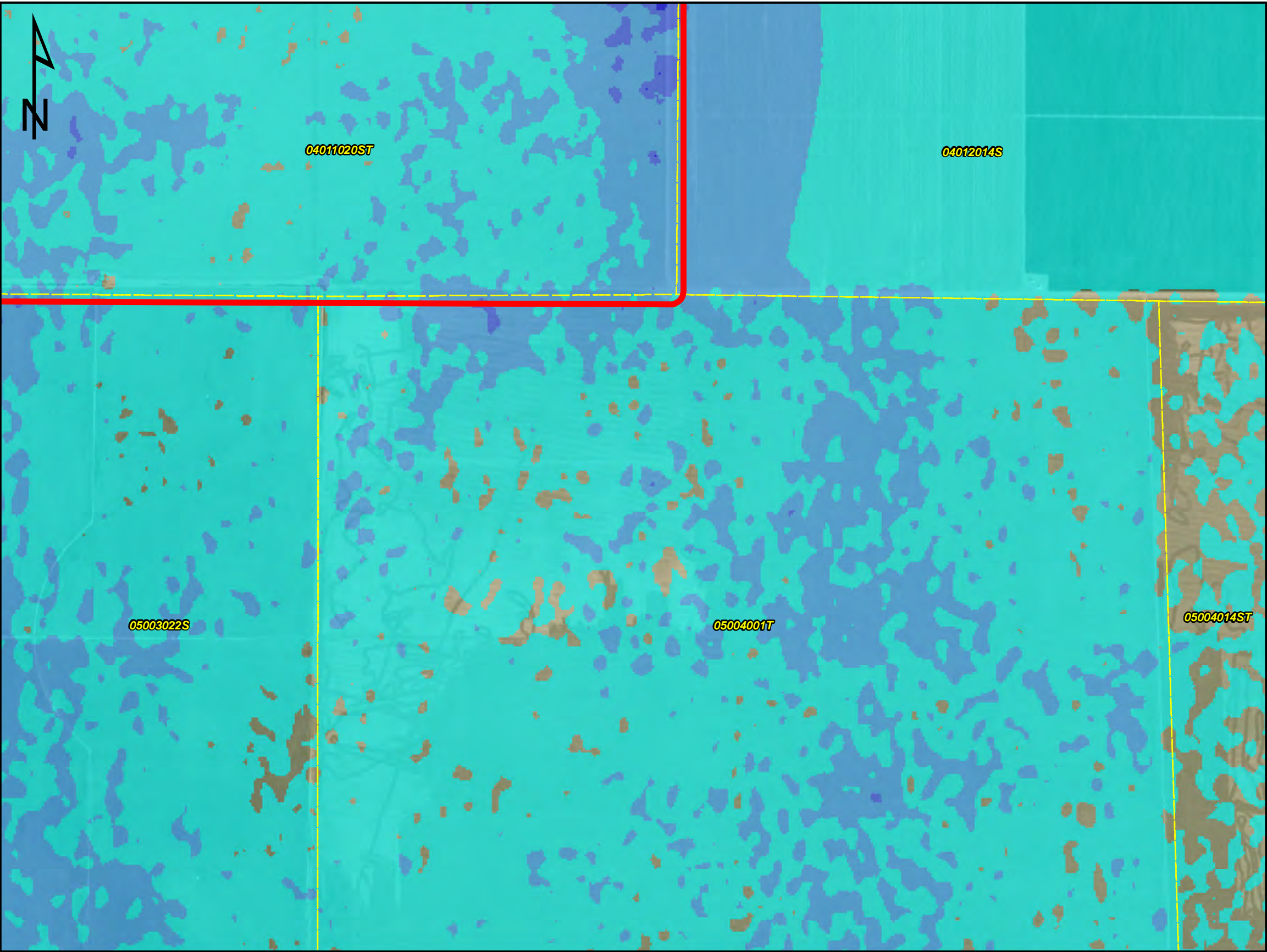
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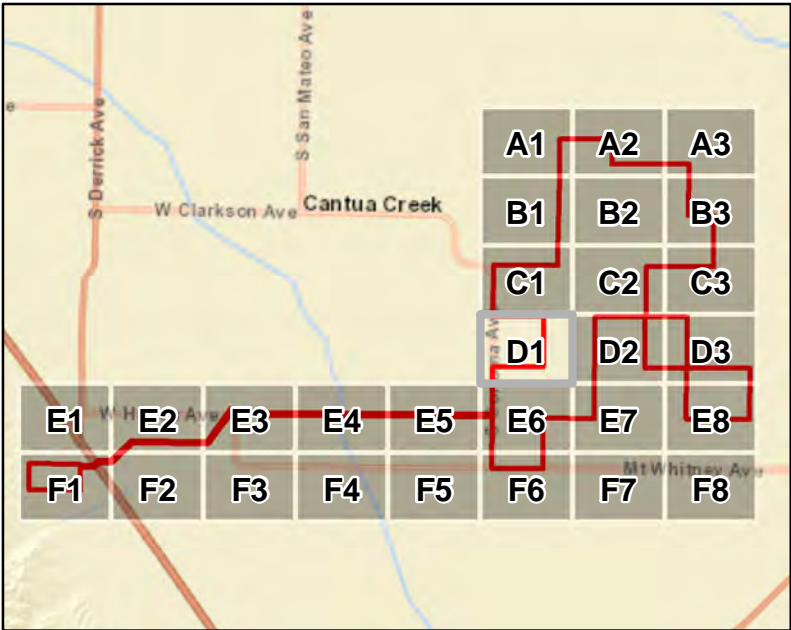
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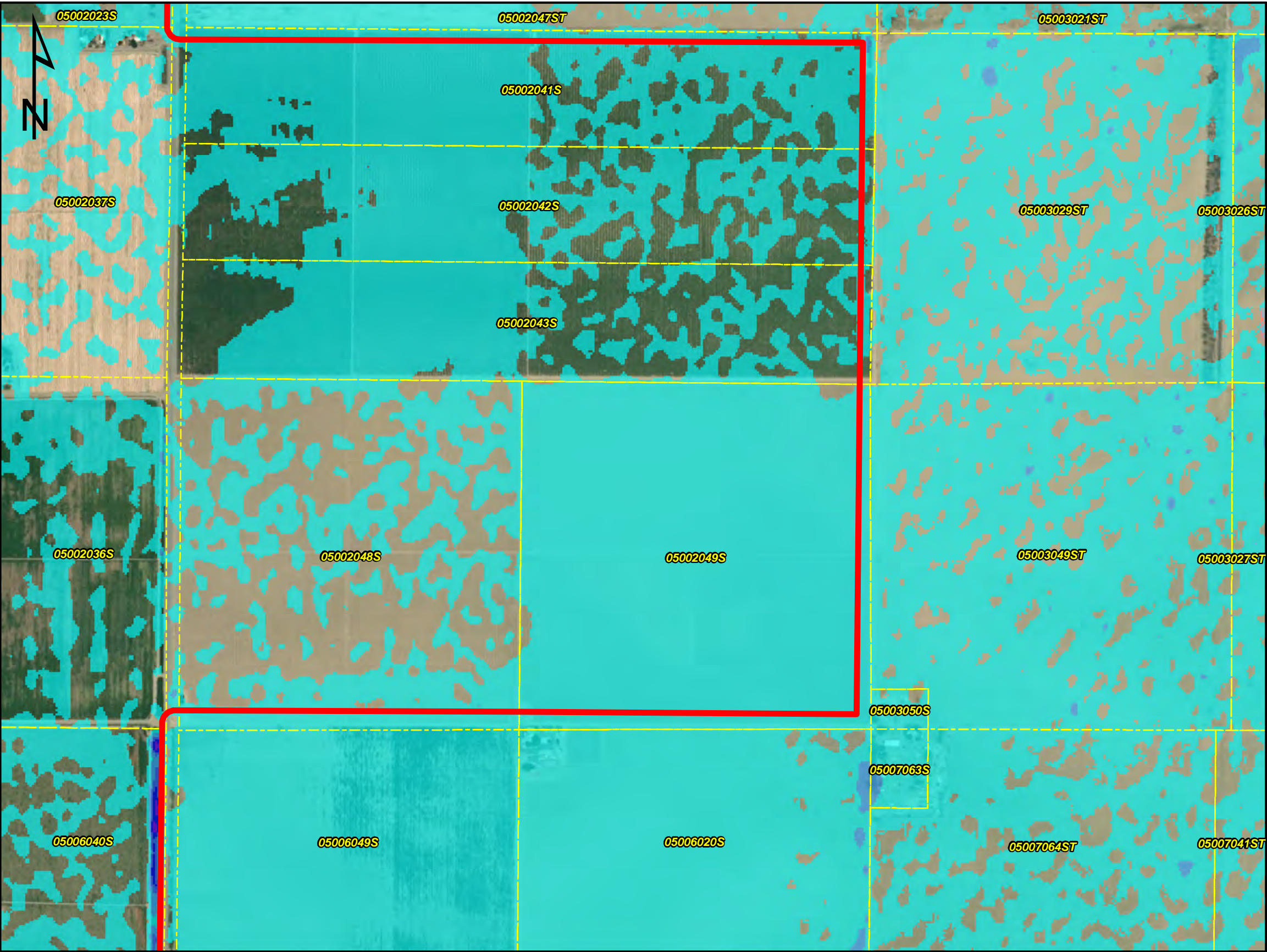
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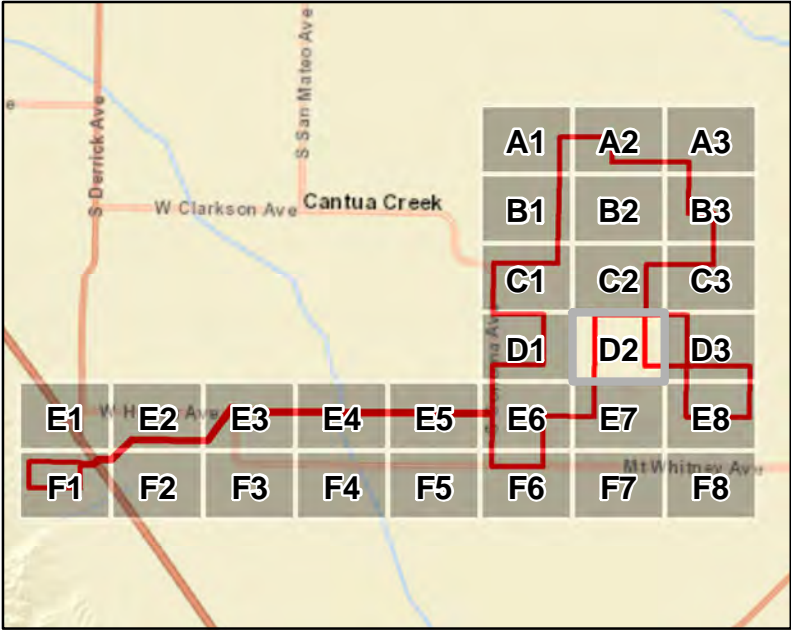
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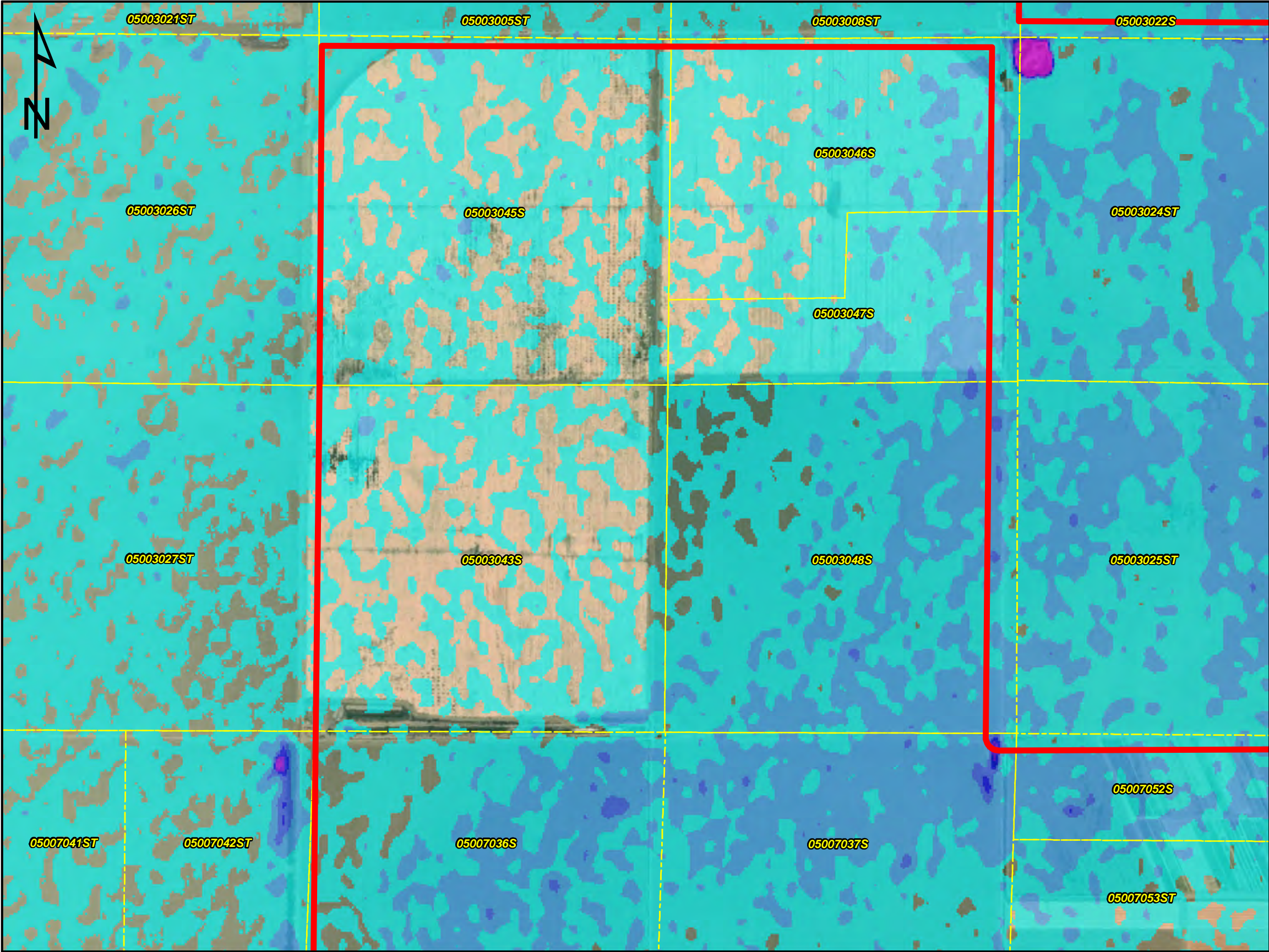
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D1



D3

E7



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

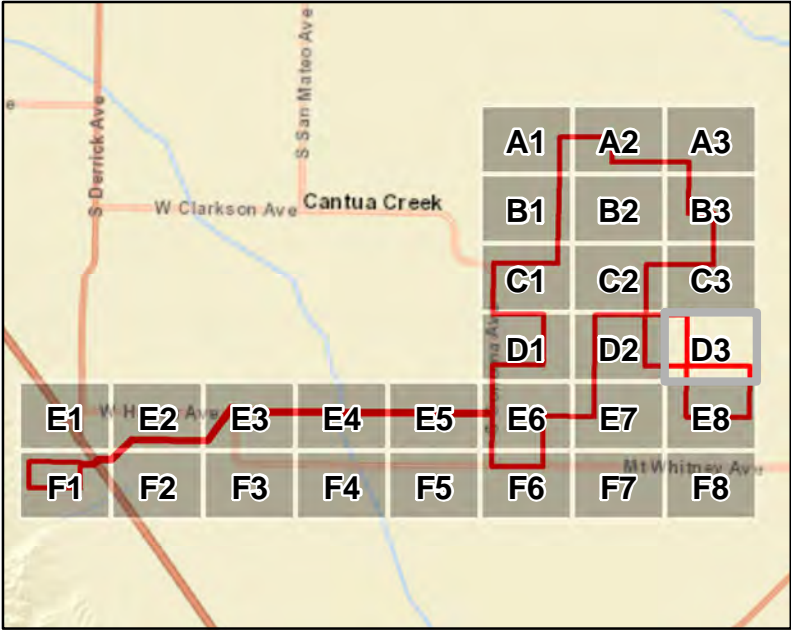
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SCALE: 1 in = 800 ft	BY: WRMA
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- Darden Study Area
- Parcel Lines

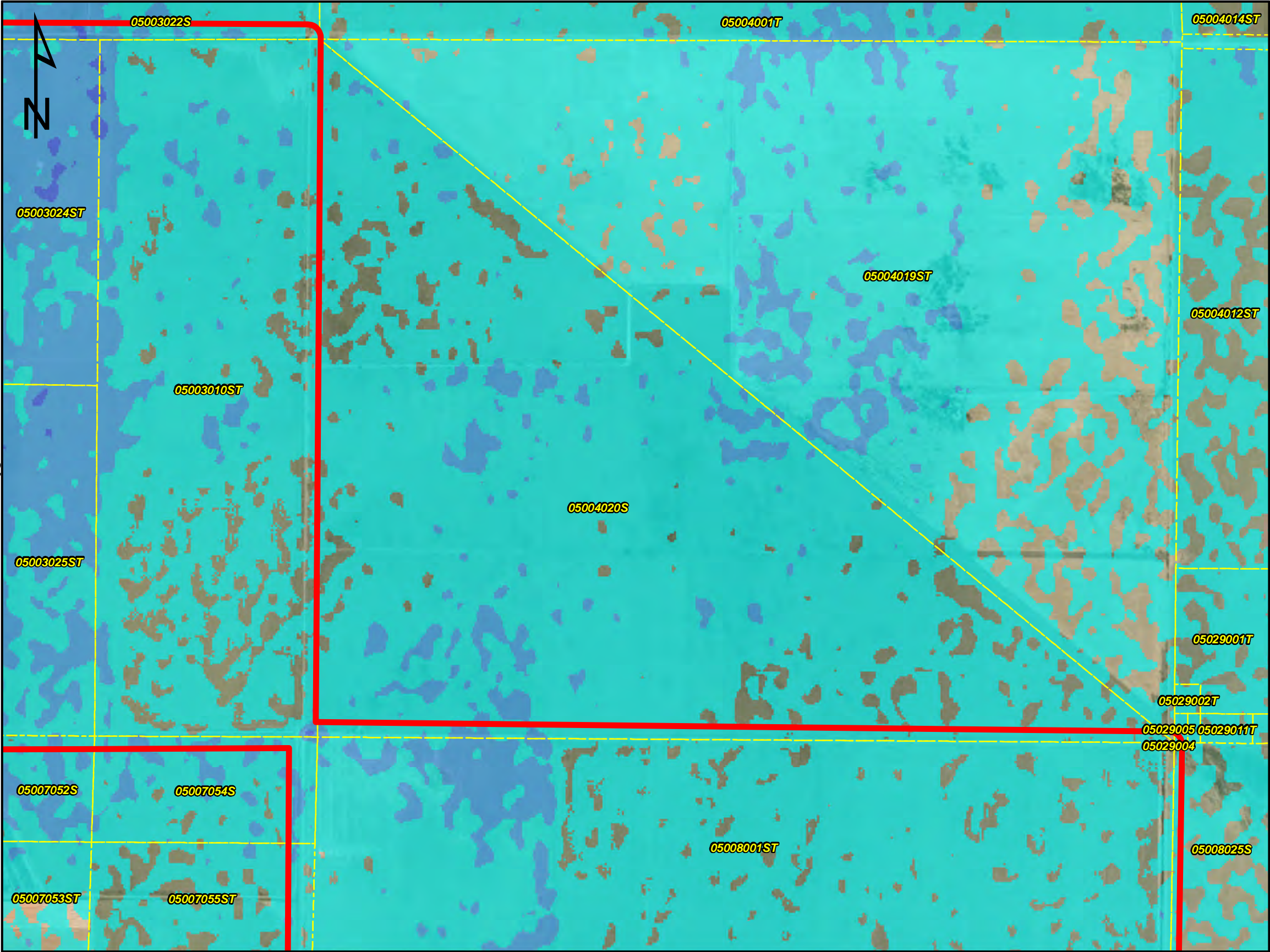
Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



D2



E8



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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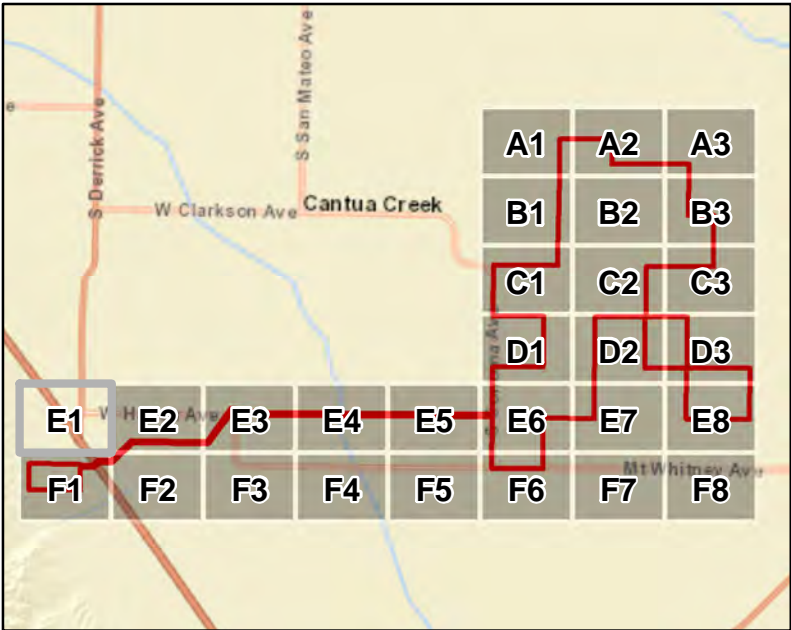
Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
WRMA  
GRID INDEX NO.:  
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PAGE:  
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GRID INDEX

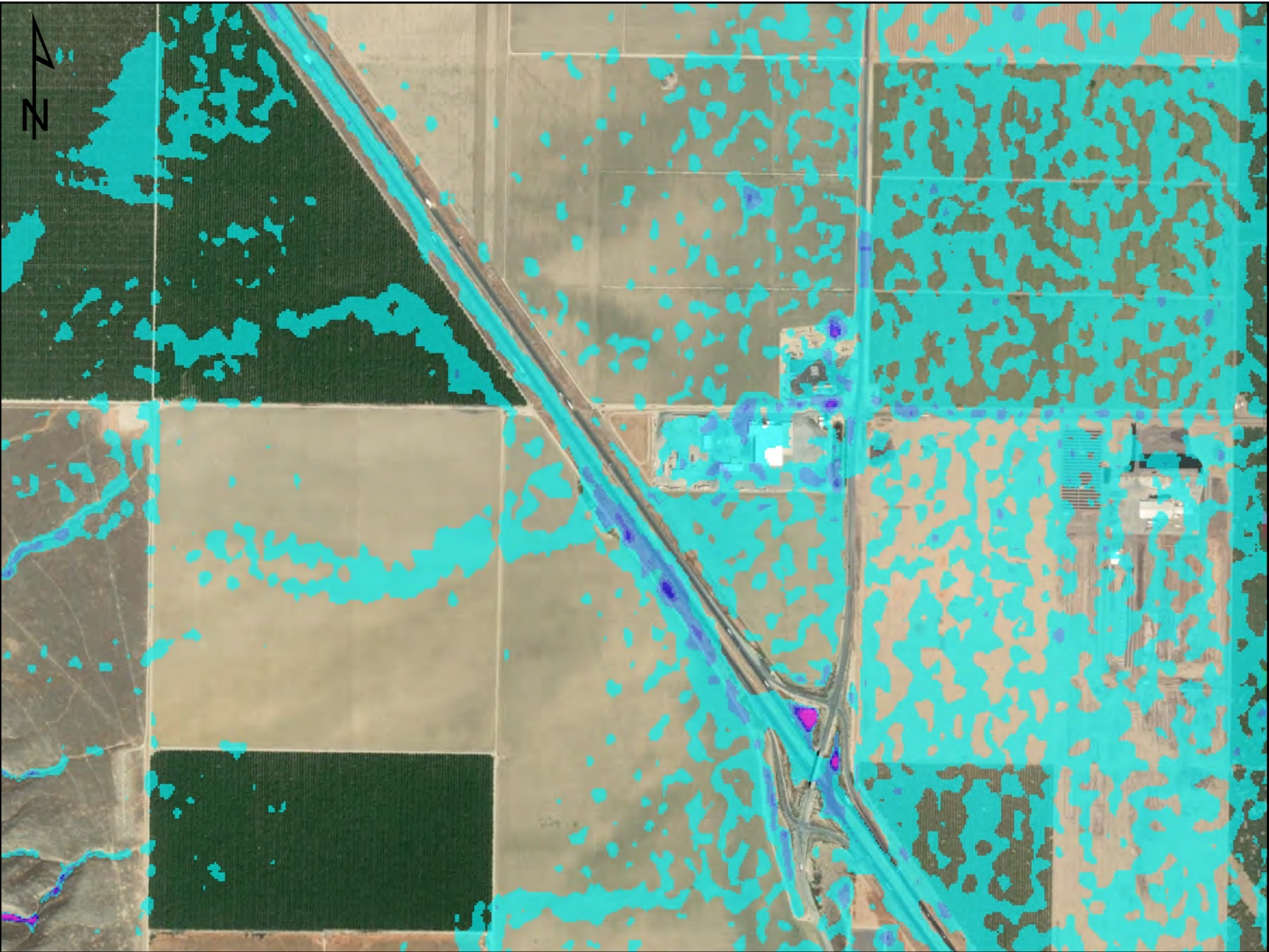
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



F1

E2



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

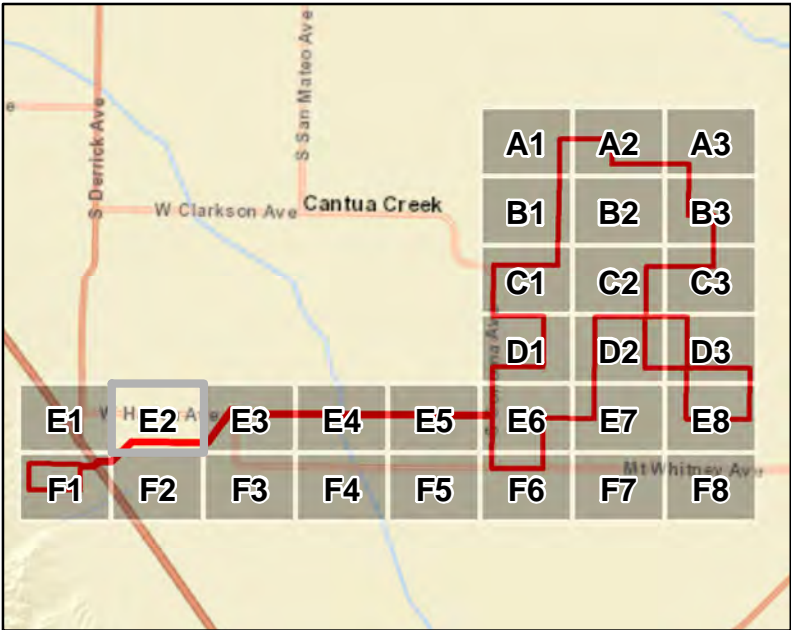
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Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
10/10/2023



SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: E1
STATE: CALIFORNIA	PAGE: 15 OF 30












**GRID INDEX**

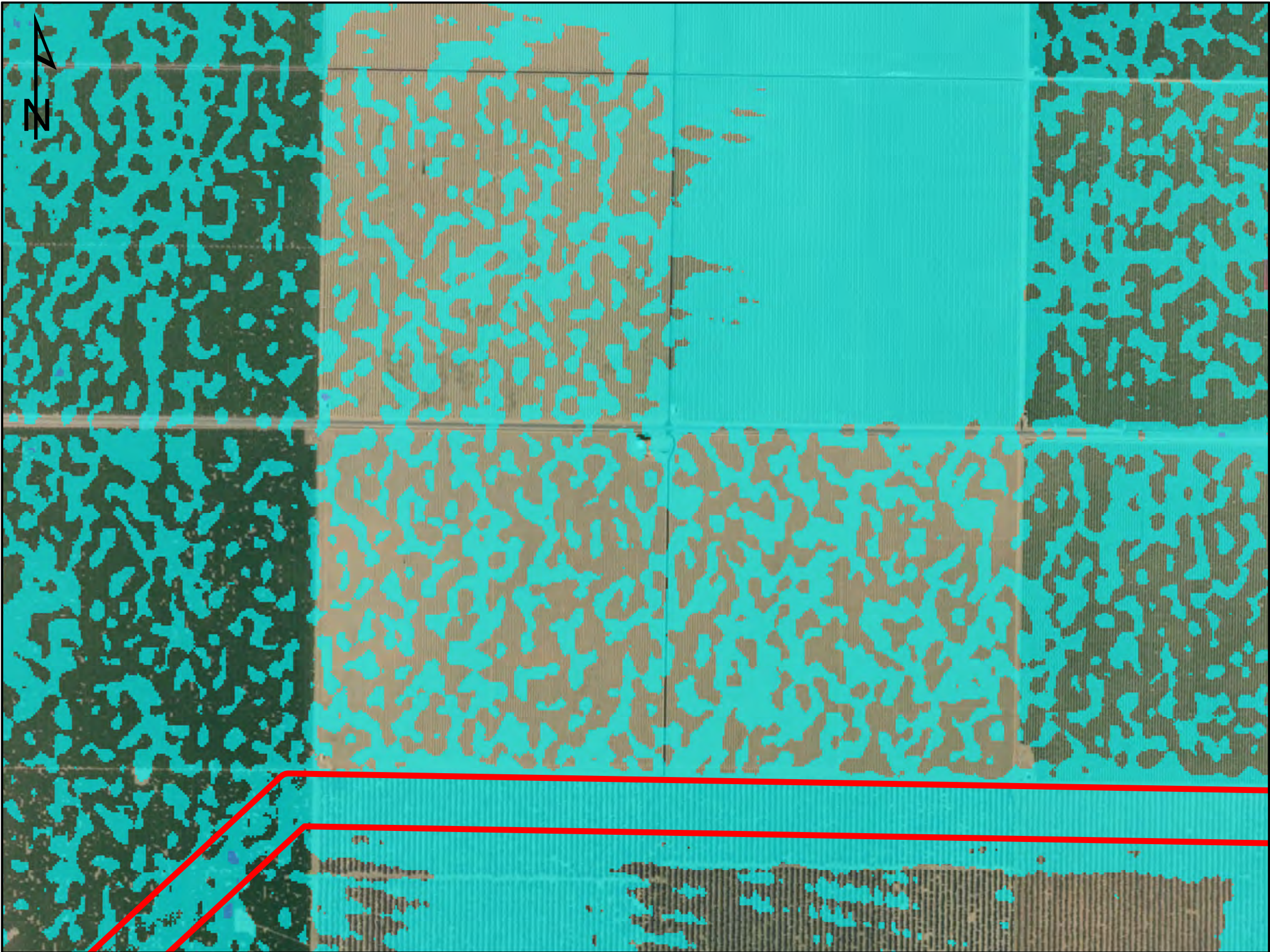
**Legend**

-  Darden Study Area
-  Parcel Lines

**Floodplain Max Depth (ft)**

-  0.0 - 1.0
-  1.1 - 2.0
-  2.1 - 2.5
-  2.6 - 3.0
-  3.1 - 3.5
-  3.6 - 4.0
-  > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
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Units: Foot US



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

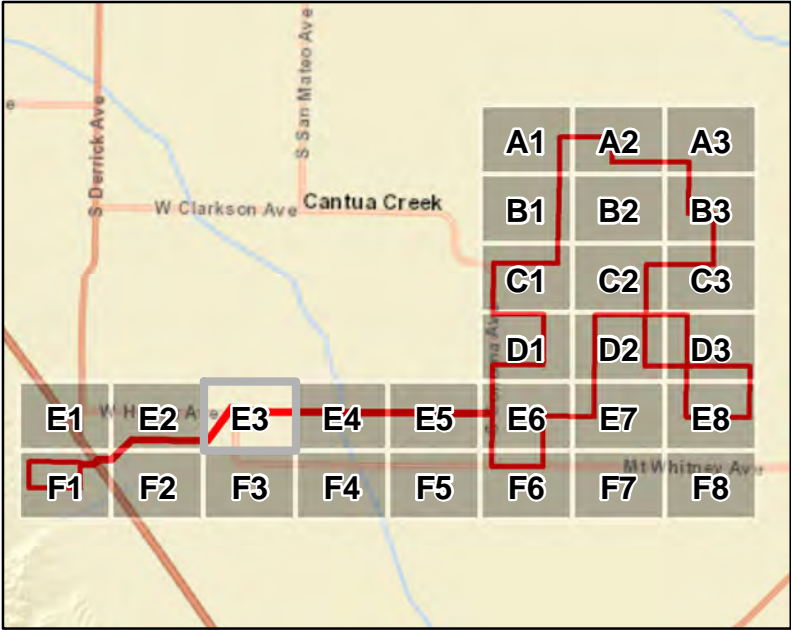
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**Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)**

Map Produced:  
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SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: <b>E2</b>
STATE: CALIFORNIA	PAGE: 16 OF 30












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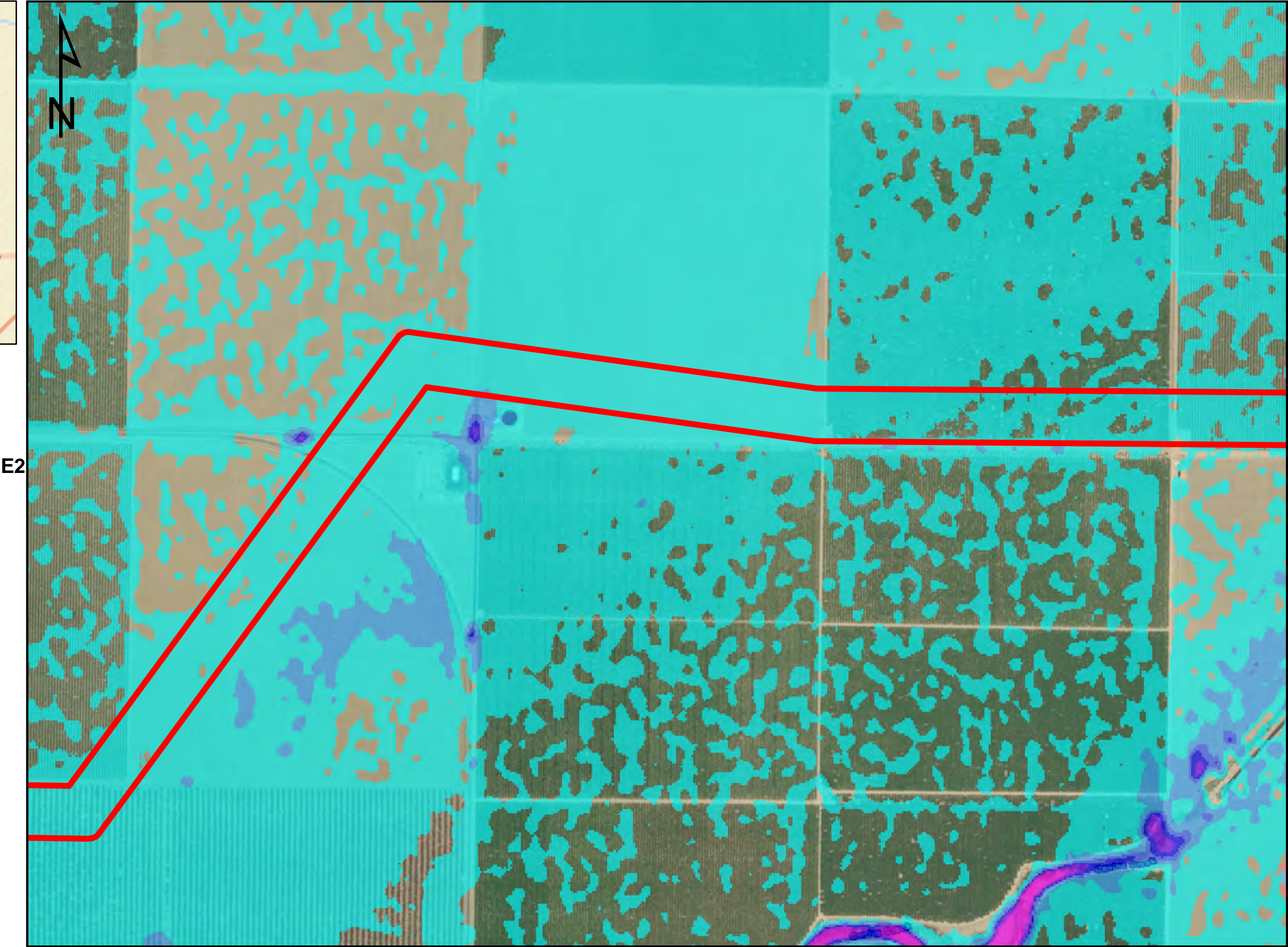
**Legend**

-  Darden Study Area
-  Parcel Lines

**Floodplain Max Depth (ft)**

-  0.0 - 1.0
-  1.1 - 2.0
-  2.1 - 2.5
-  2.6 - 3.0
-  3.1 - 3.5
-  3.6 - 4.0
-  > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
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Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

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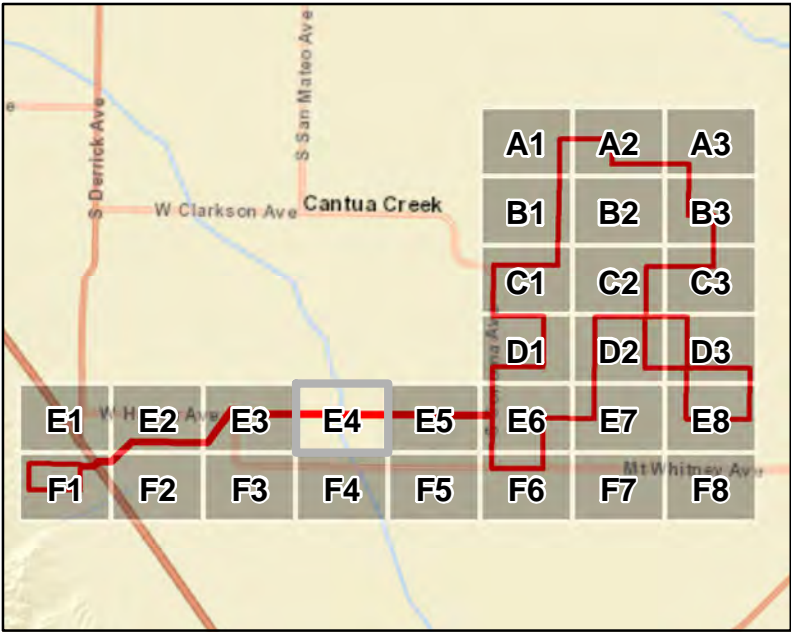
**Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)**

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
WRMA  
GRID INDEX NO.:  
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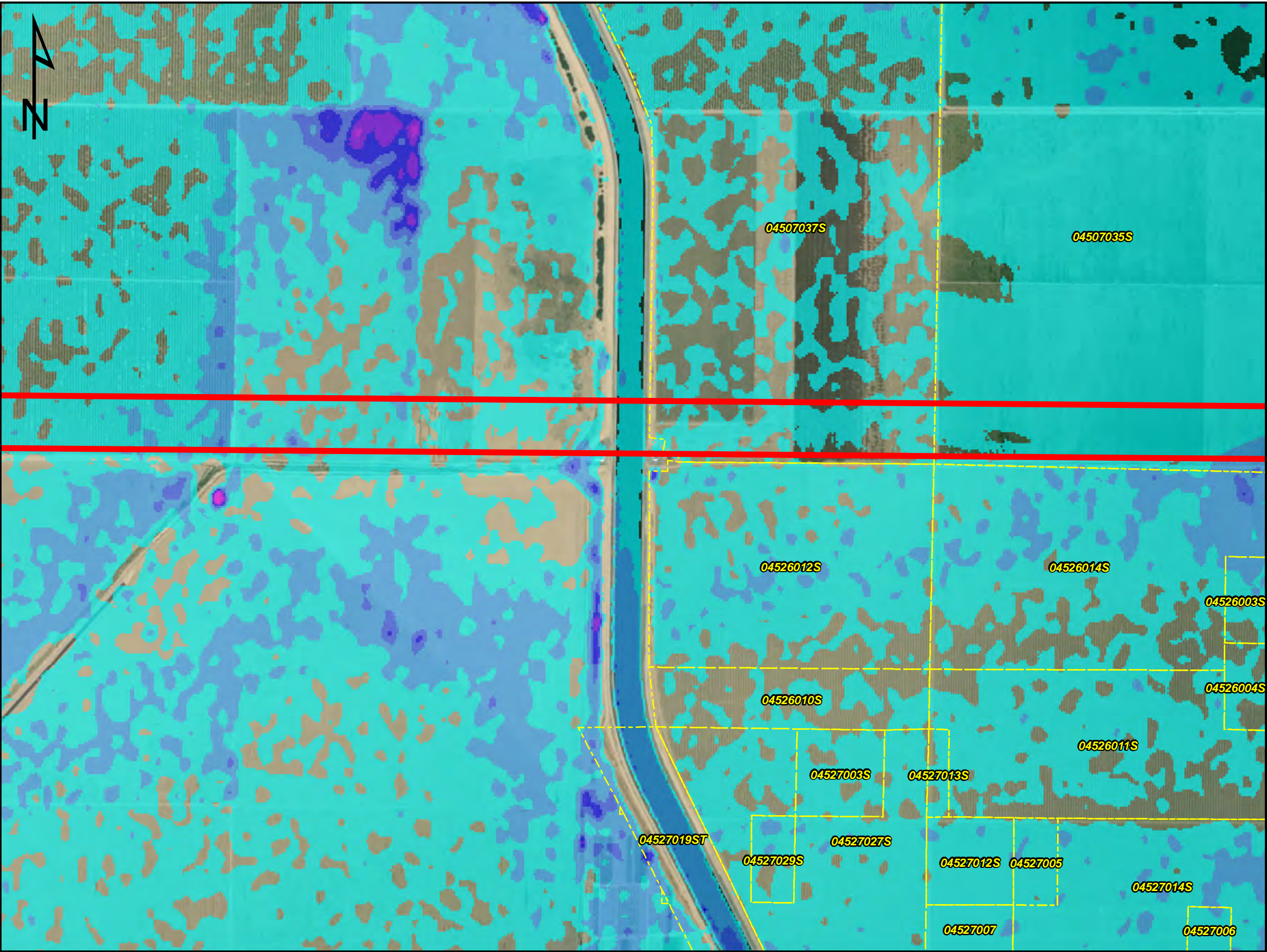
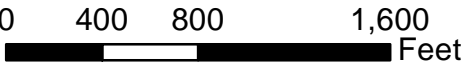
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
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UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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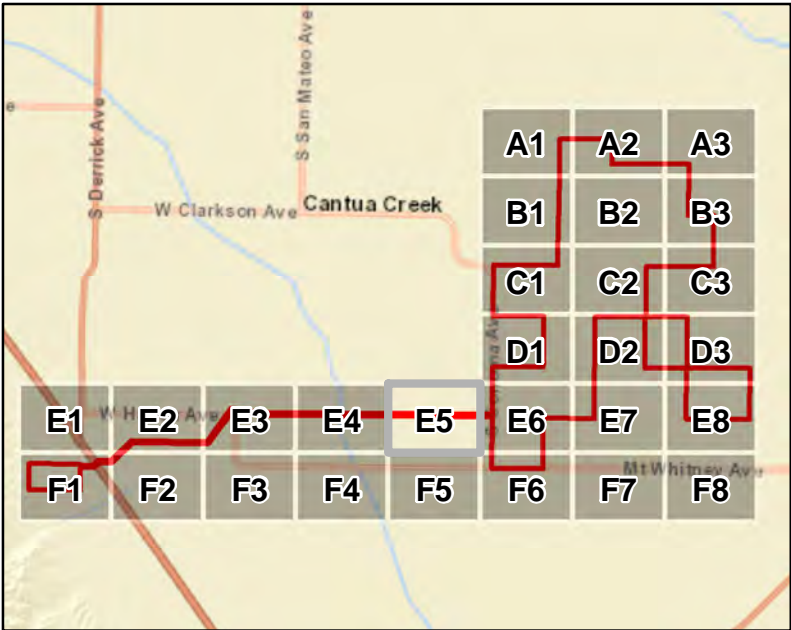
Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
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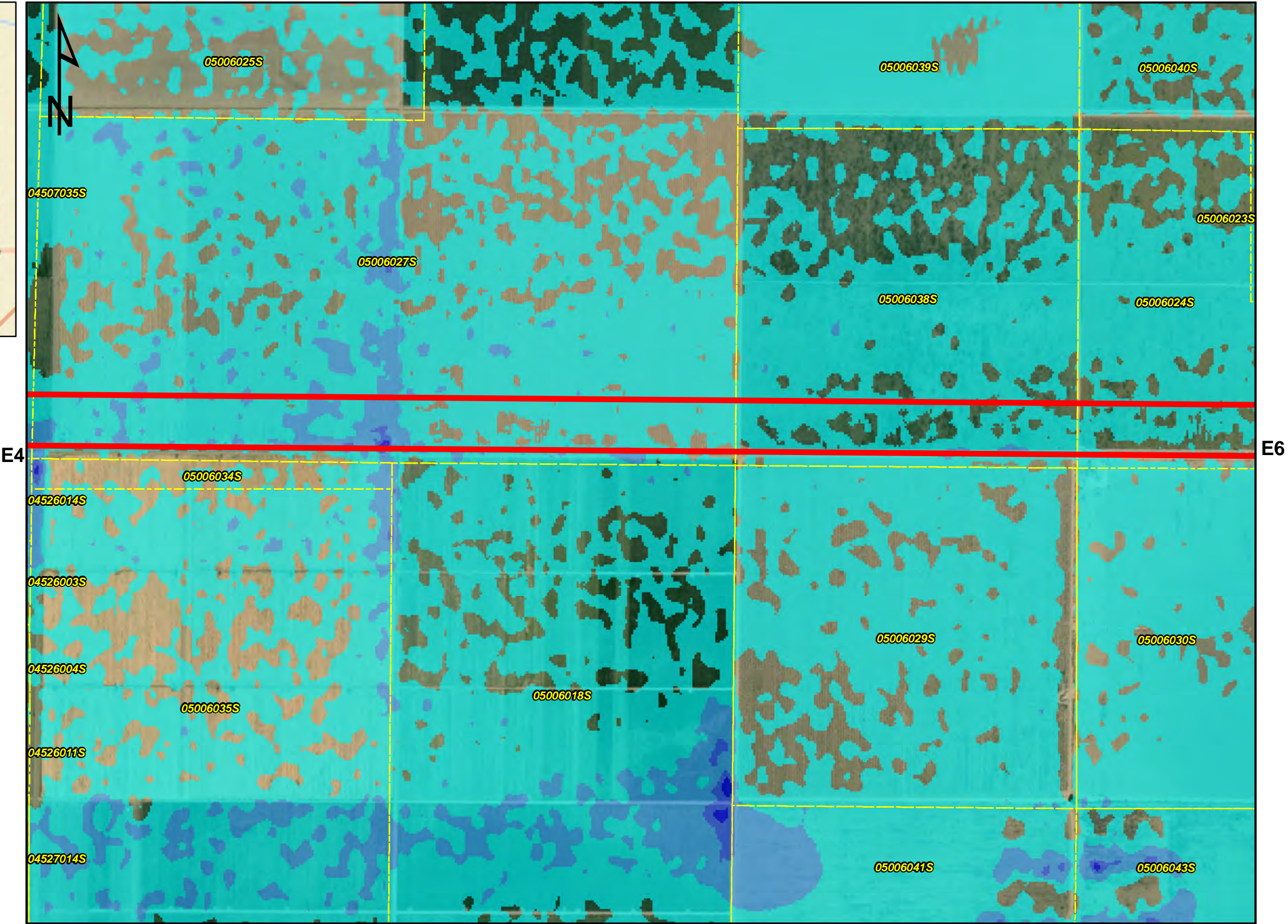
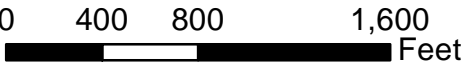
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

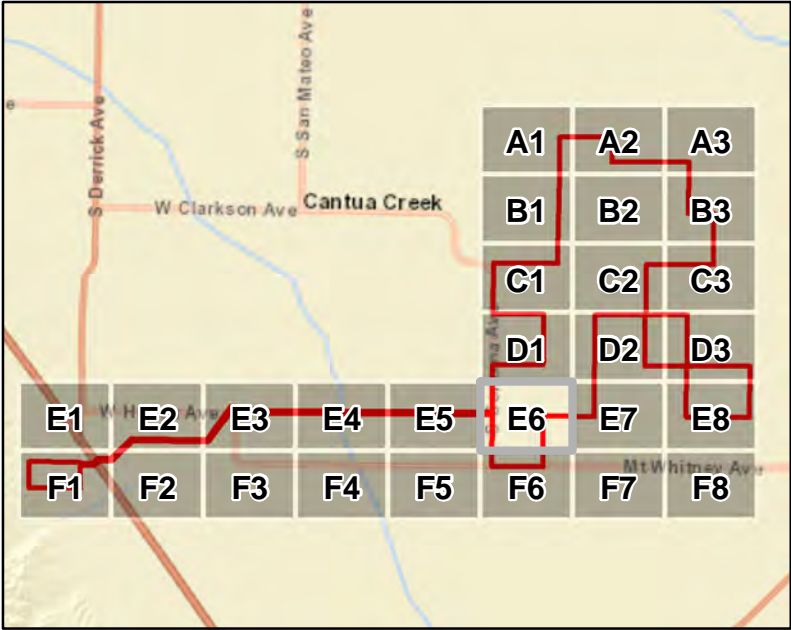
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Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
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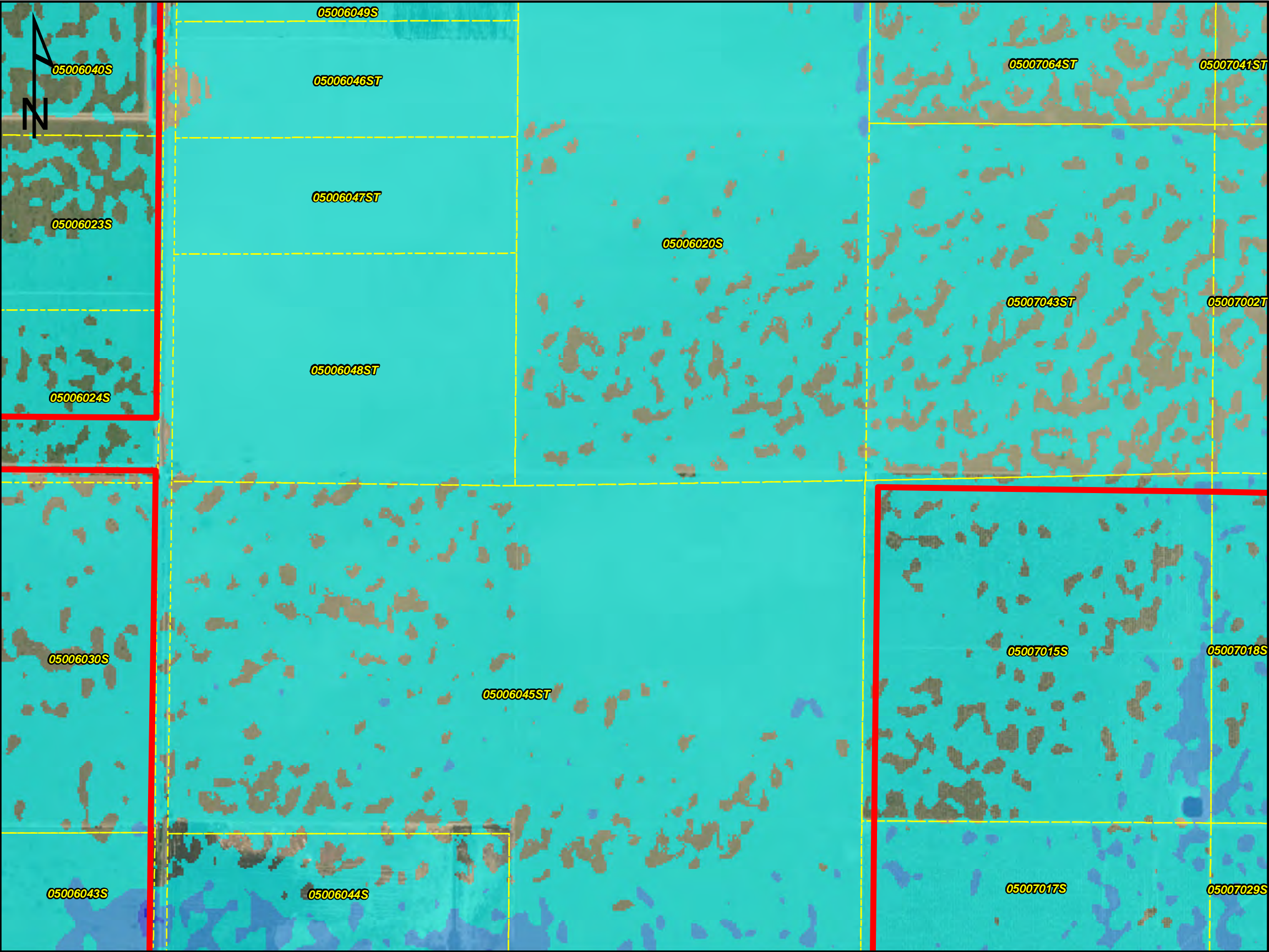
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
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False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
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Units: Foot US



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

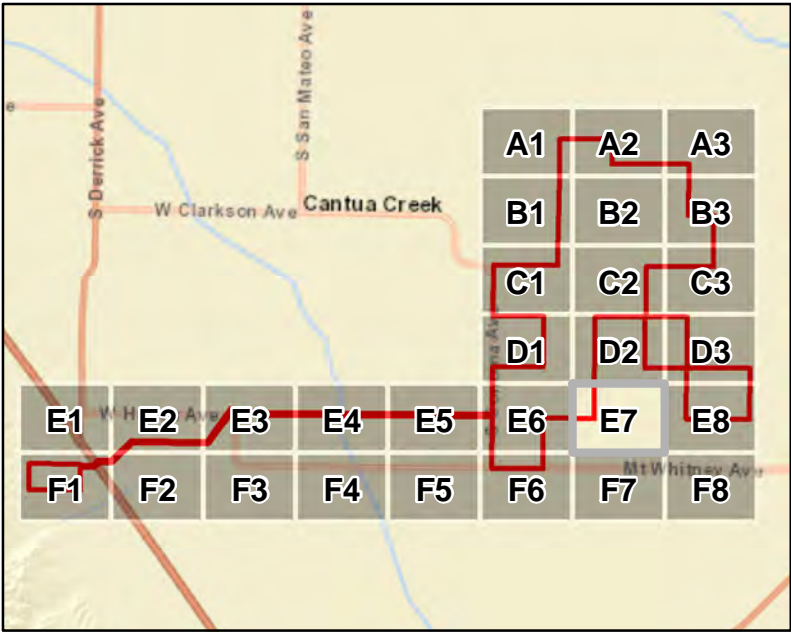
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Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
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SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: E6
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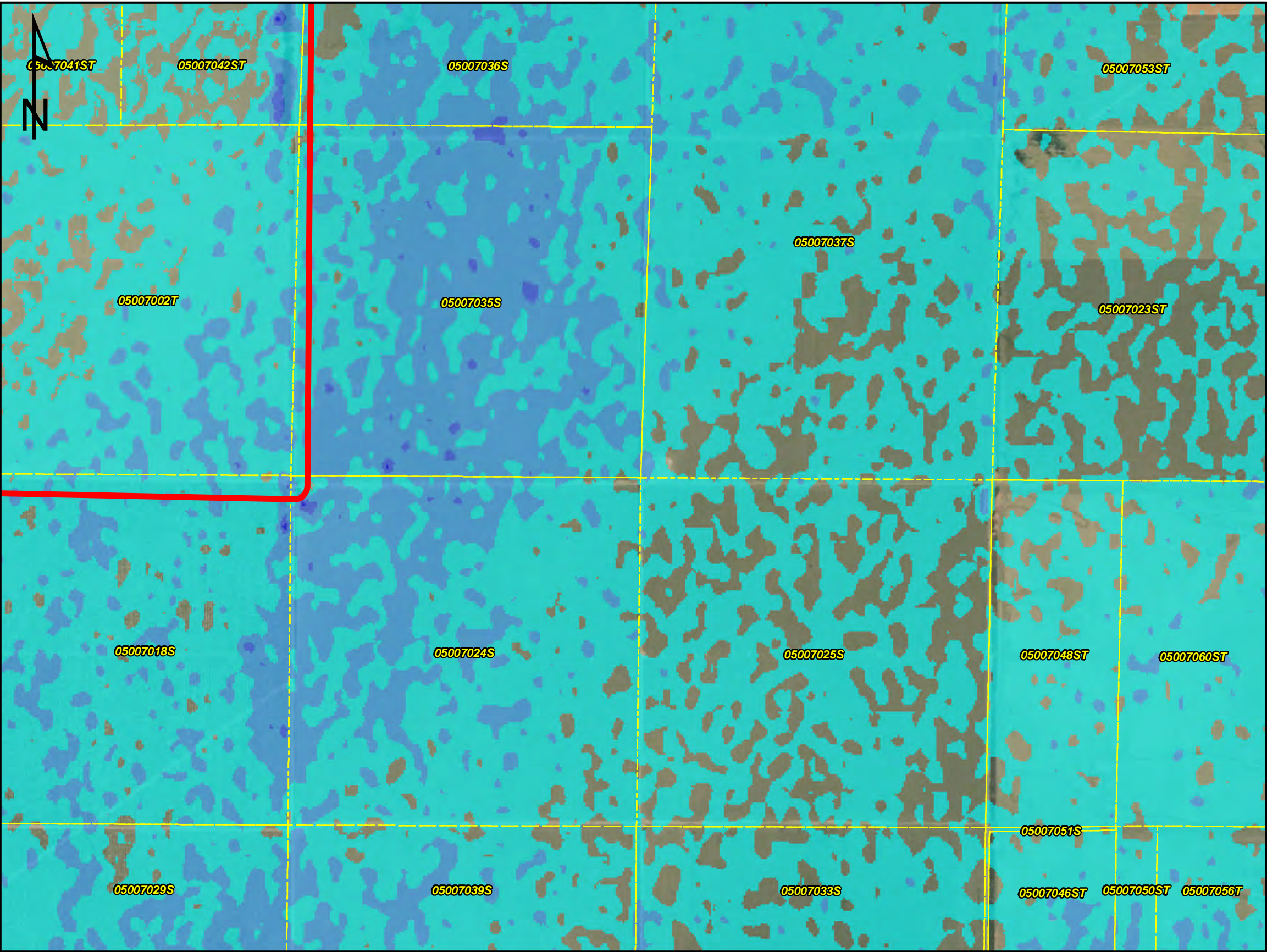
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

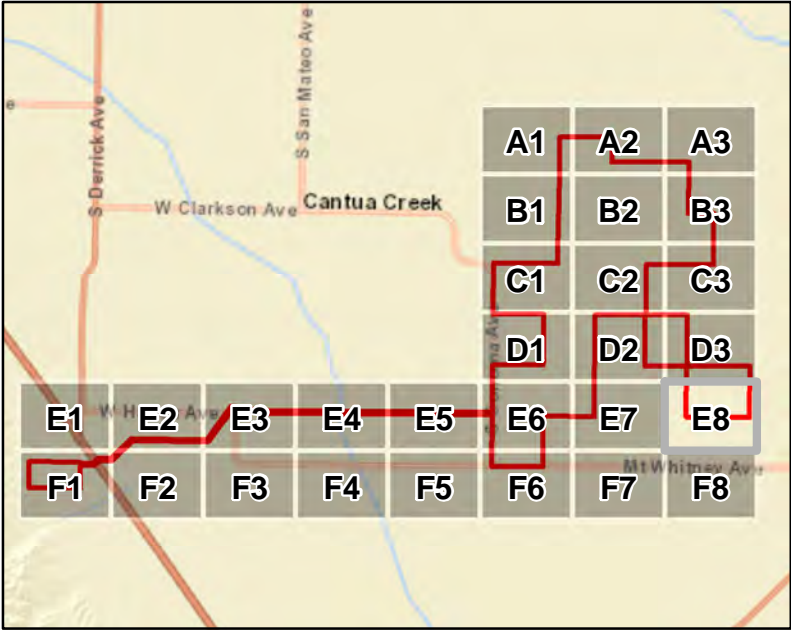
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Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: E7
STATE: CALIFORNIA	PAGE: 21 OF 30





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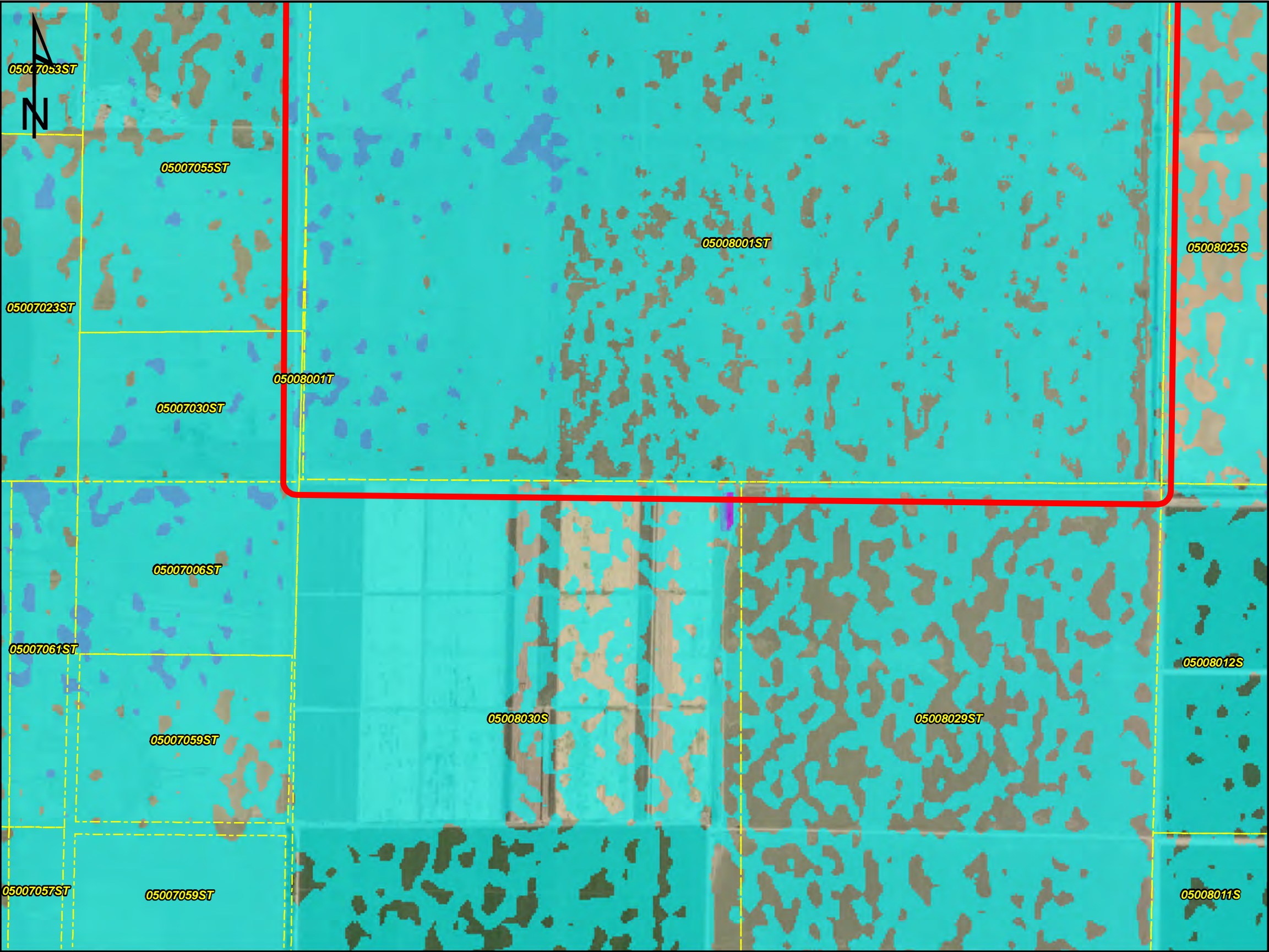
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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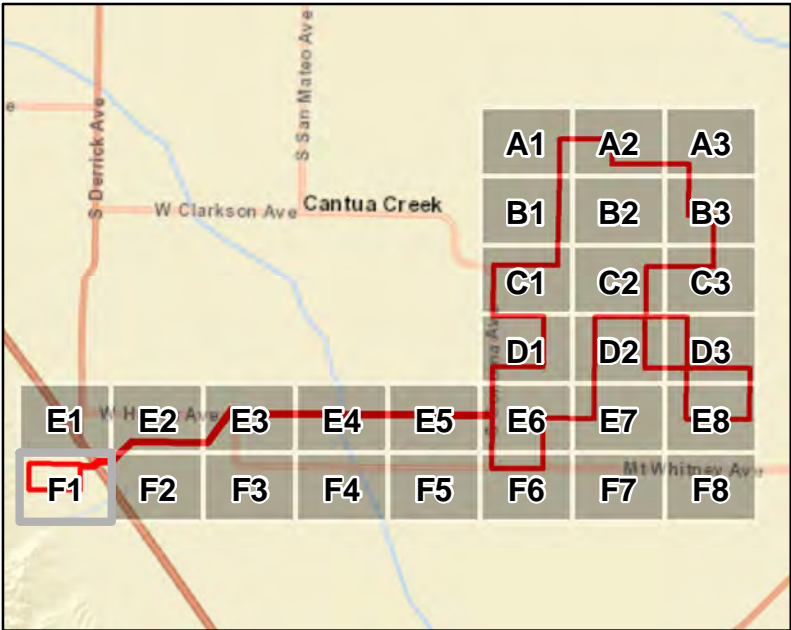
Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
WRMA  
GRID INDEX NO.:  
E8  
PAGE:  
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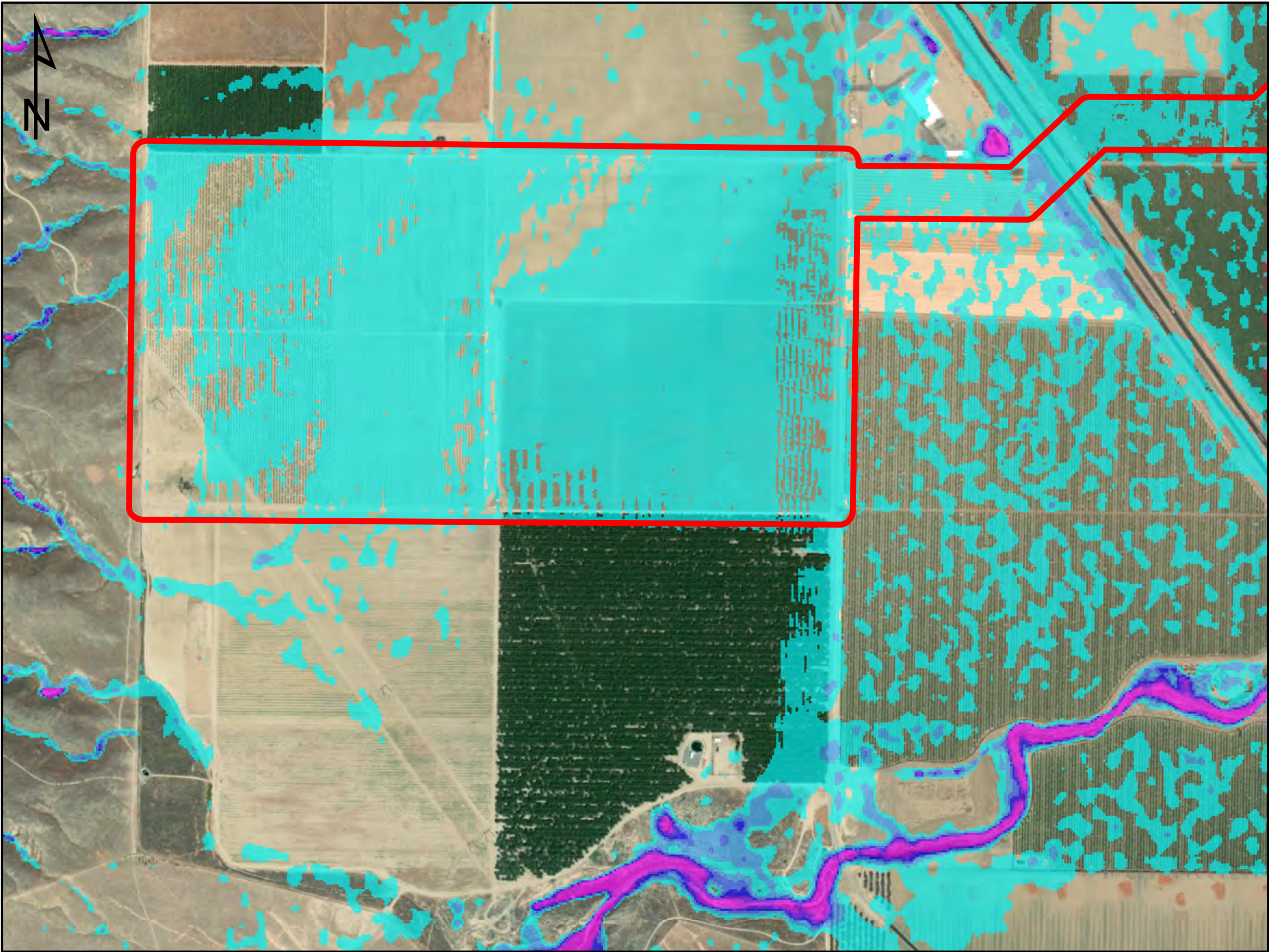
Legend

- Darden Study Area
- Parcel Lines

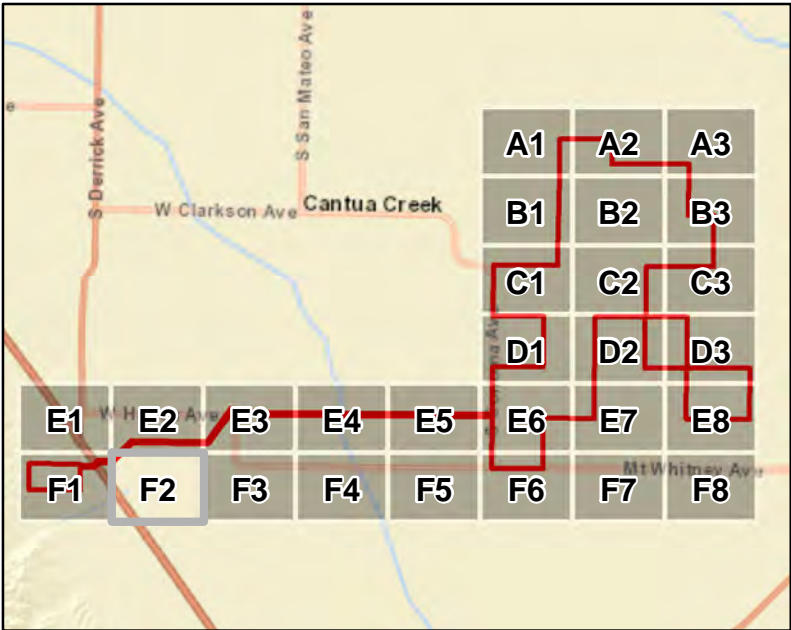
Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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False Easting: 6,561,666.6667  
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Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US







**GRID INDEX**

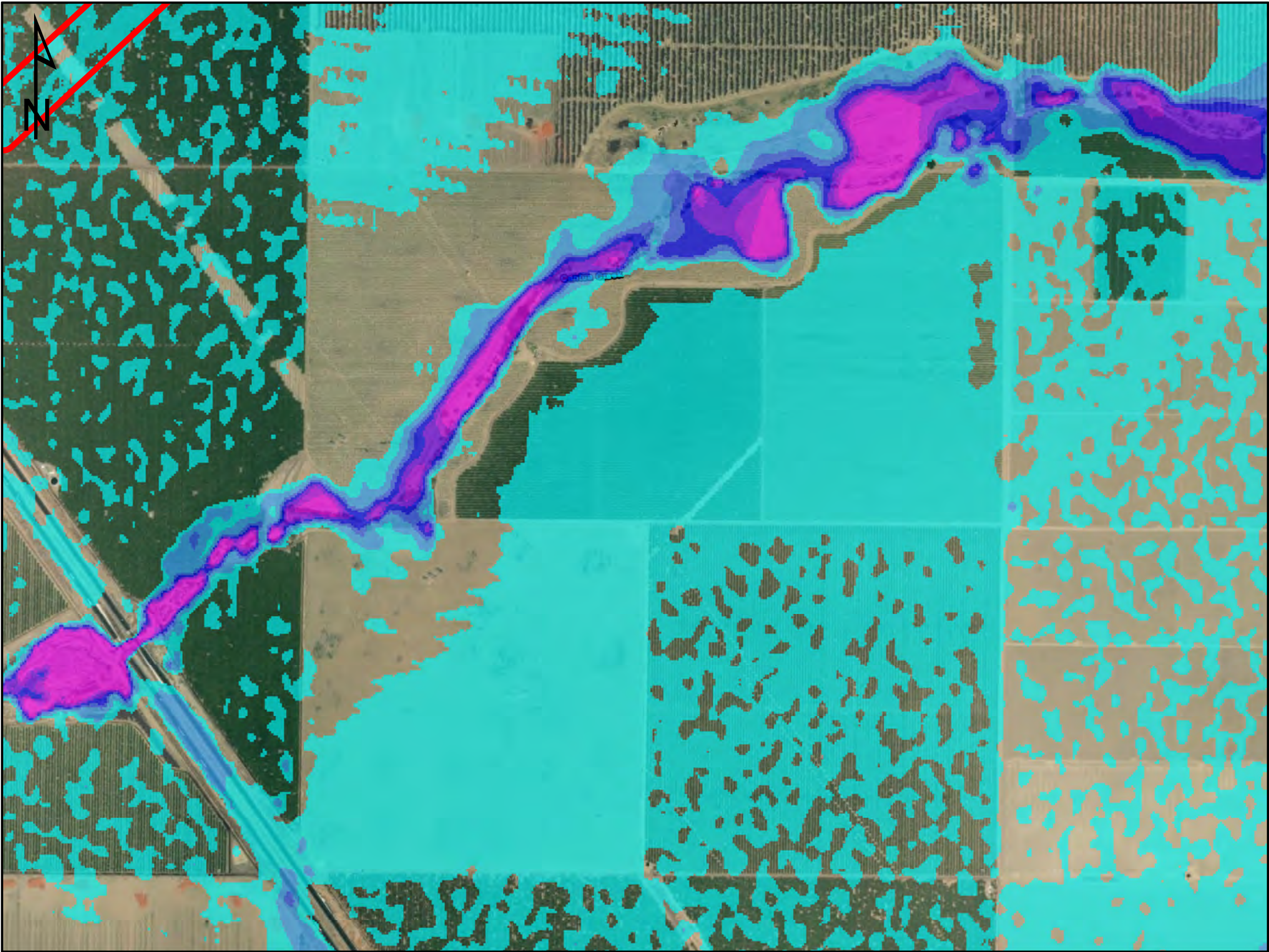
**Legend**

- Darden Study Area
- Parcel Lines

**Floodplain Max Depth (ft)**

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
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Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

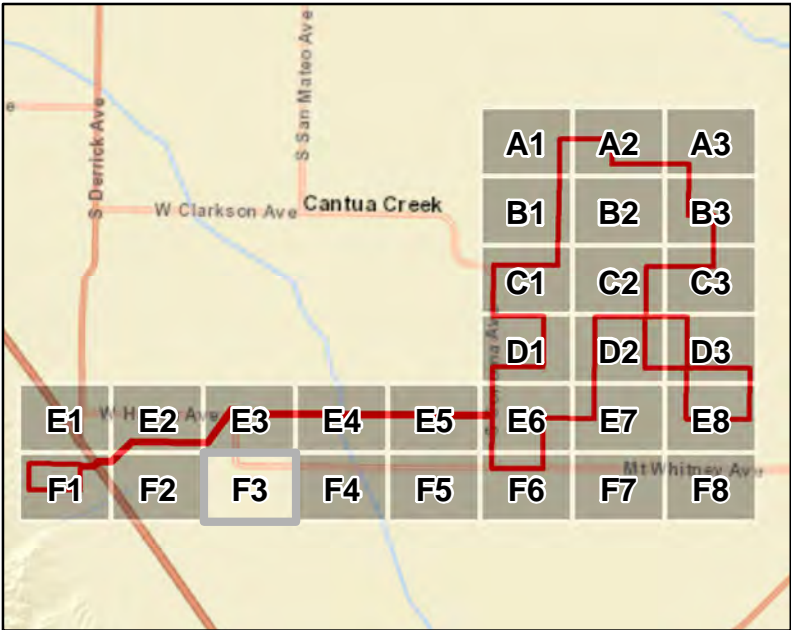
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**Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)**

Map Produced:  
10/10/2023



SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: <b>F2</b>
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**GRID INDEX**

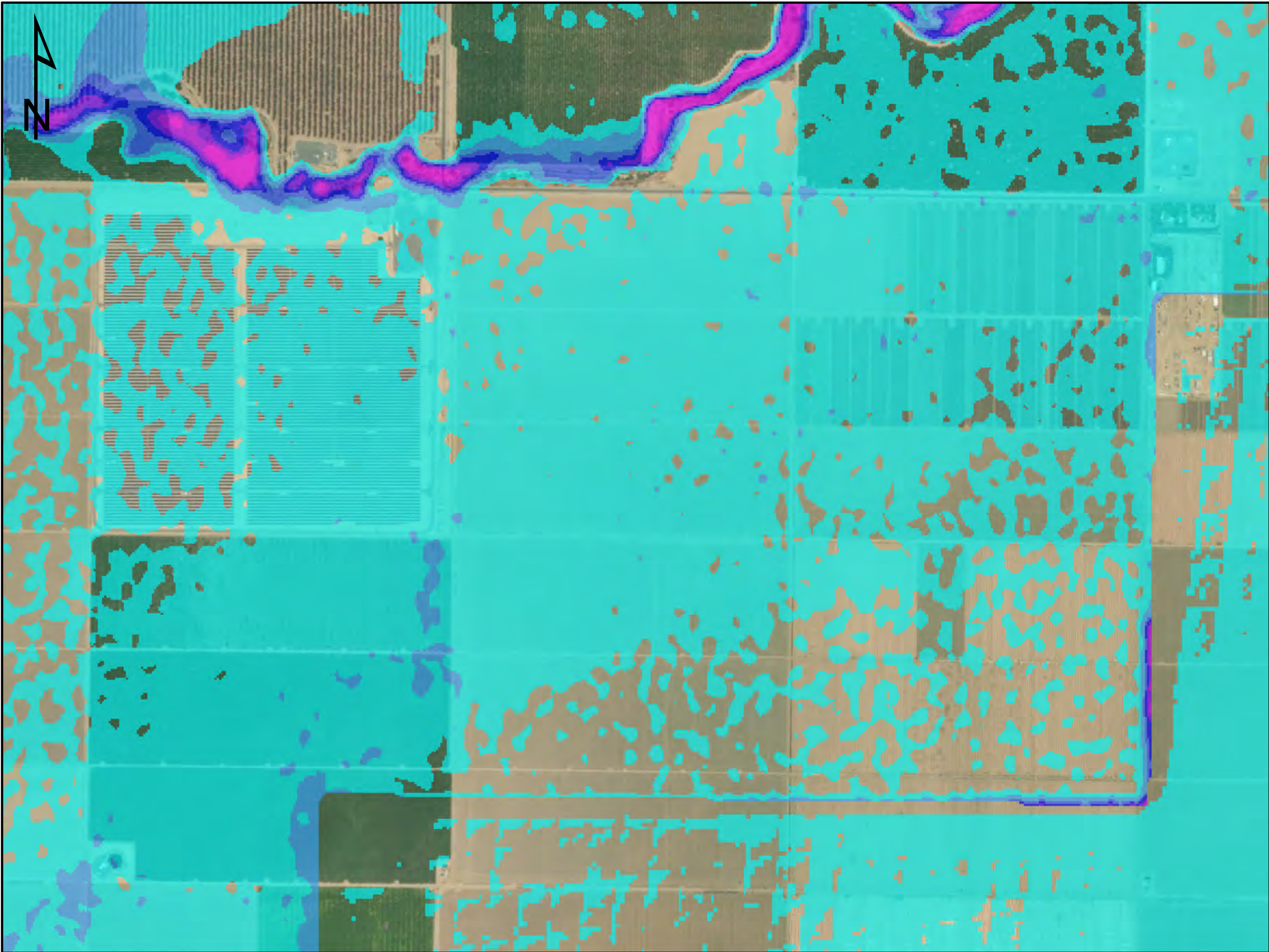
**Legend**

-  Darden Study Area
-  Parcel Lines

**Floodplain Max Depth (ft)**

-  0.0 - 1.0
-  1.1 - 2.0
-  2.1 - 2.5
-  2.6 - 3.0
-  3.1 - 3.5
-  3.6 - 4.0
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Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

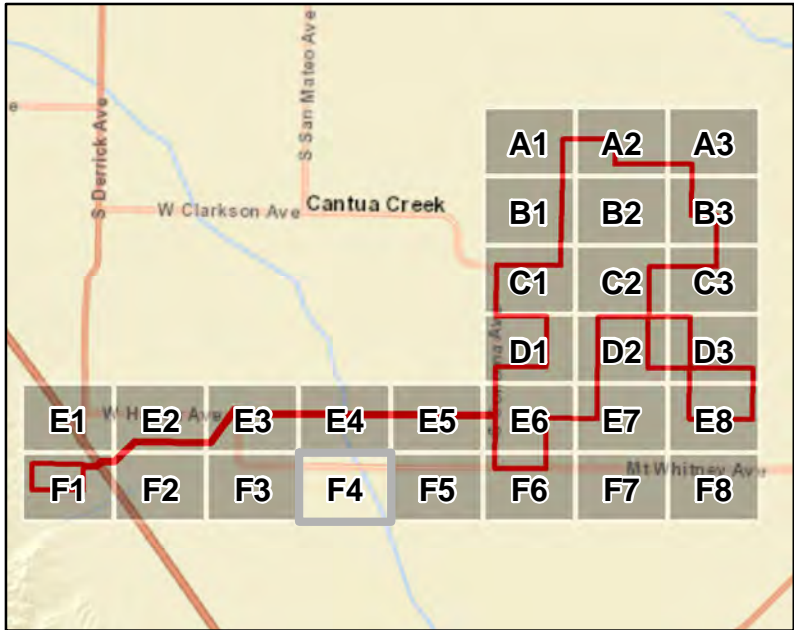
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**Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)**

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: <b>F3</b>
STATE: CALIFORNIA	PAGE: 25 OF 30





### GRID INDEX

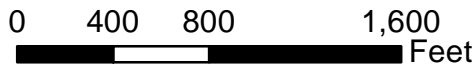
#### Legend

- Darden Study Area
- Parcel Lines

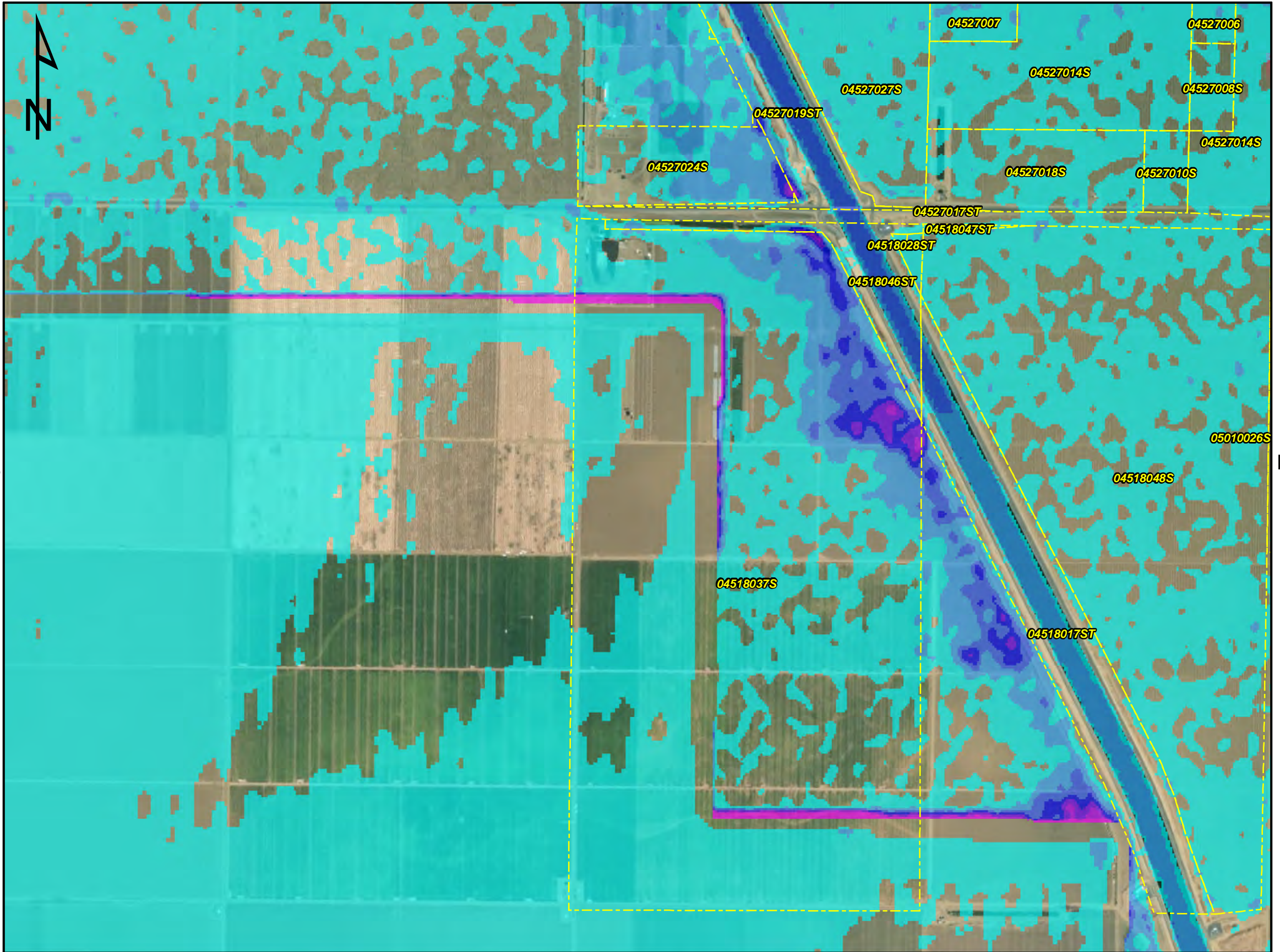
#### Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
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- 3.1 - 3.5
- 3.6 - 4.0
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Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



F3



F5



## UPPER DRY SUB-BASIN DARDEN STUDY AREA FRESNO COUNTY, CA

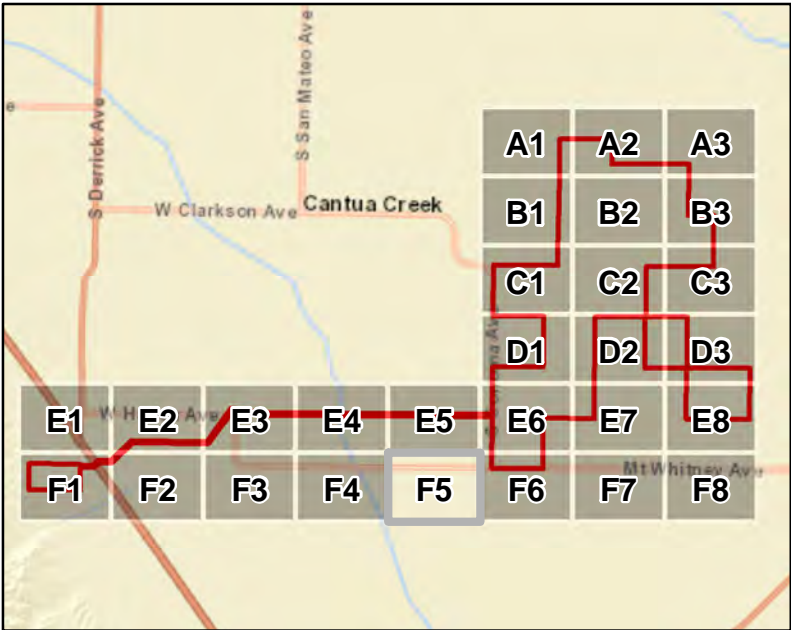
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## Darden Maximum Flood Depth Classification 100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: F4
STATE: CALIFORNIA	PAGE: 26 OF 30





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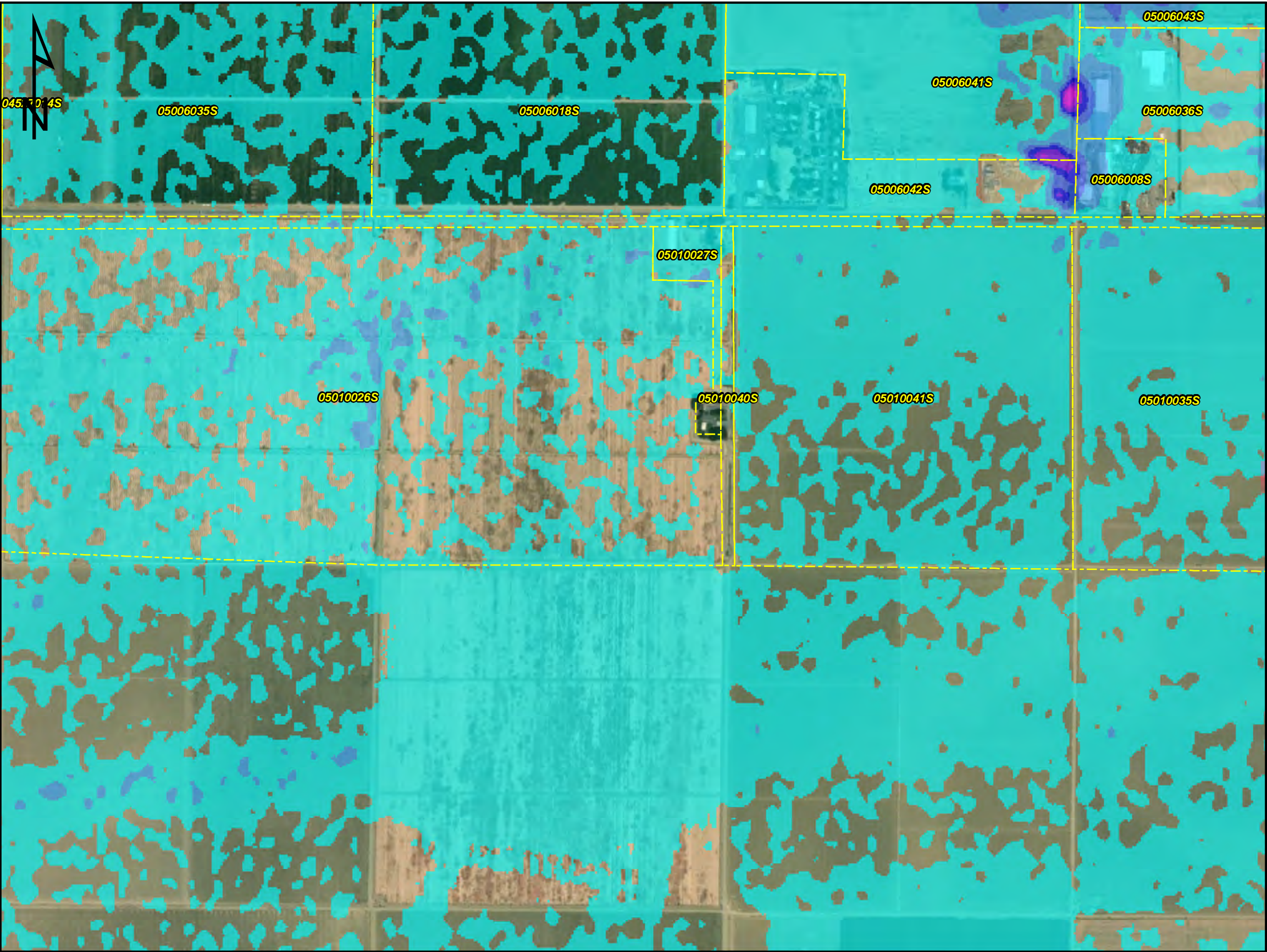
**Legend**

- Darden Study Area
- Parcel Lines

**Floodplain Max Depth (ft)**

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
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**UPPER DRY SUB-BASIN  
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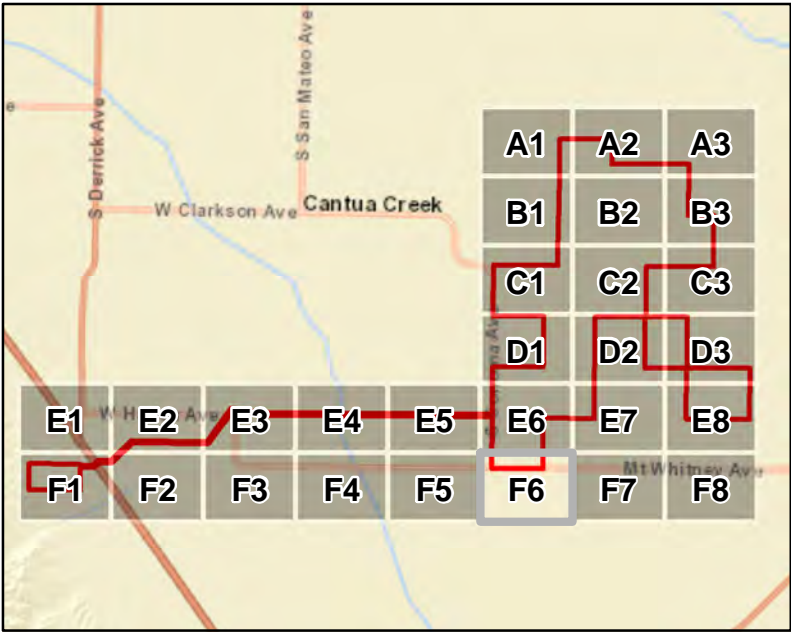
**Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)**

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
WRMA  
GRID INDEX NO.:  
**F5**  
PAGE:  
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GRID INDEX

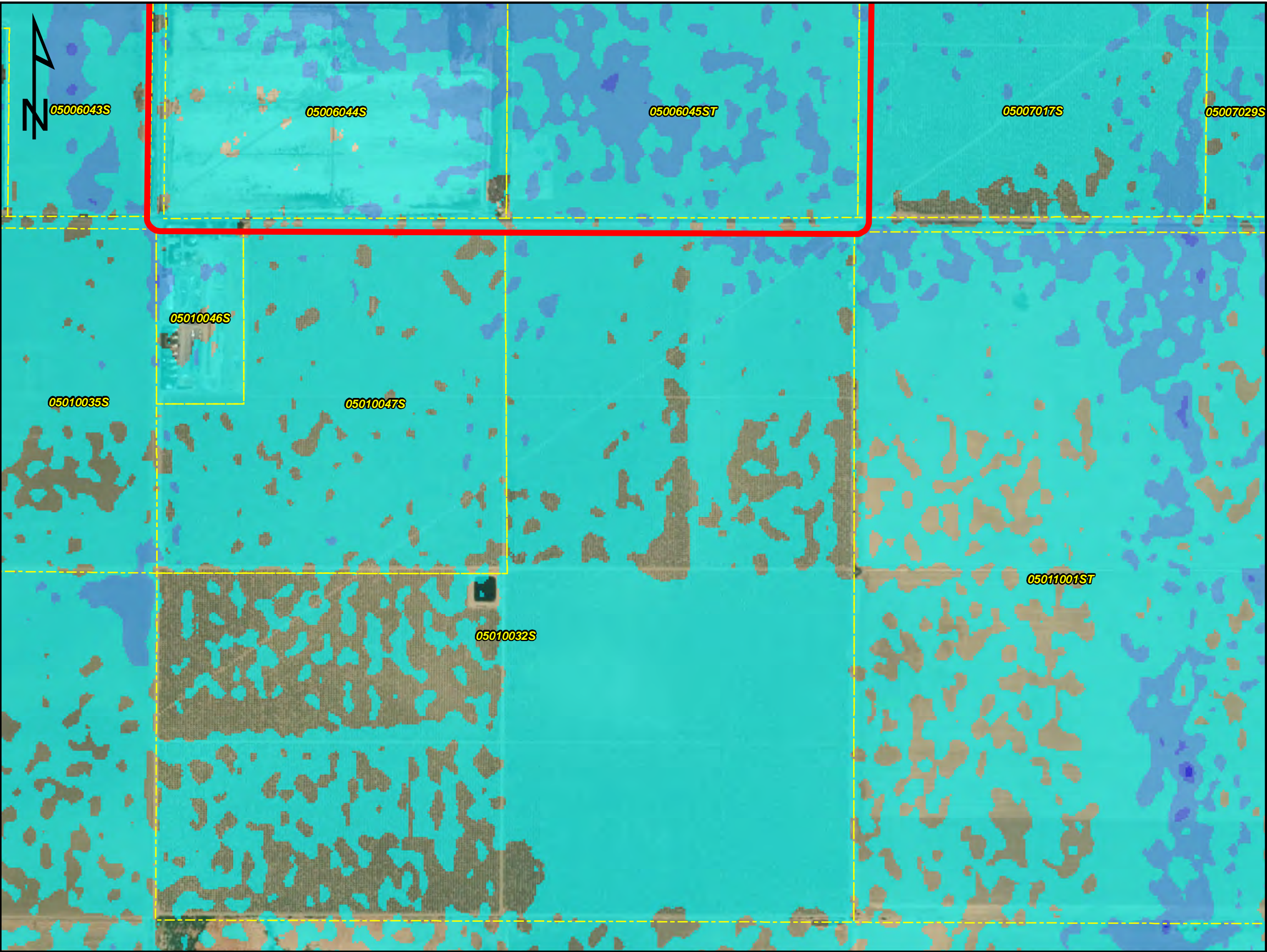
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

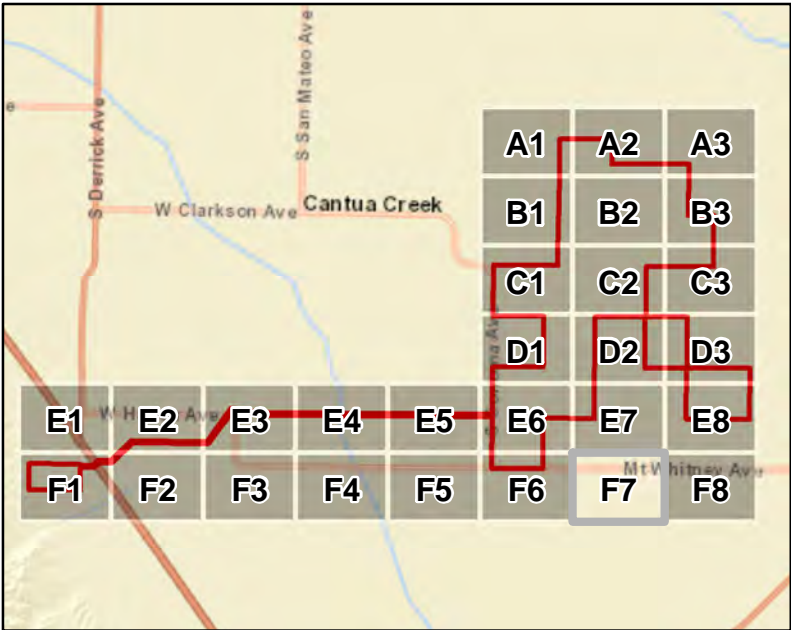
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Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: F6
STATE: CALIFORNIA	PAGE: 28 OF 30





**GRID INDEX**

**Legend**

- Darden Study Area
- Parcel Lines

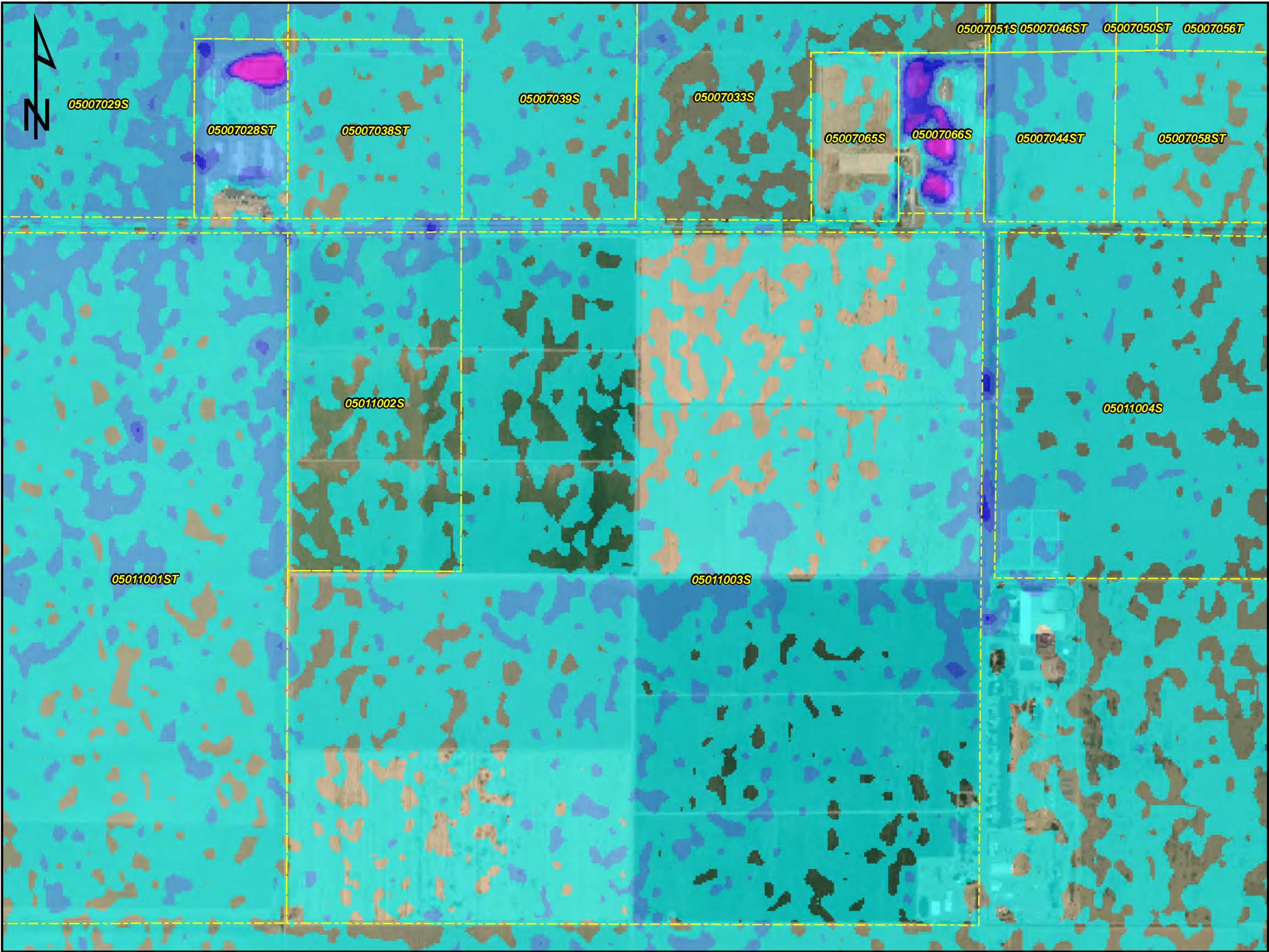
**Floodplain Max Depth (ft)**

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
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Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



F6



F8



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

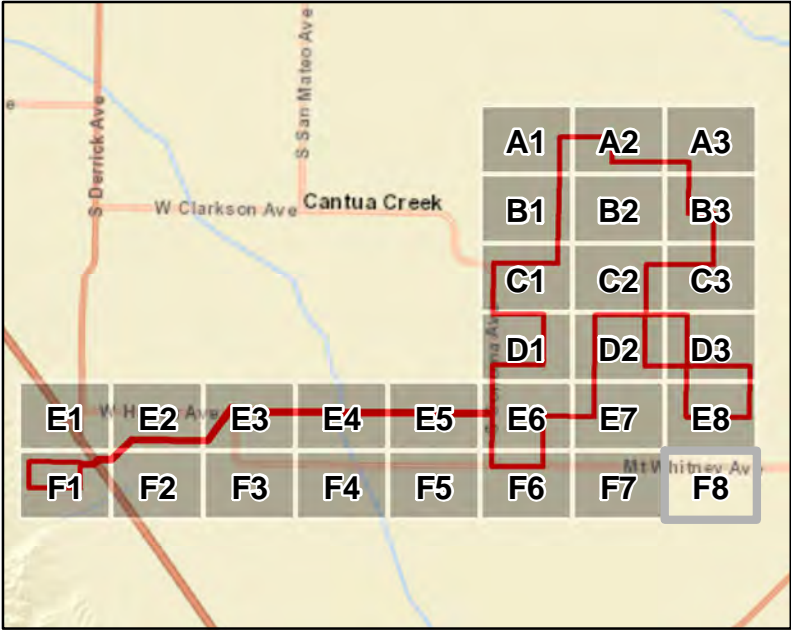
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**Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)**

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: <b>F7</b>
STATE: CALIFORNIA	PAGE: 29 OF 30





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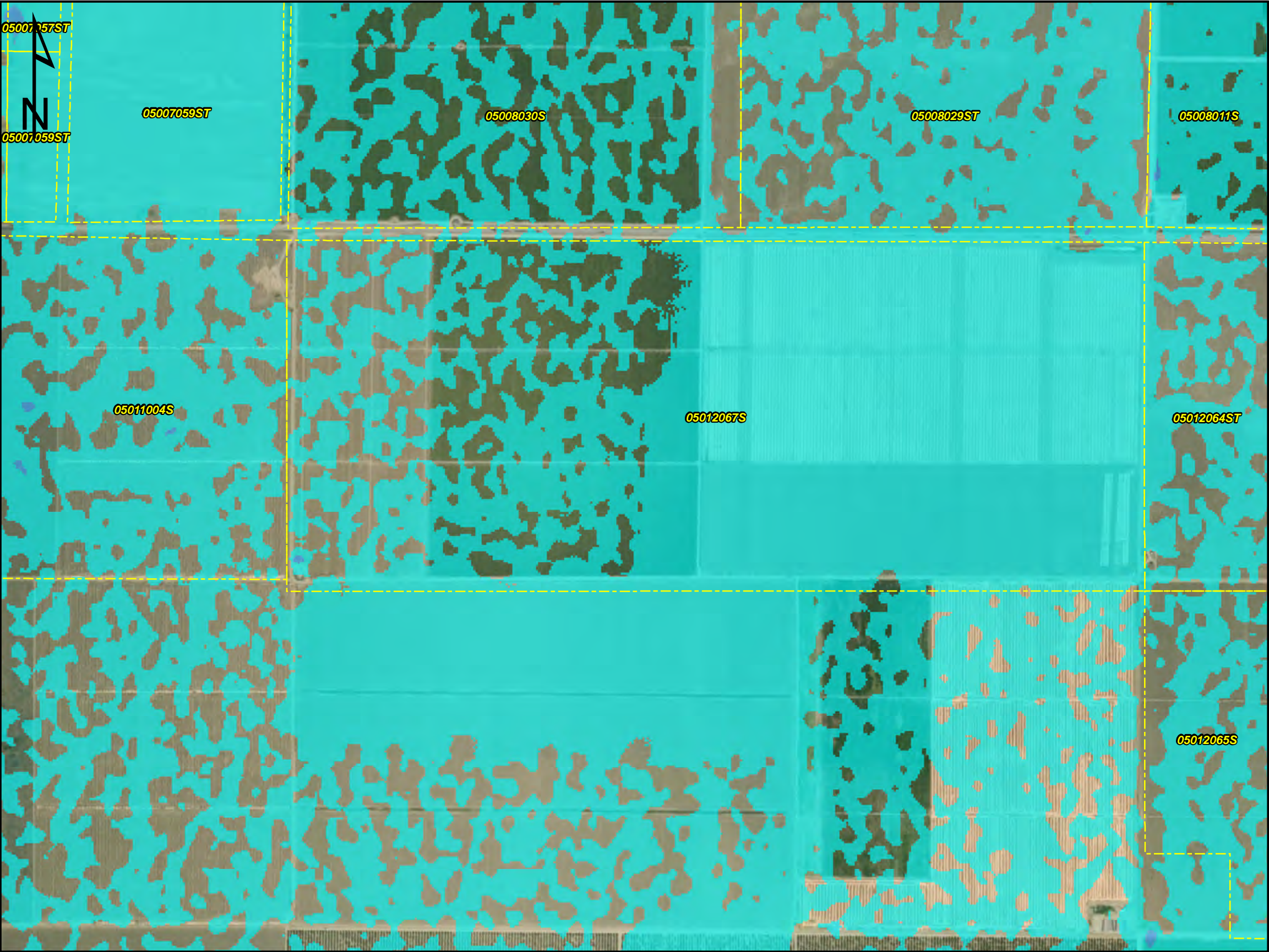
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
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Standard Parallel 2: 37.2500  
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UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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Darden  
Maximum Flood Depth Classification  
100 Year - 24 Hour Storm (1% Annual Chance)

Map Produced:  
10/10/2023

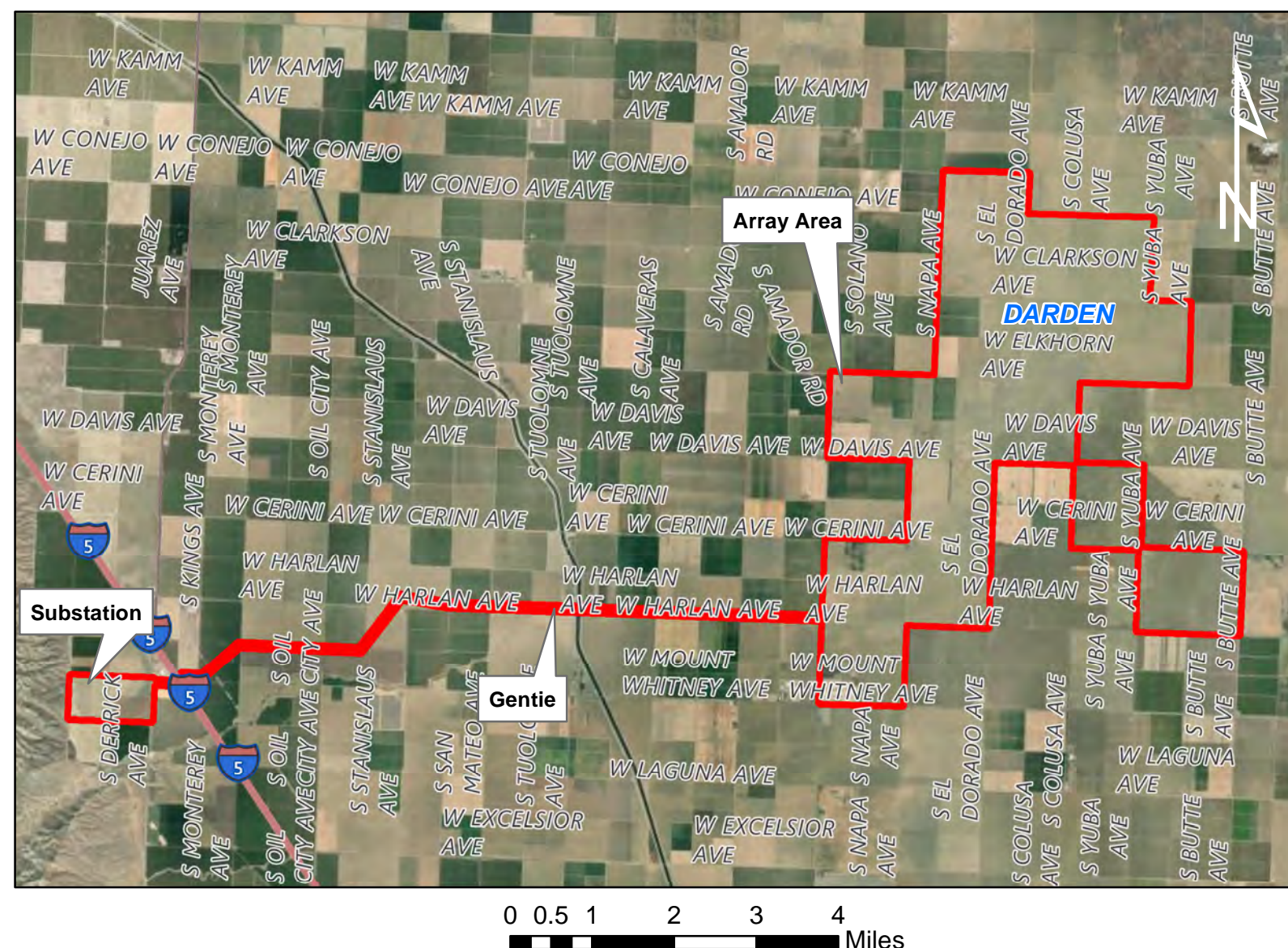
SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: F8
STATE: CALIFORNIA	PAGE: 30 OF 30





# Intersect Power

**STUDY AREA: IP DARDEN**  
**LOCATION: FRESNO COUNTY, CA**  
**TOTAL ACREAGE: 10,261**  
**CLASSIFICATION: 500YR-24HR FLOOD (MAX DEPTH)**  
**COORDINATE SYSTEM: NAD 83 STATE PLANE - CA ZN04**  
**DATE PRODUCED: OCTOBER 2023**



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

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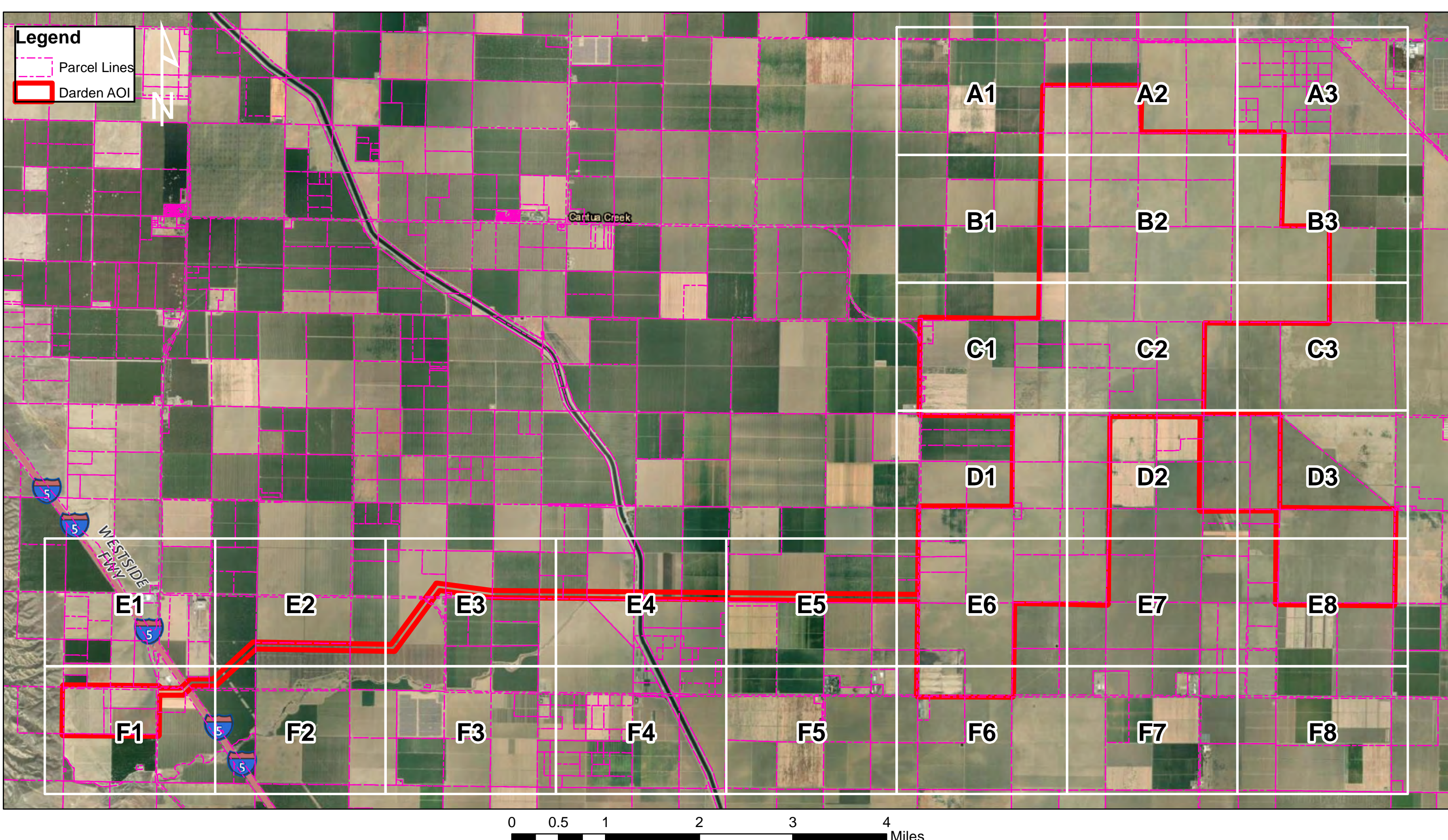
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DARDEN STUDY AREA  
MAX FLOOD DEPTH CLASSIFICATION**

Map Produced:  
10/10/2023

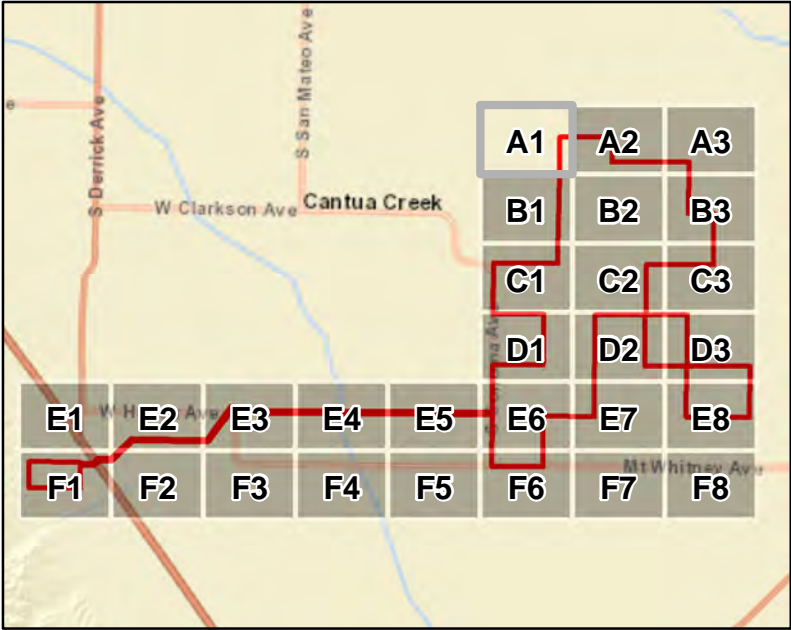
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**COUNTY:**  
FRESNO  
**STATE:**  
CALIFORNIA

**BY:**  
WRMA  
**GRID INDEX NO.:**  
**PAGE:**  
1 OF 30









**GRID INDEX**

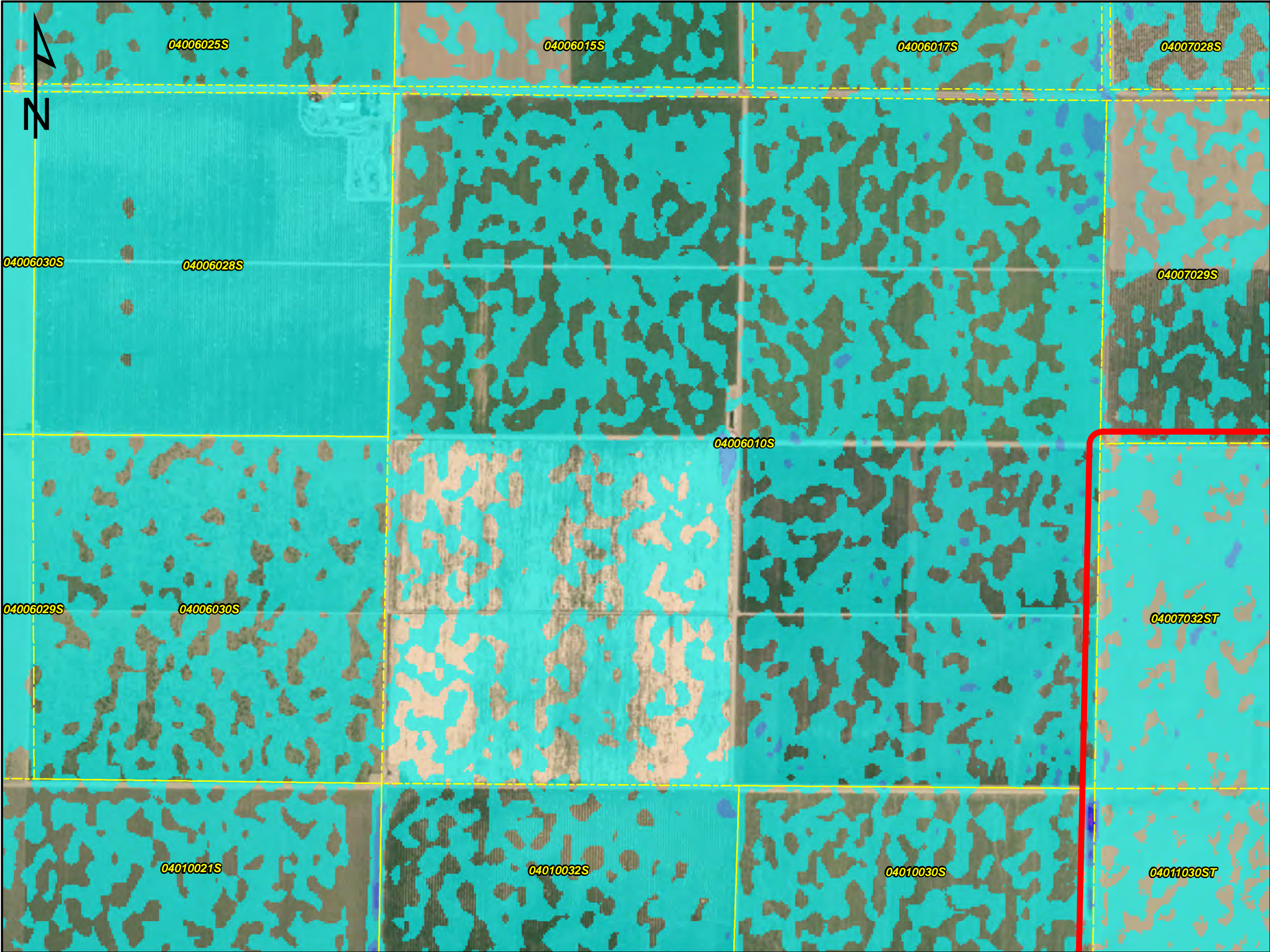
**Legend**

- Darden Study Area
- Parcel Lines

**Floodplain Max Depth (ft)**

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

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Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



B1

A2



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

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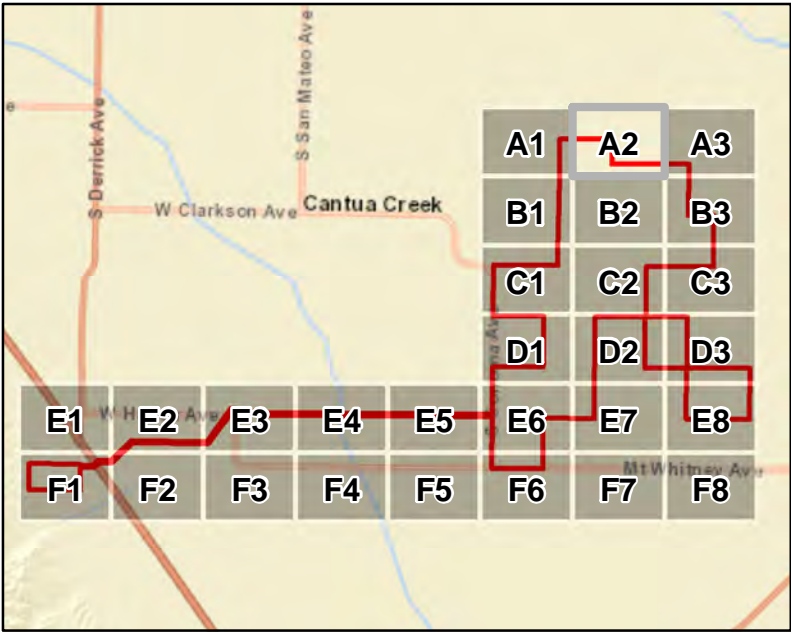
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**Maximum Flood Depth Classification**  
**500 Year - 24 Hour Storm (0.2% Annual Chance)**

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
WRMA  
GRID INDEX NO.:  
**A1**  
PAGE:  
3 OF 30





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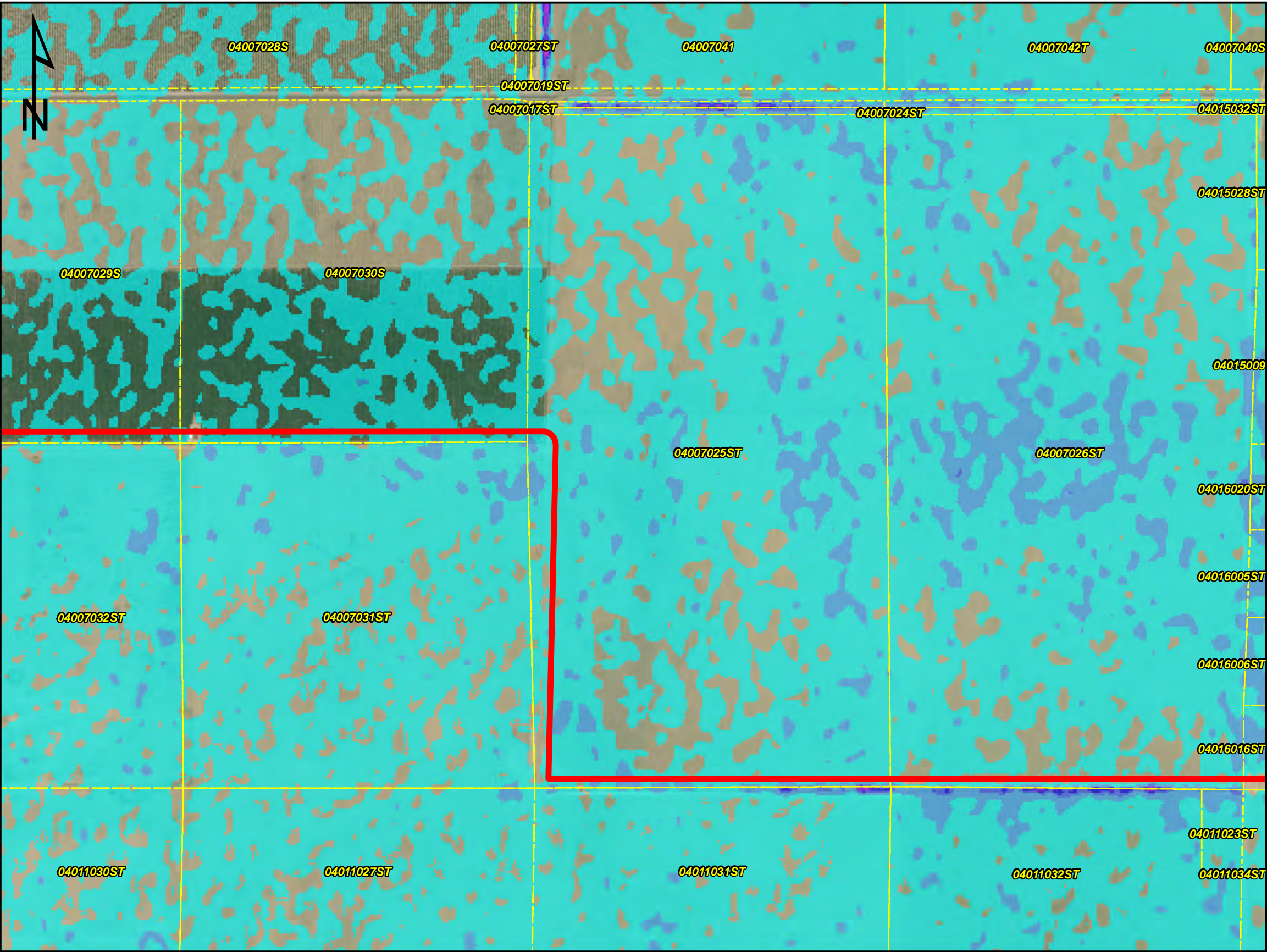
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

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Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



A1

A3

B2



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

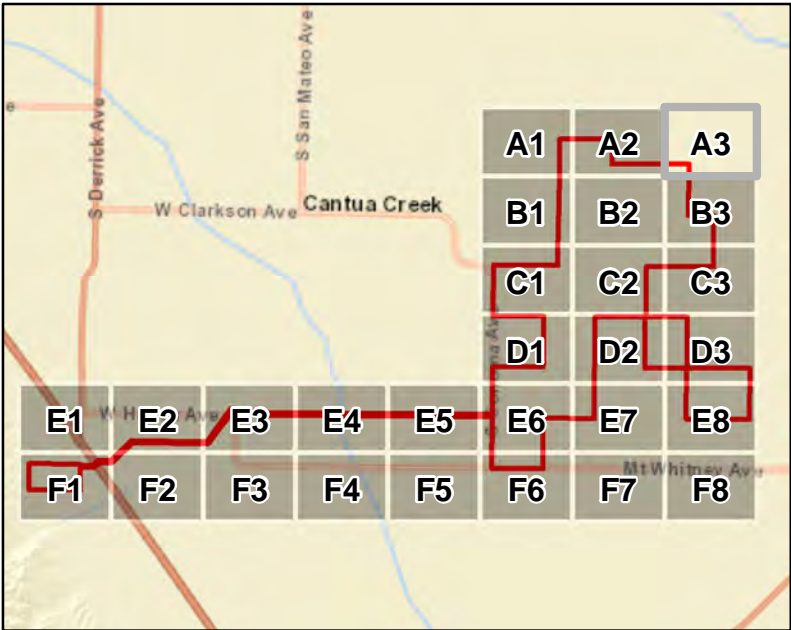
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Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: A2
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GRID INDEX

Legend

- Darden Study Area
- Parcel Lines

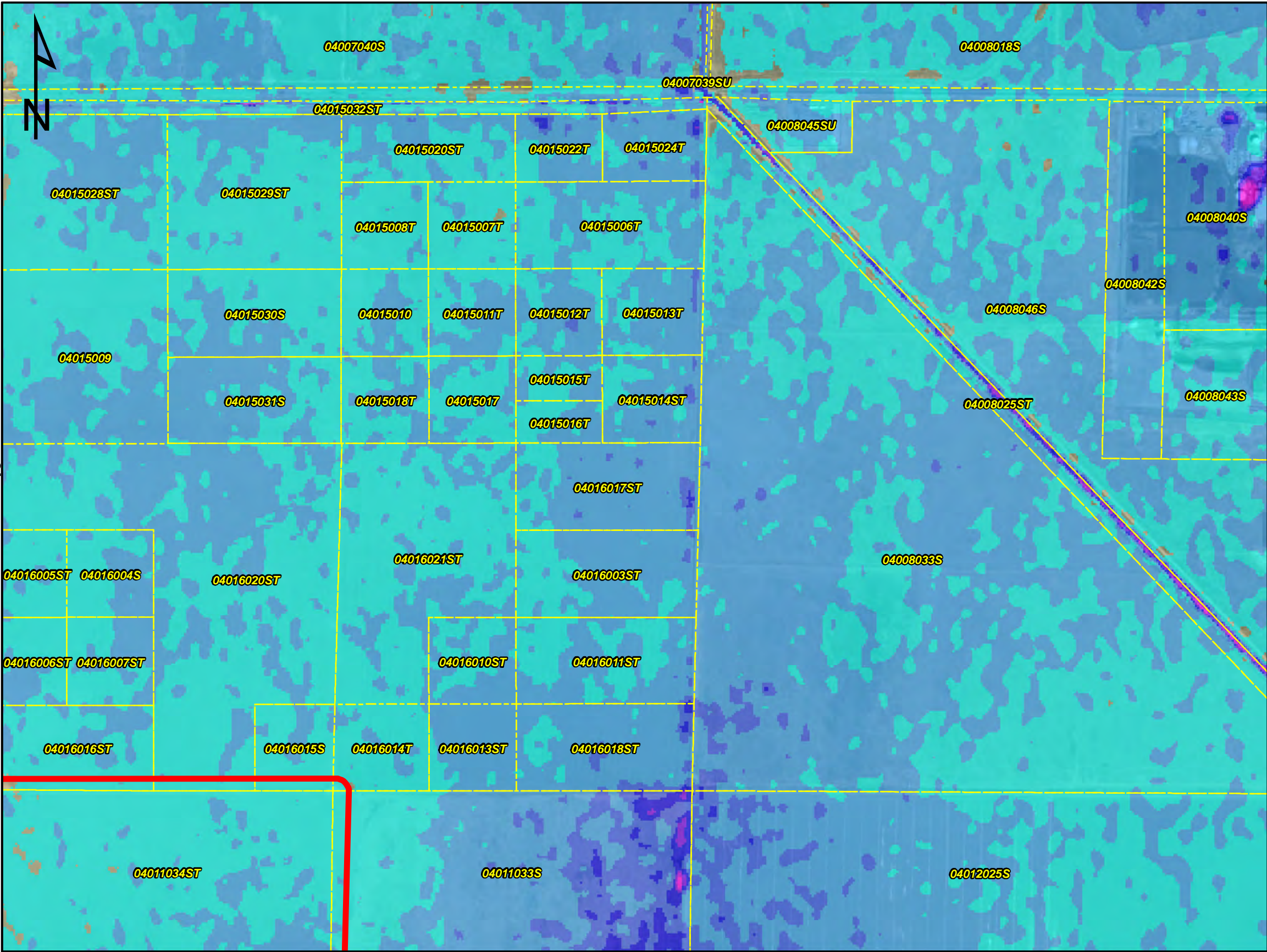
Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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Units: Foot US



A2



B3



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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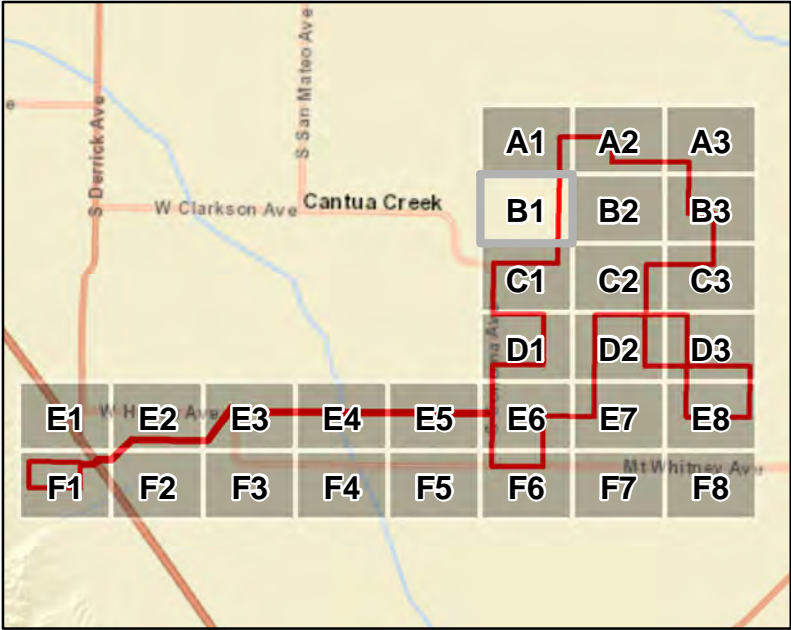
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Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA



BY:  
WRMA  
GRID INDEX NO.:  
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**GRID INDEX**

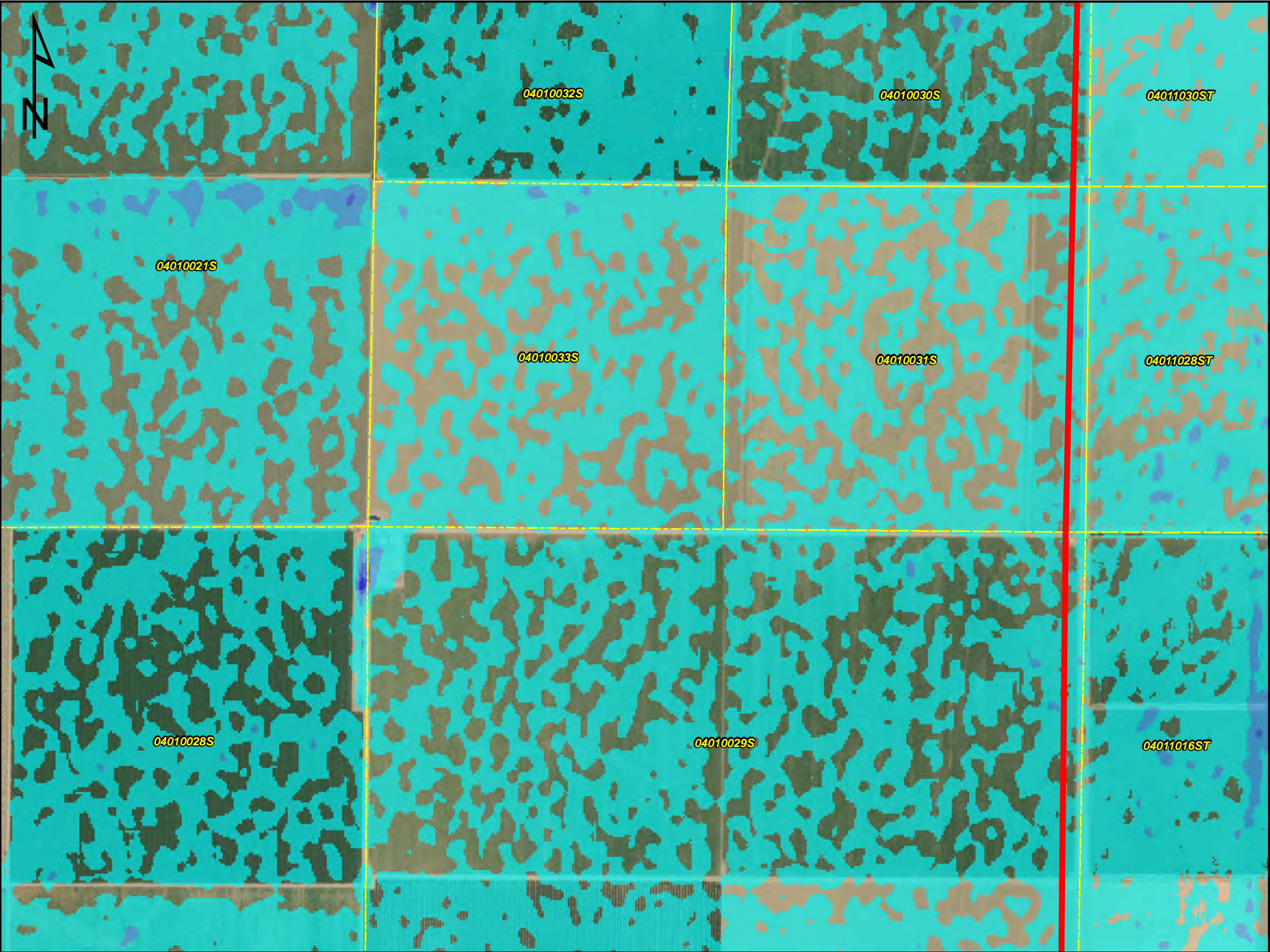
**Legend**

-  Darden Study Area
-  Parcel Lines

**Floodplain Max Depth (ft)**

-  0.0 - 1.0
-  1.1 - 2.0
-  2.1 - 2.5
-  2.6 - 3.0
-  3.1 - 3.5
-  3.6 - 4.0
-  > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

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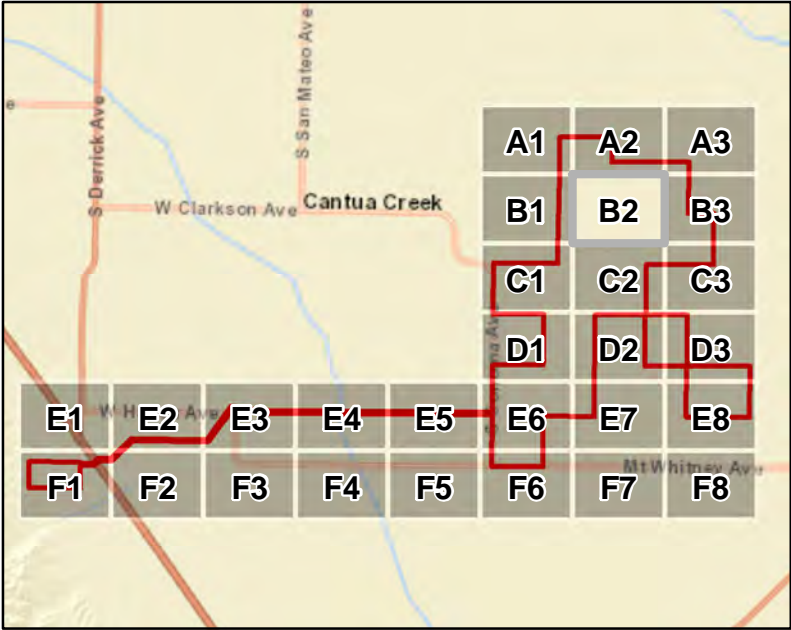
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Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)**

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
WRMA  
GRID INDEX NO.:  
**B1**  
PAGE:  
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GRID INDEX

Legend

- Darden Study Area
- Parcel Lines

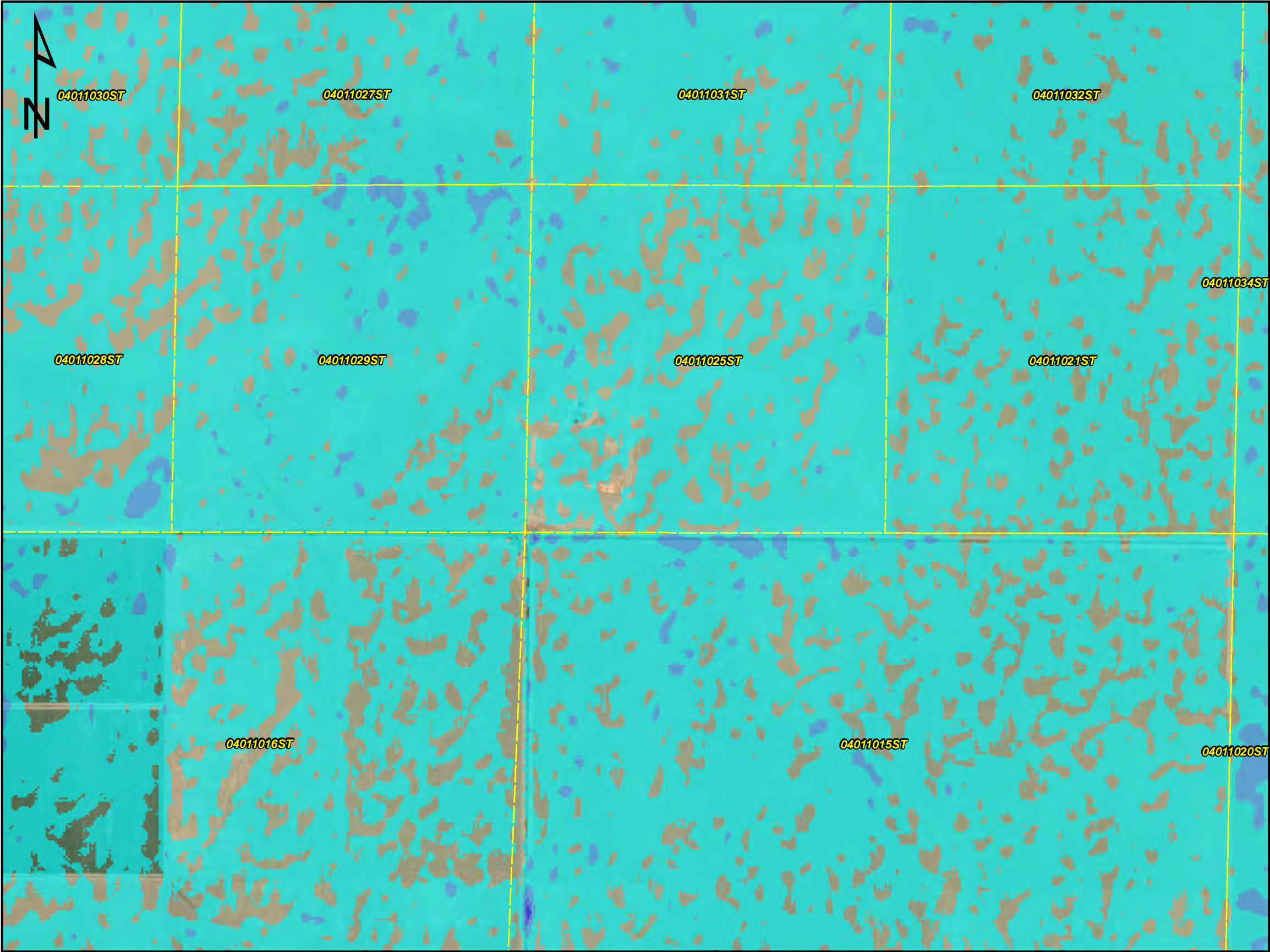
Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



B1



B3

C2



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

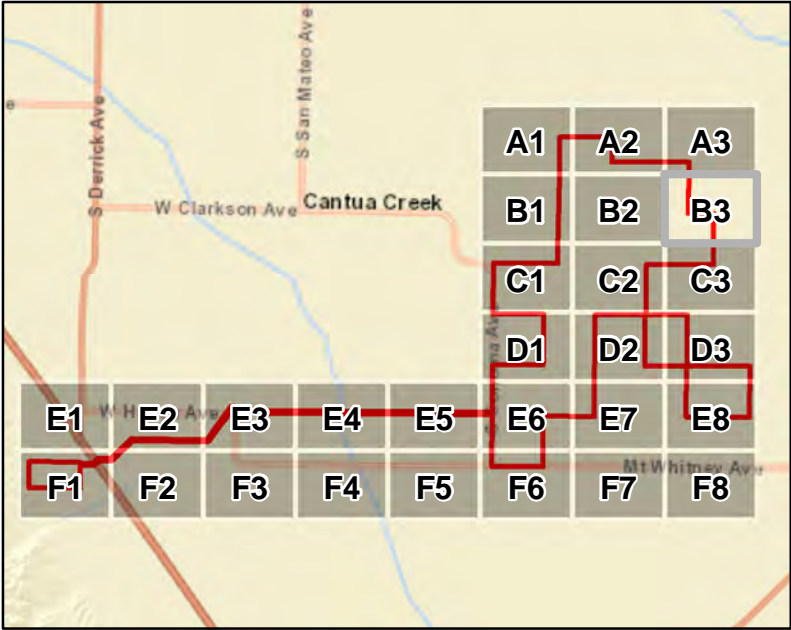
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Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
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SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: B2
STATE: CALIFORNIA	PAGE: 7 OF 30





GRID INDEX

Legend

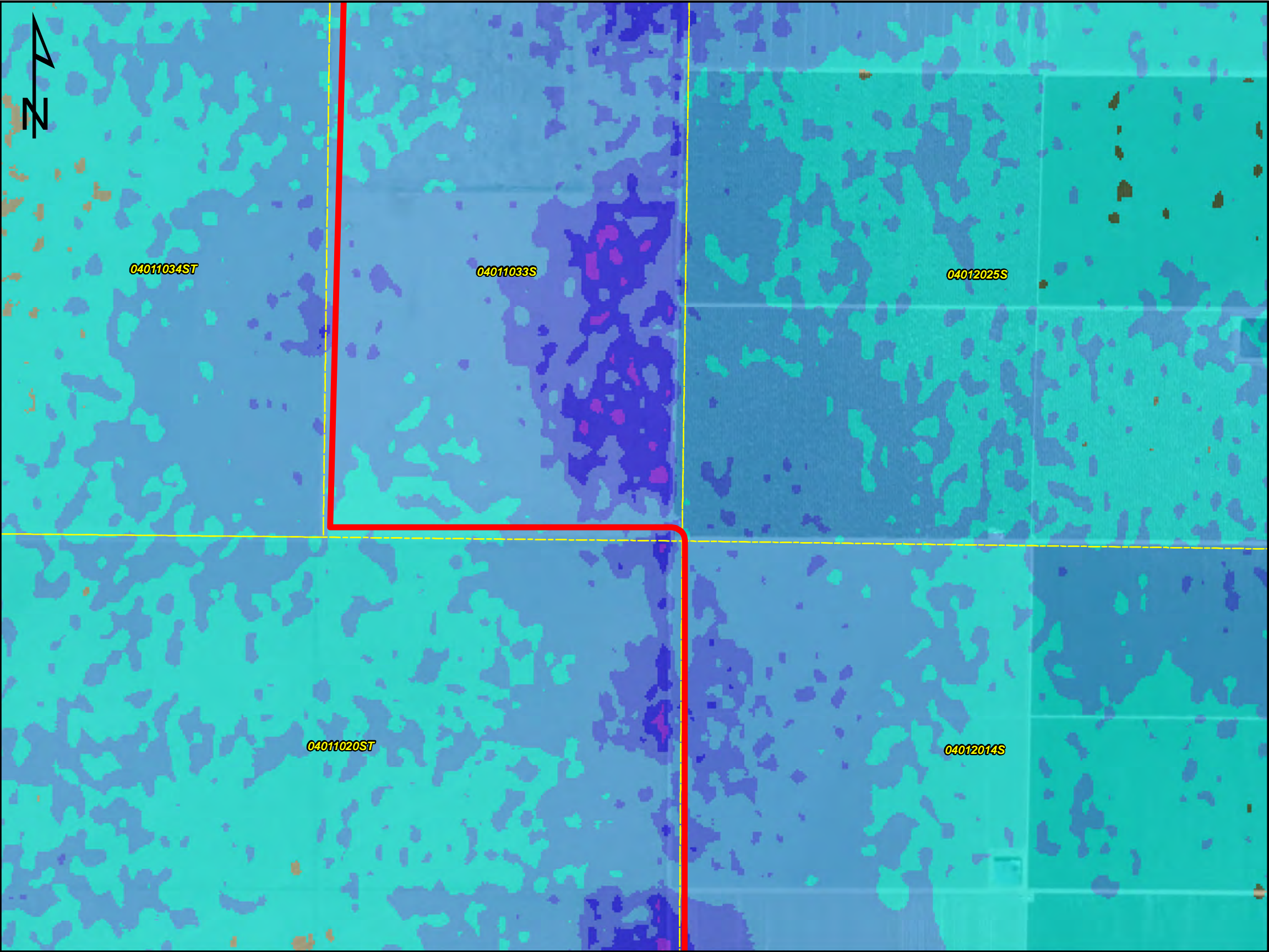
- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US

0 400 800 1,600 Feet



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

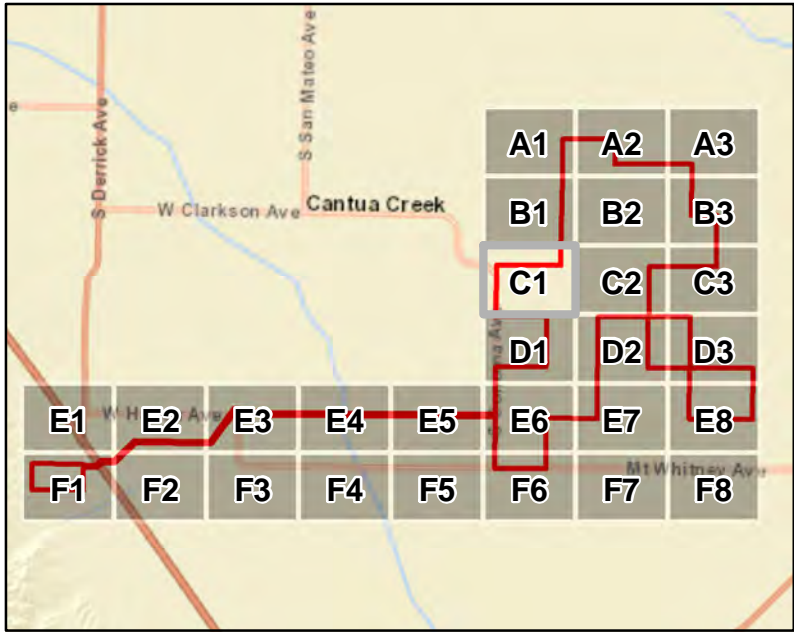
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Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
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SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: <b>B3</b>
STATE: CALIFORNIA	PAGE: 8 OF 30





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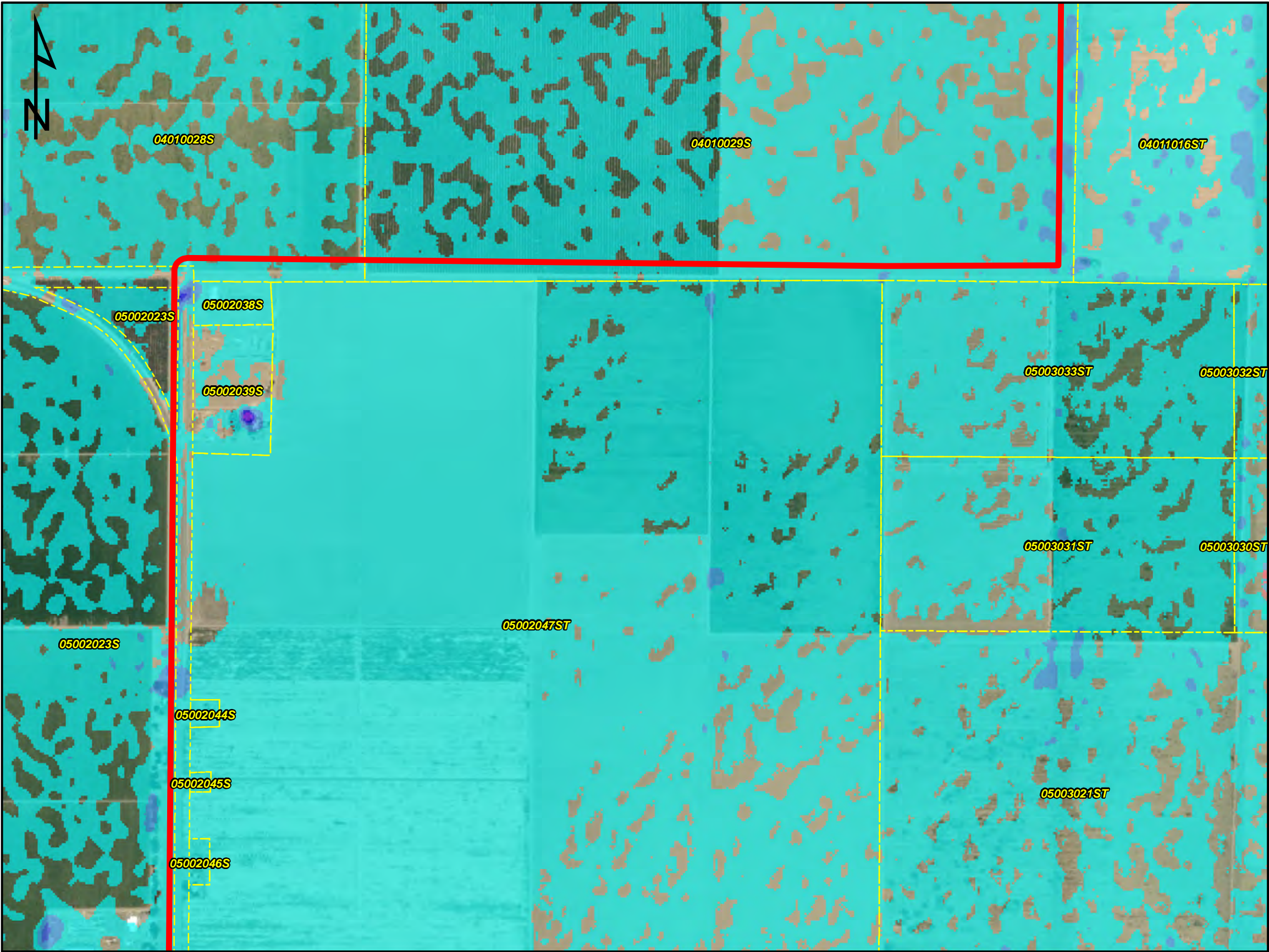
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
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UPPER DRY SUB-BASIN  
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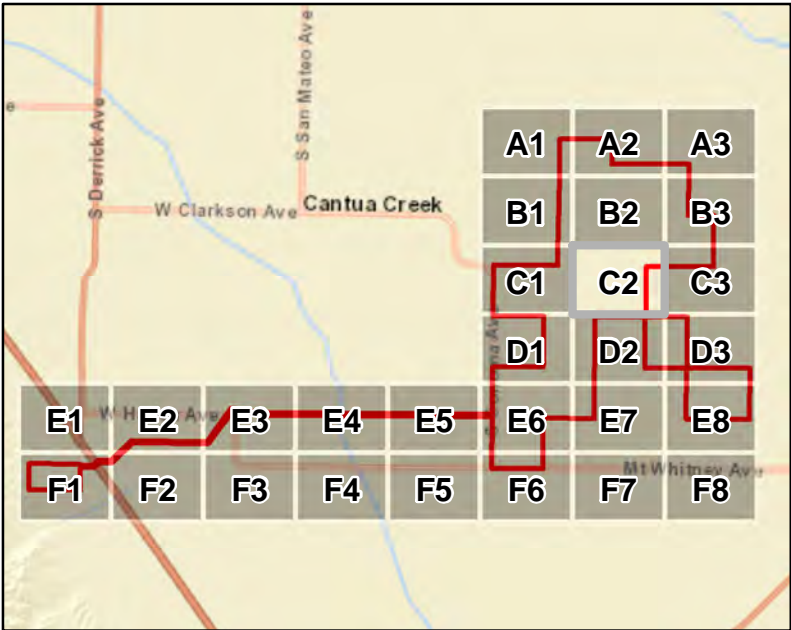
Darden  
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500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
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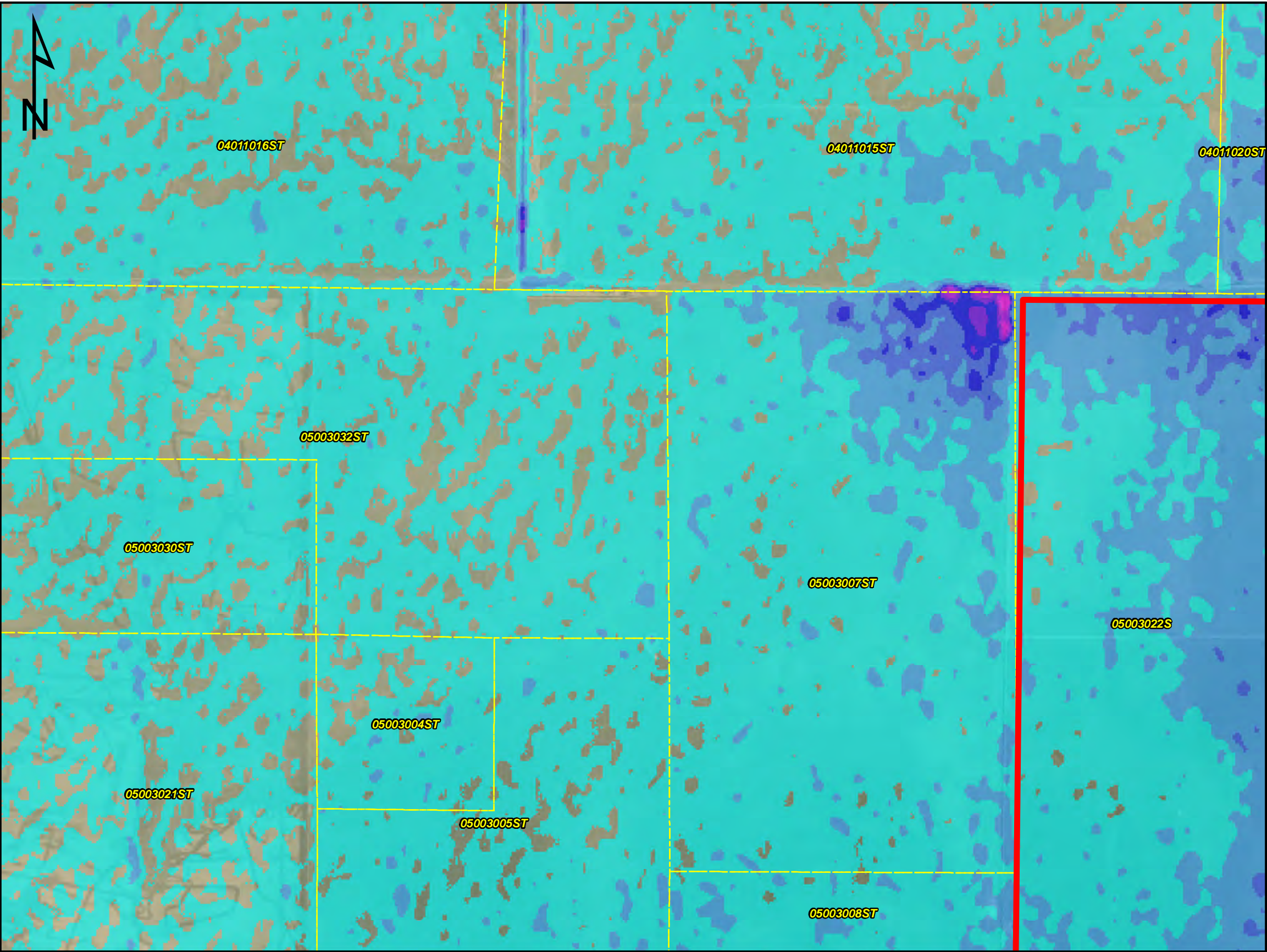
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
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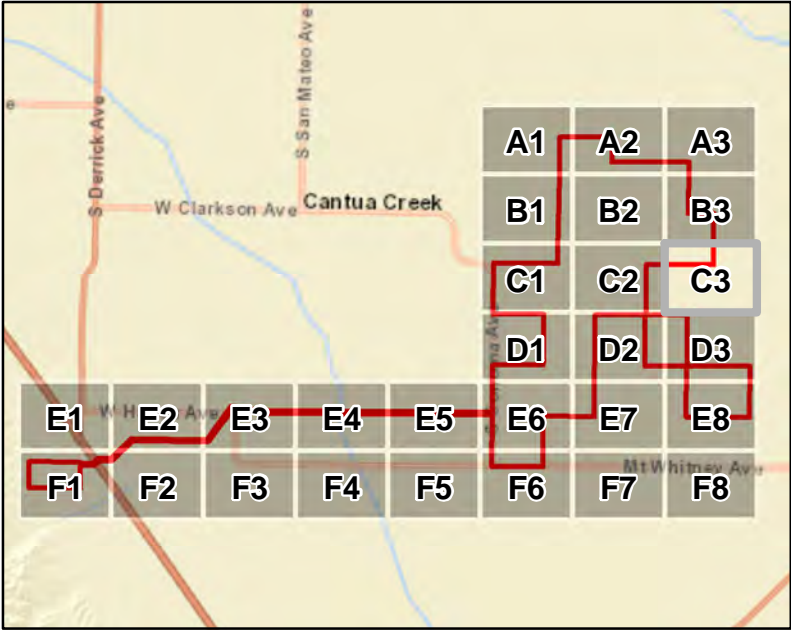
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10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
WRMA  
GRID INDEX NO.:  
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GRID INDEX

Legend

- Darden Study Area
- Parcel Lines

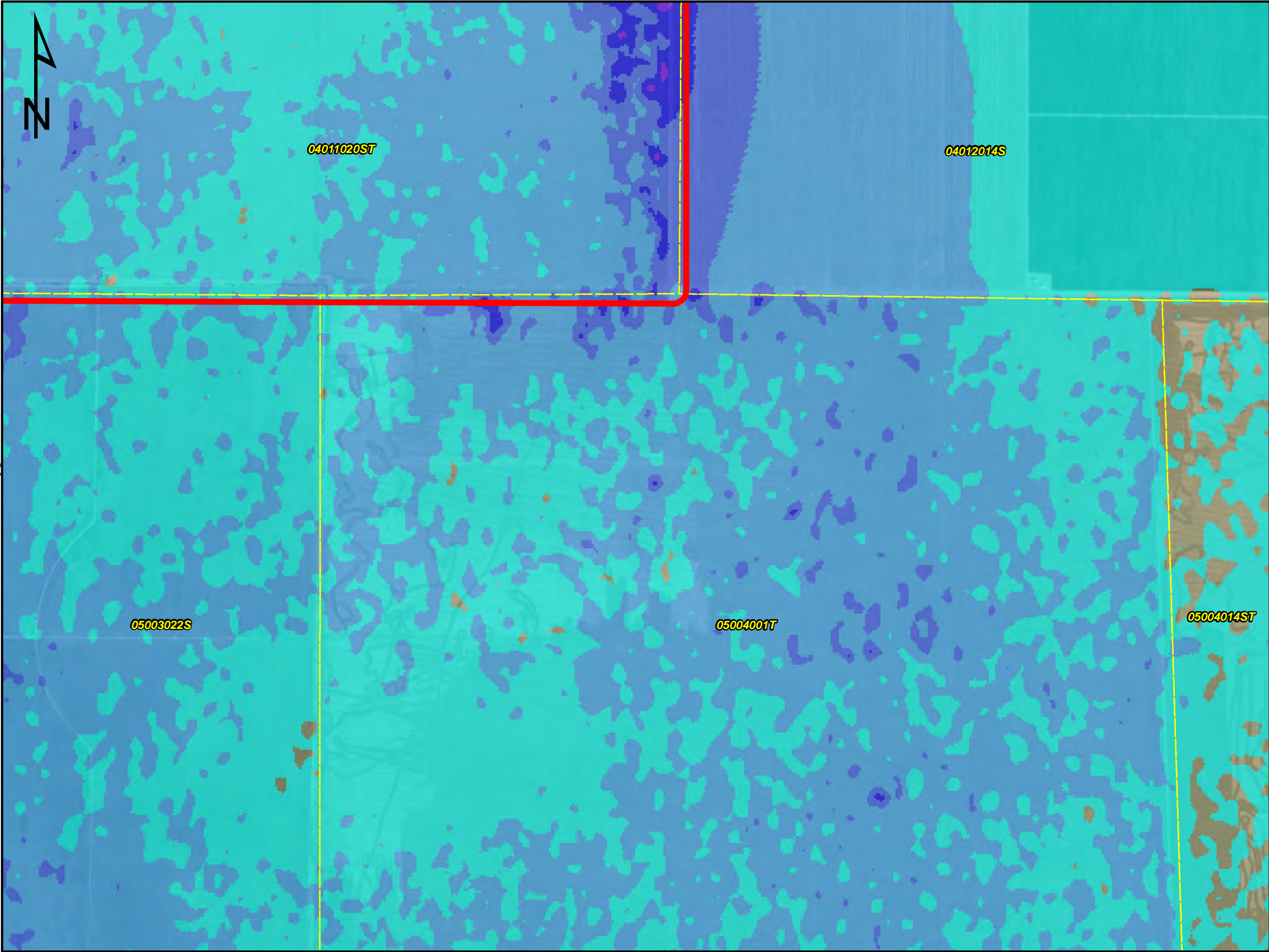
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- 0.0 - 1.0
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Standard Parallel 2: 37.2500  
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Units: Foot US



C2



D3



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

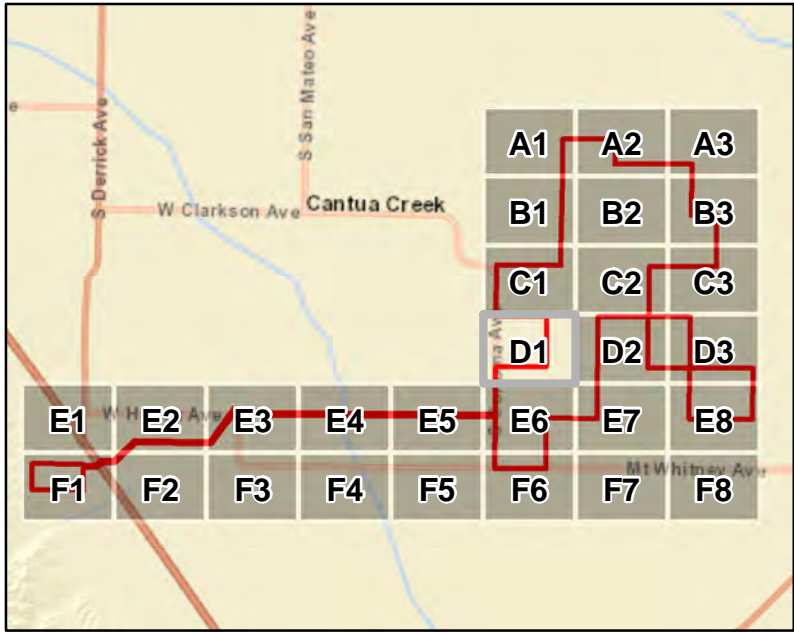
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Darden  
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500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: C3
STATE: CALIFORNIA	PAGE: 11 OF 30





GRID INDEX

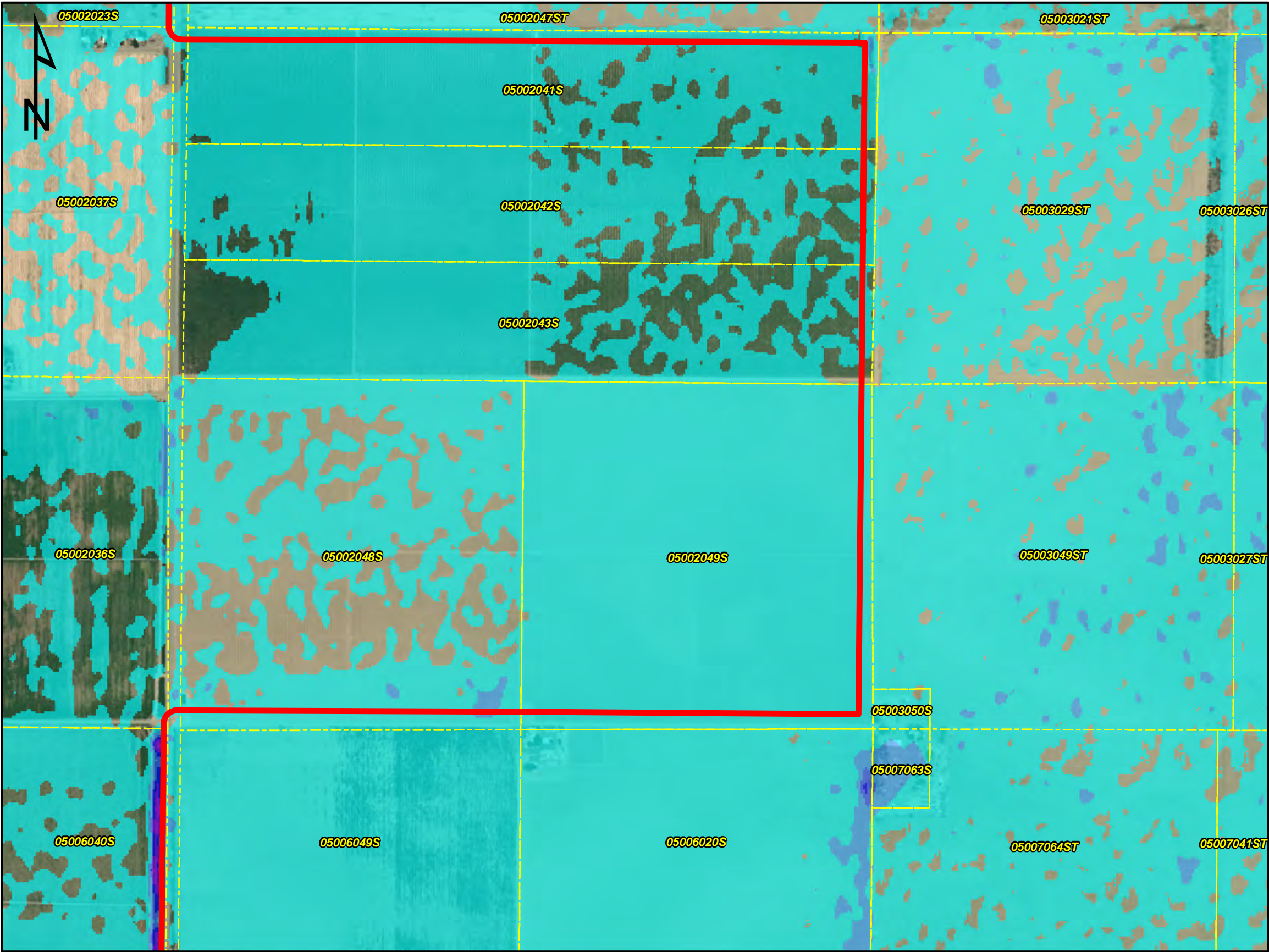
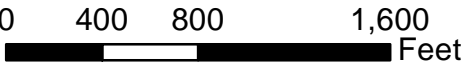
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
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Latitude Of Origin: 35.3333  
Units: Foot US



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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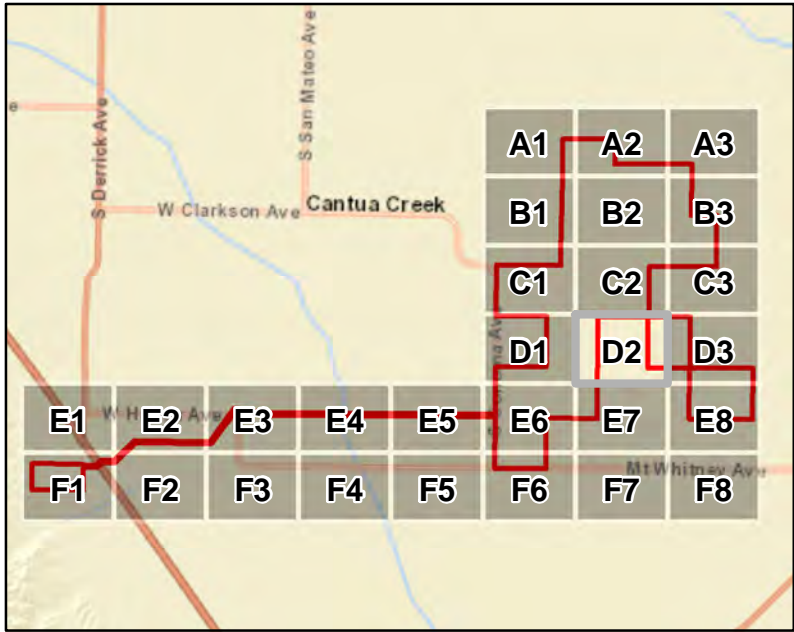
Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
WRMA  
GRID INDEX NO.:  
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PAGE:  
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GRID INDEX

Legend

- Darden Study Area
- Parcel Lines

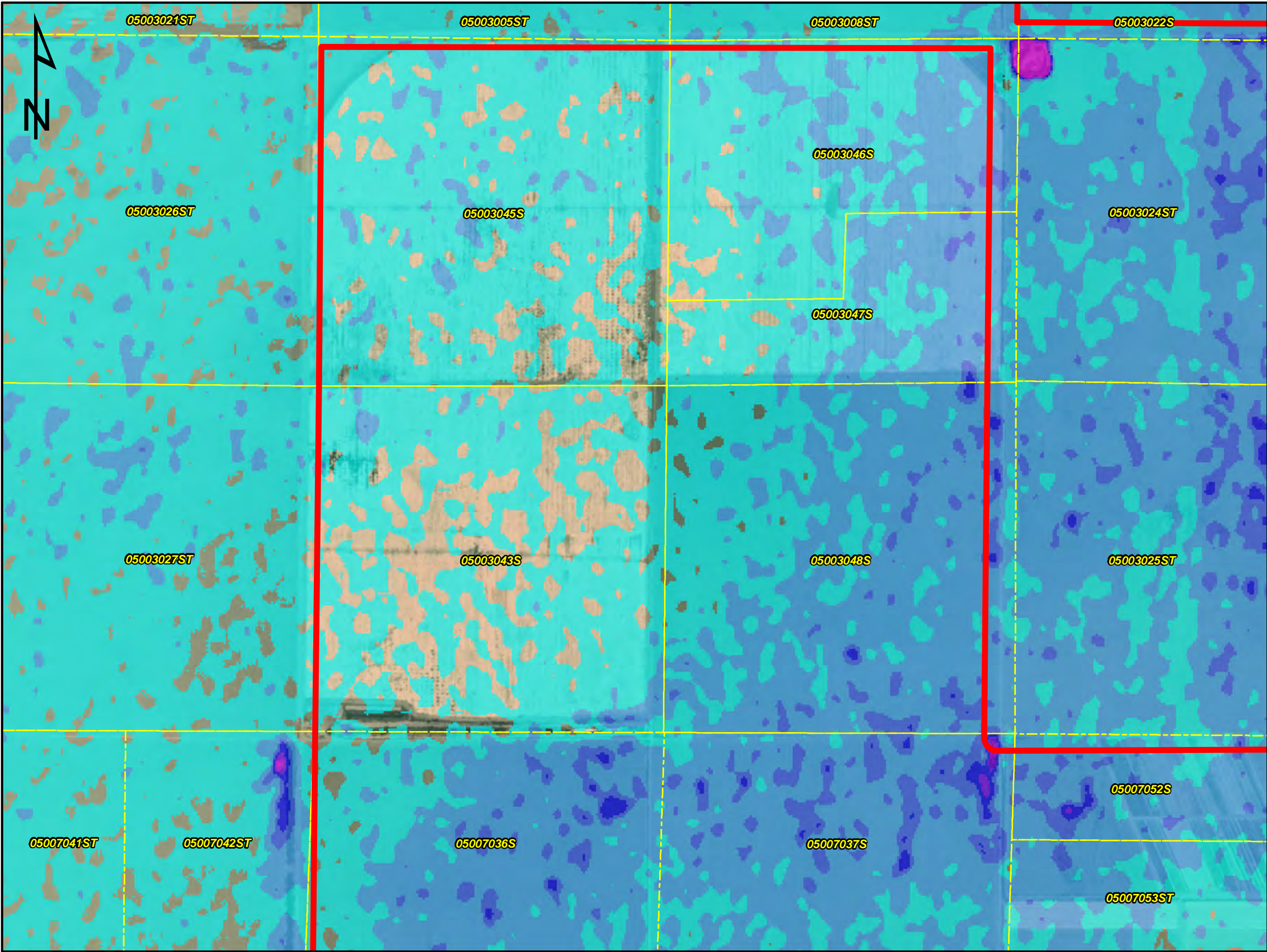
Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



D1



D3

E7



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

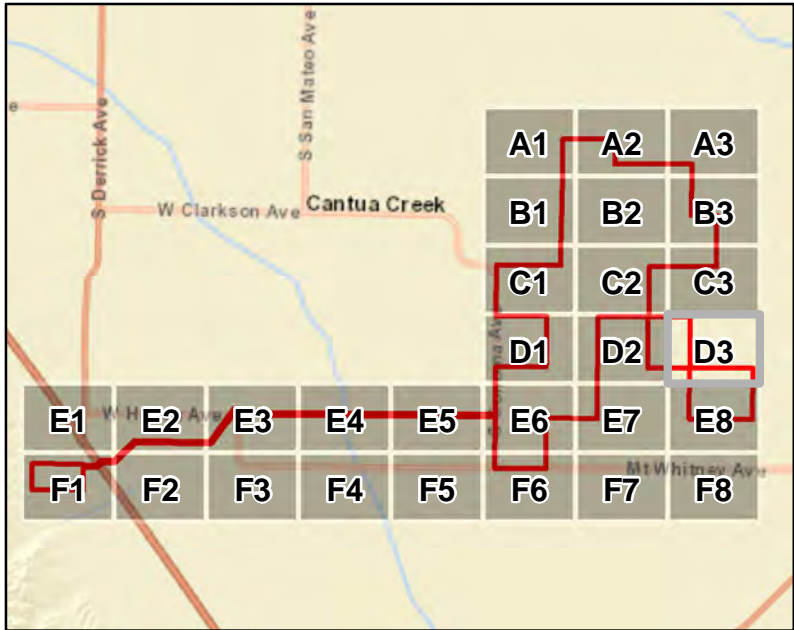
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Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: D2
STATE: CALIFORNIA	PAGE: 13 OF 30





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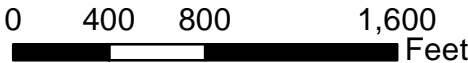
Legend

- Darden Study Area
- Parcel Lines

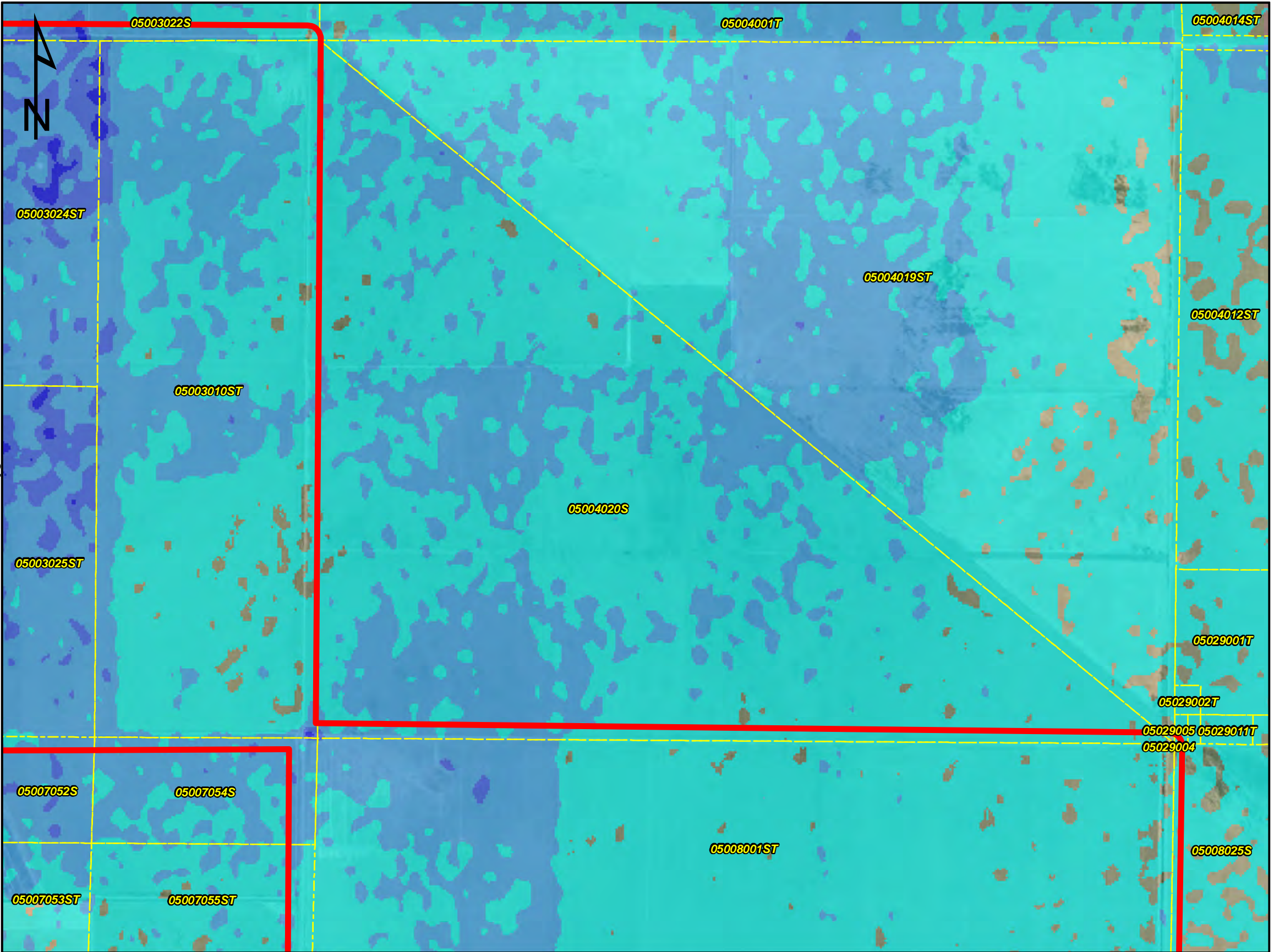
Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



D2



E8



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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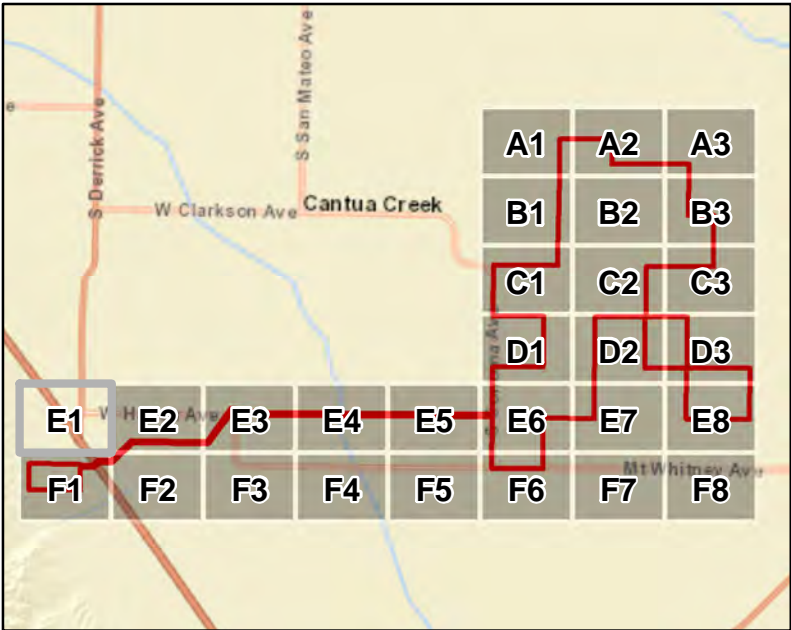
Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
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CALIFORNIA



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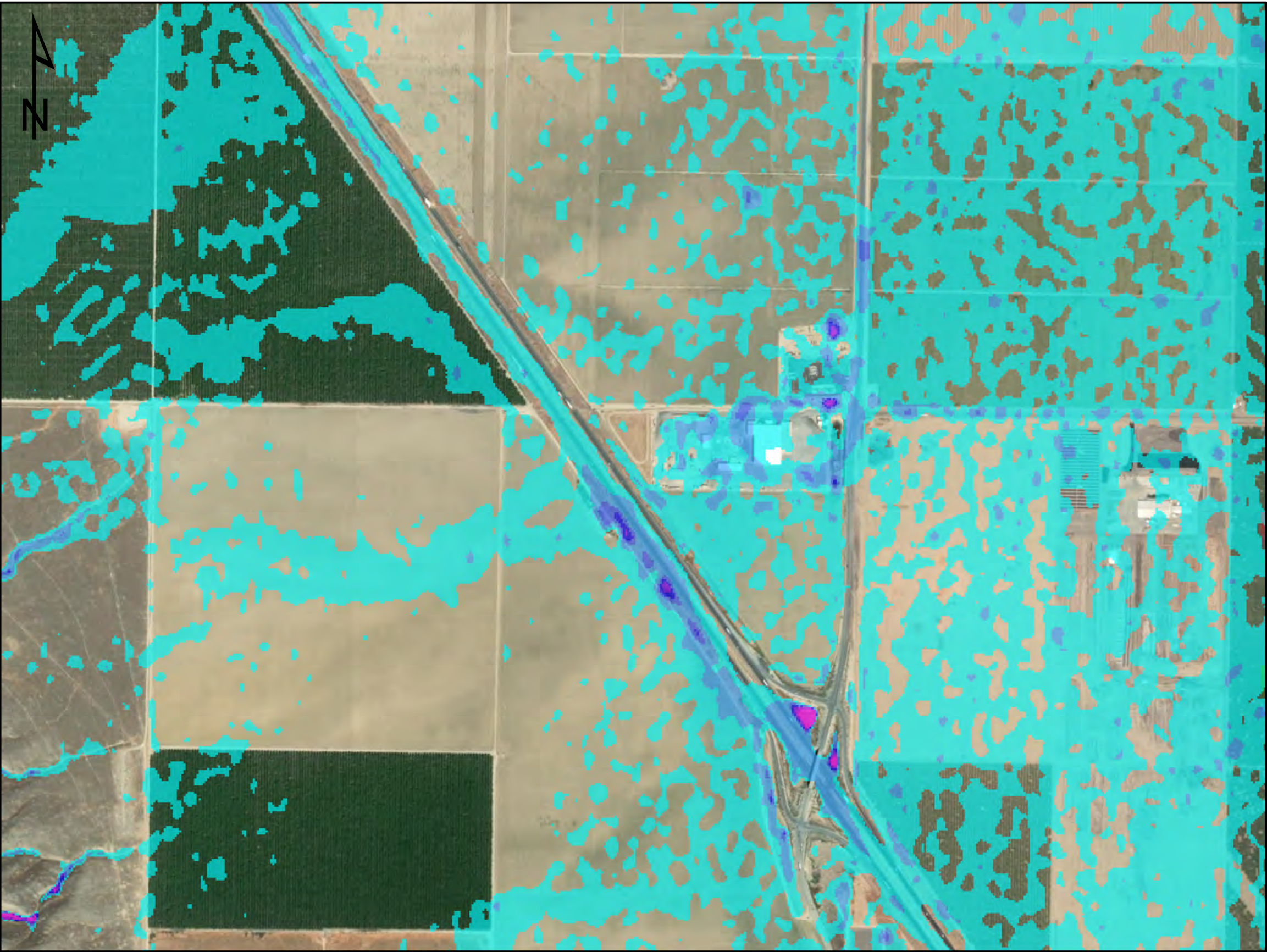
Legend

-  Darden Study Area
-  Parcel Lines

Floodplain Max Depth (ft)

-  0.0 - 1.0
-  1.1 - 2.0
-  2.1 - 2.5
-  2.6 - 3.0
-  3.1 - 3.5
-  3.6 - 4.0
-  > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



F1

E2



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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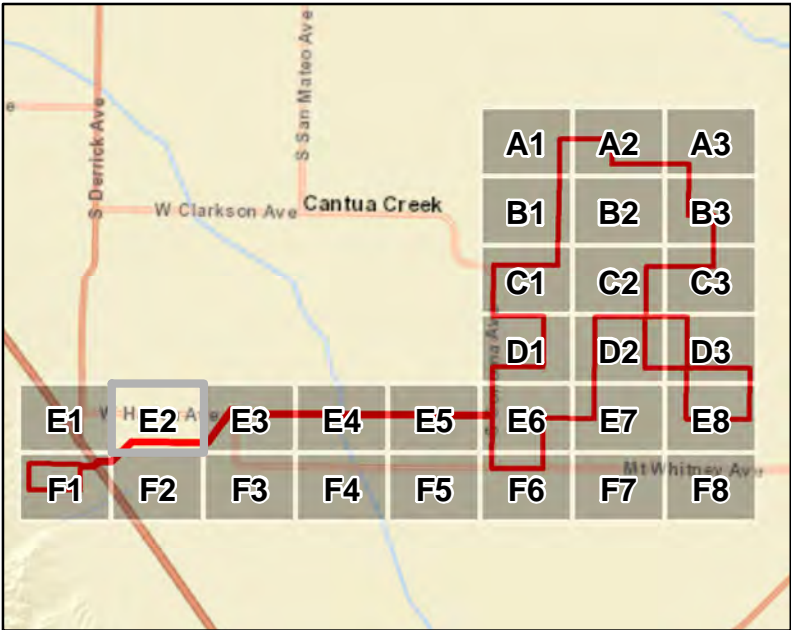
Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
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GRID INDEX

Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



E1

E3

F2



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

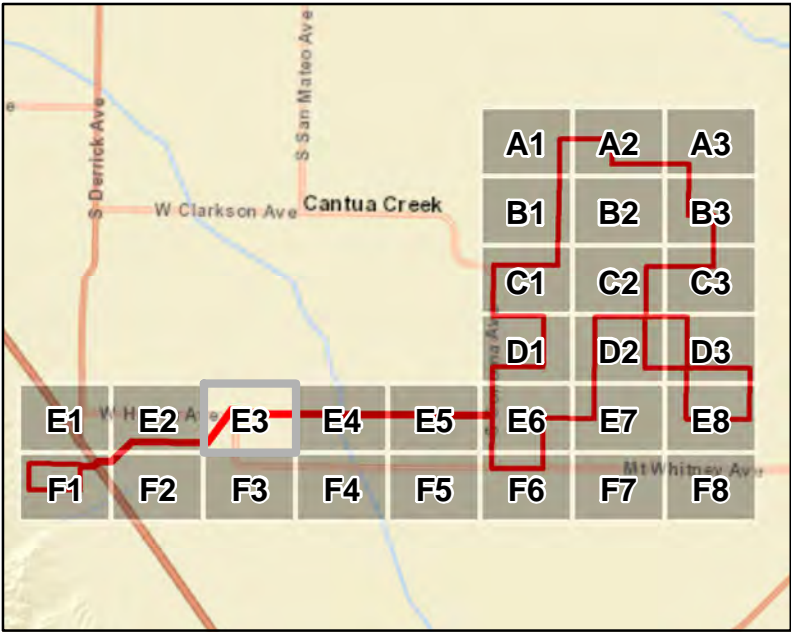
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Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
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SCALE: 1 in = 800 ft	BY: WRMA
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STATE: CALIFORNIA	PAGE: 16 OF 30












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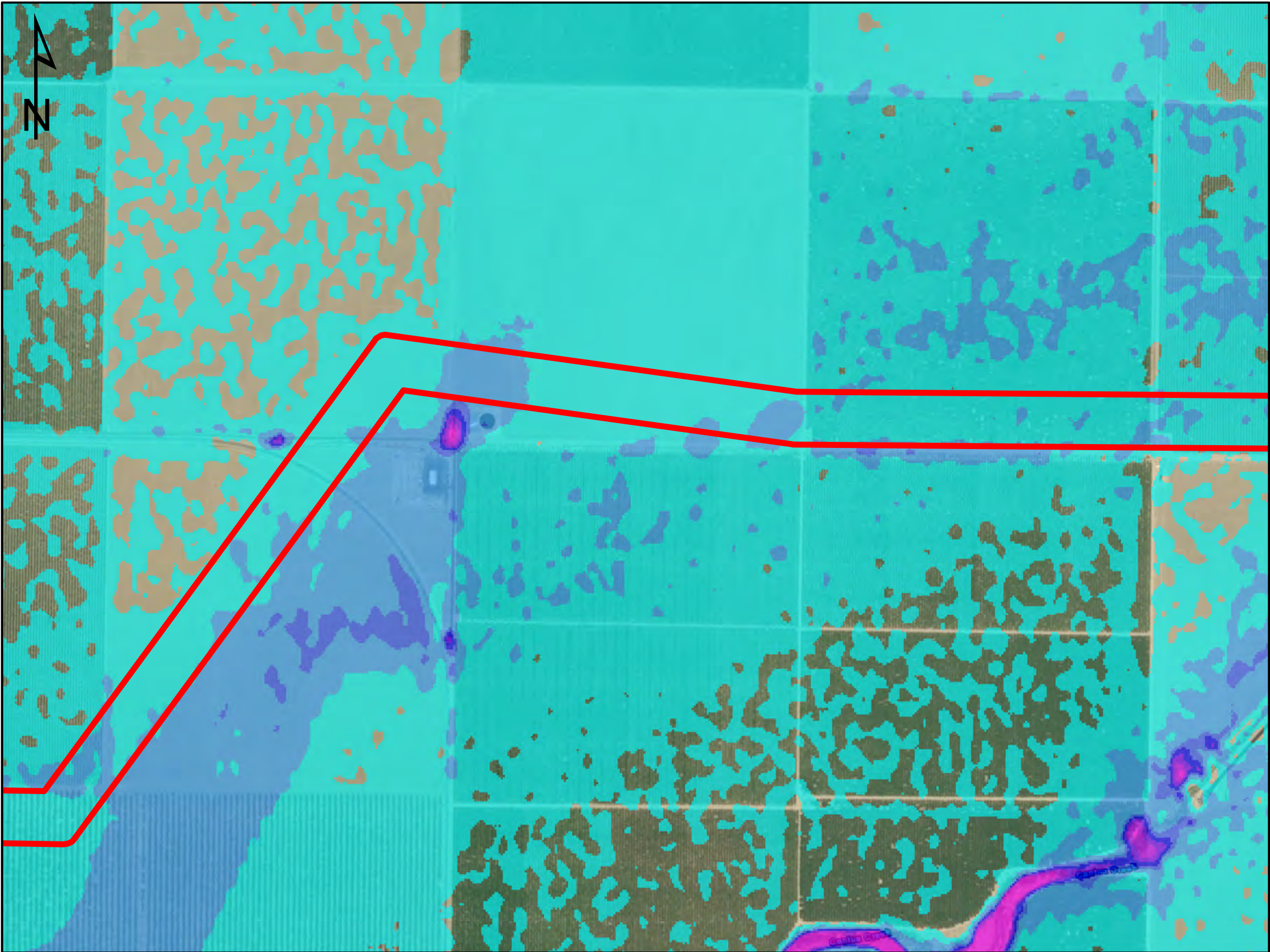
**Legend**

-  Darden Study Area
-  Parcel Lines

**Floodplain Max Depth (ft)**

-  0.0 - 1.0
-  1.1 - 2.0
-  2.1 - 2.5
-  2.6 - 3.0
-  3.1 - 3.5
-  3.6 - 4.0
-  > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
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Latitude Of Origin: 35.3333  
Units: Foot US



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

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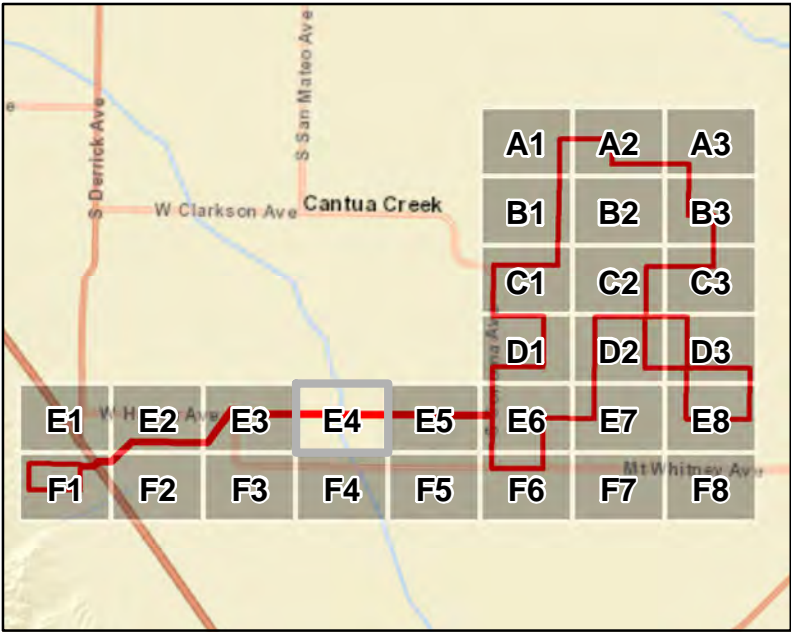
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Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)**

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
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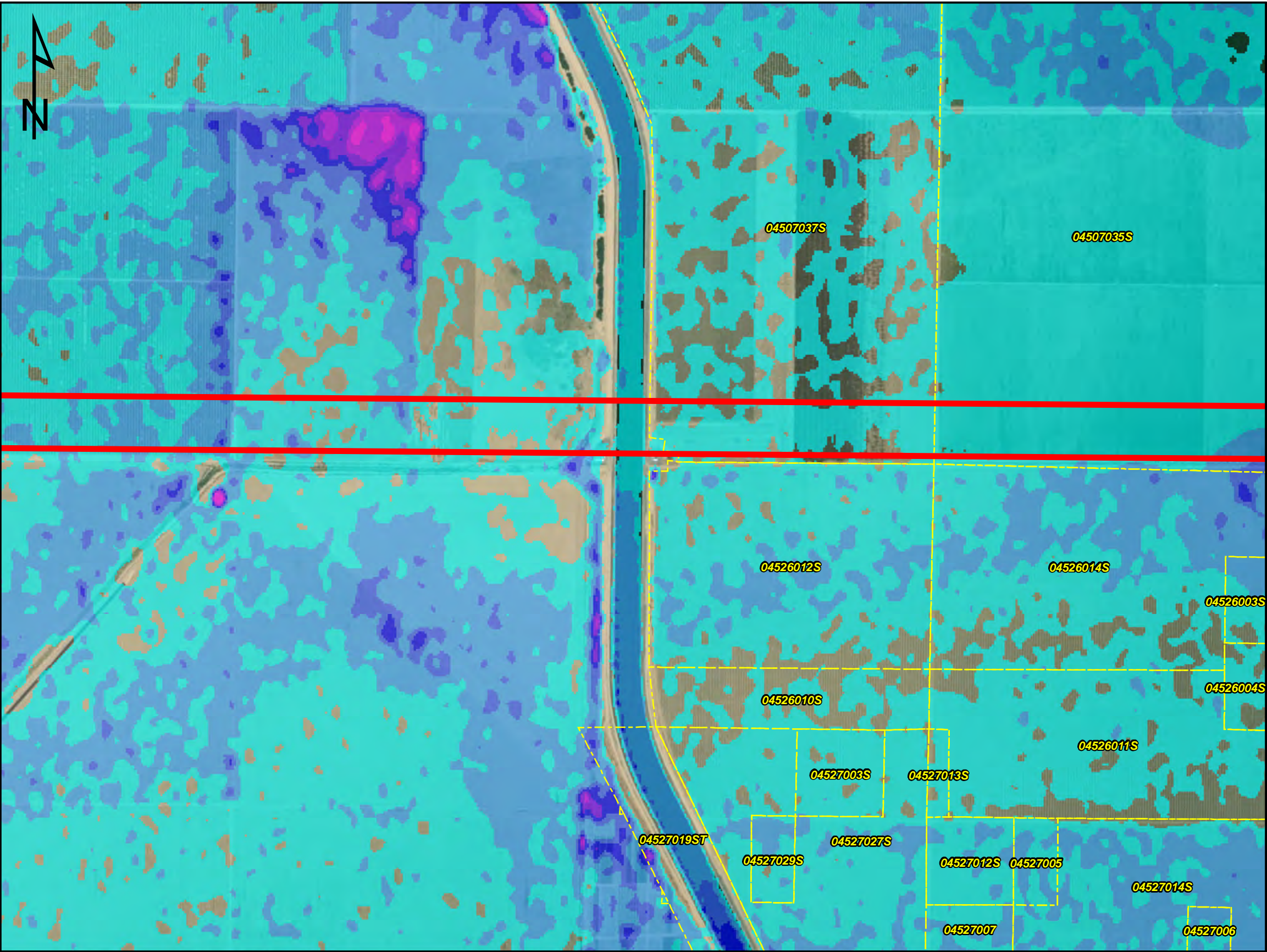
- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
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False Northing: 1,640,416.6667  
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Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US

0 400 800 1,600 Feet



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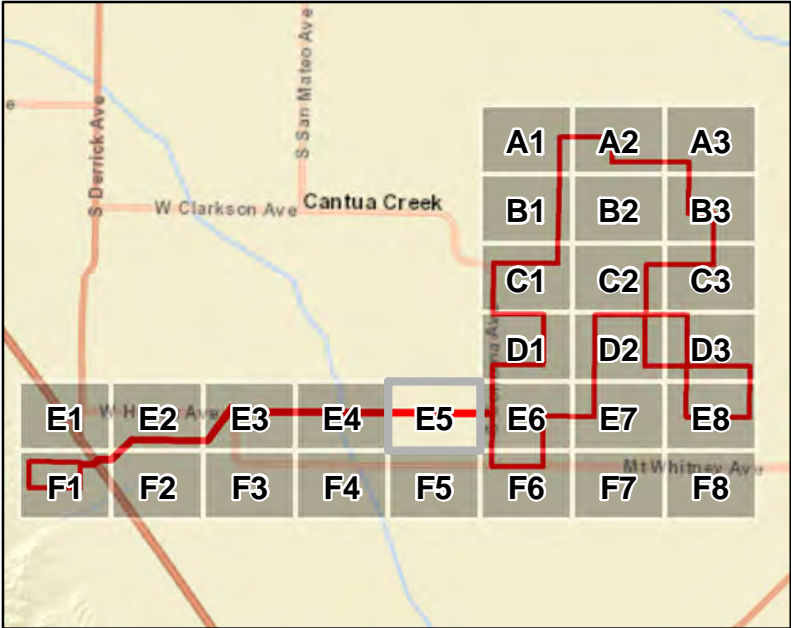
Darden  
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500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
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1 in = 800 ft  
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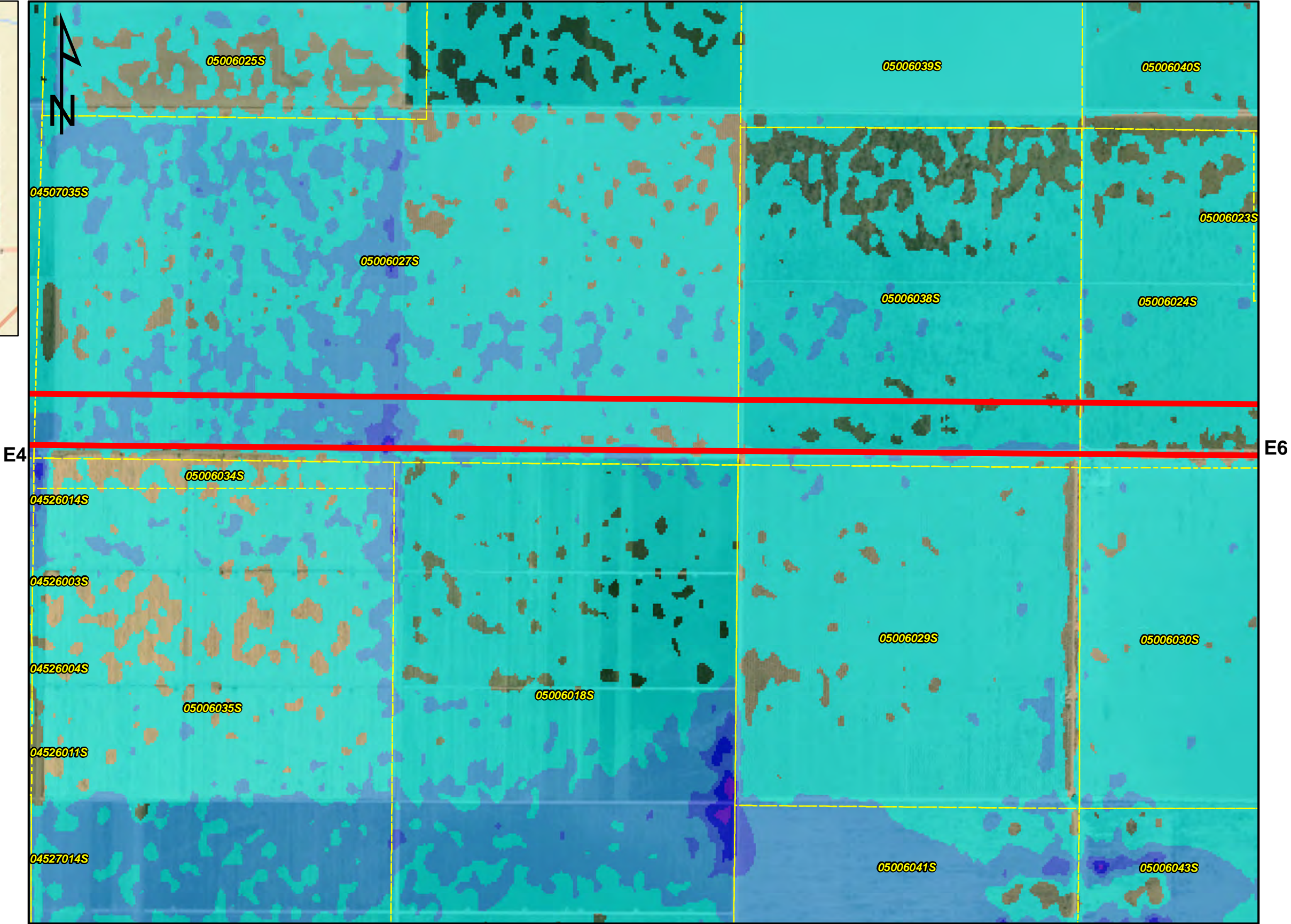
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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Units: Foot US



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

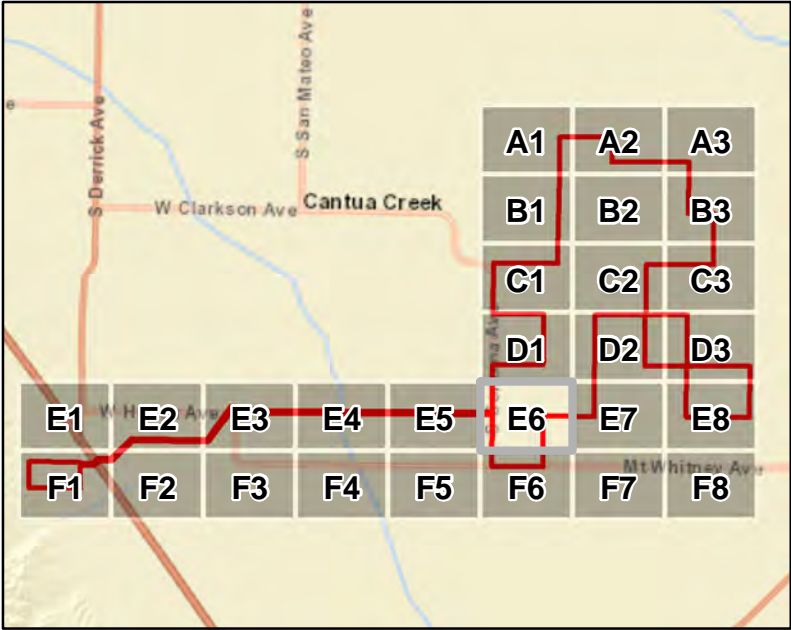
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Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
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SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: E5
STATE: CALIFORNIA	PAGE: 19 OF 30





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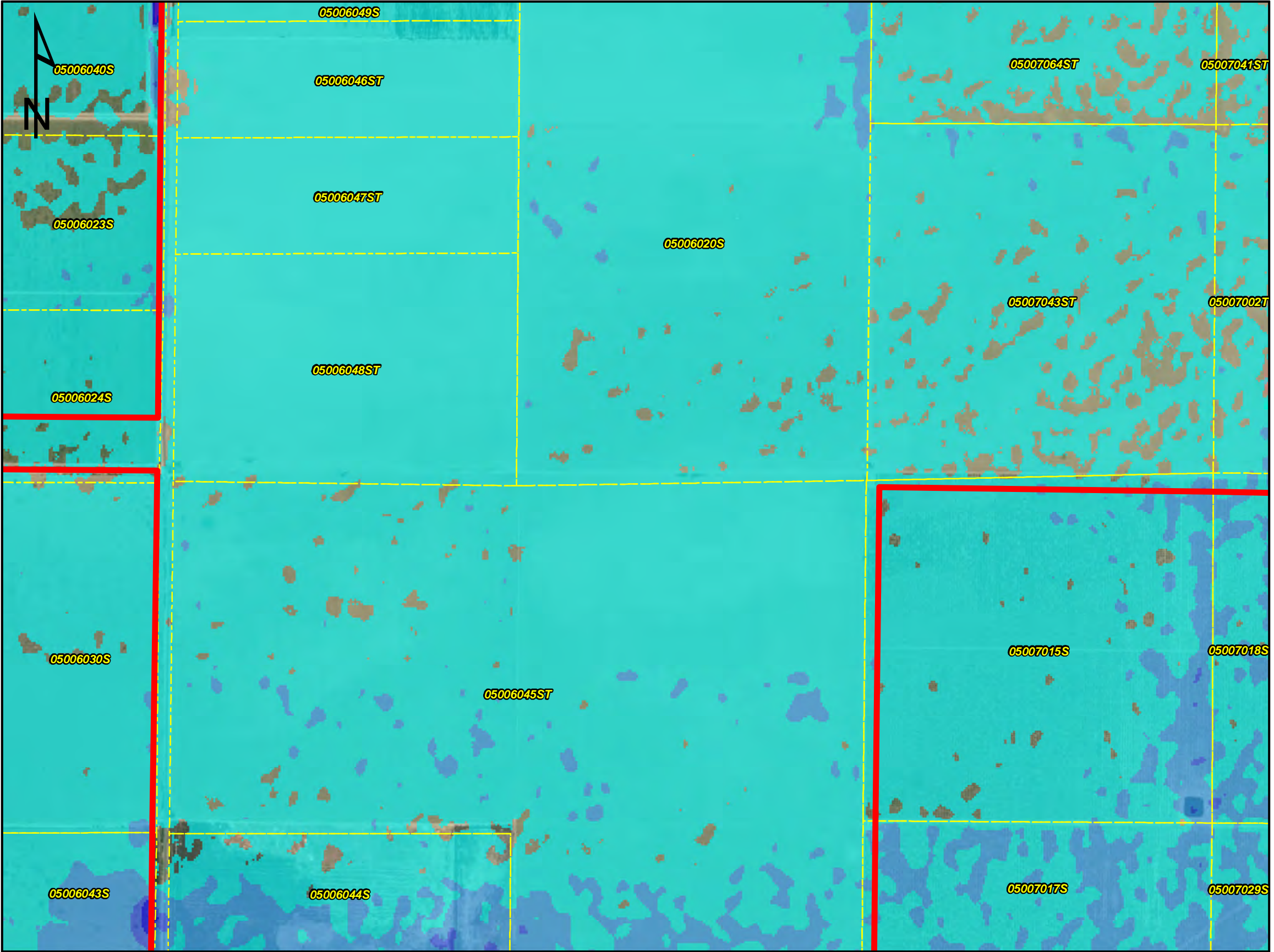
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

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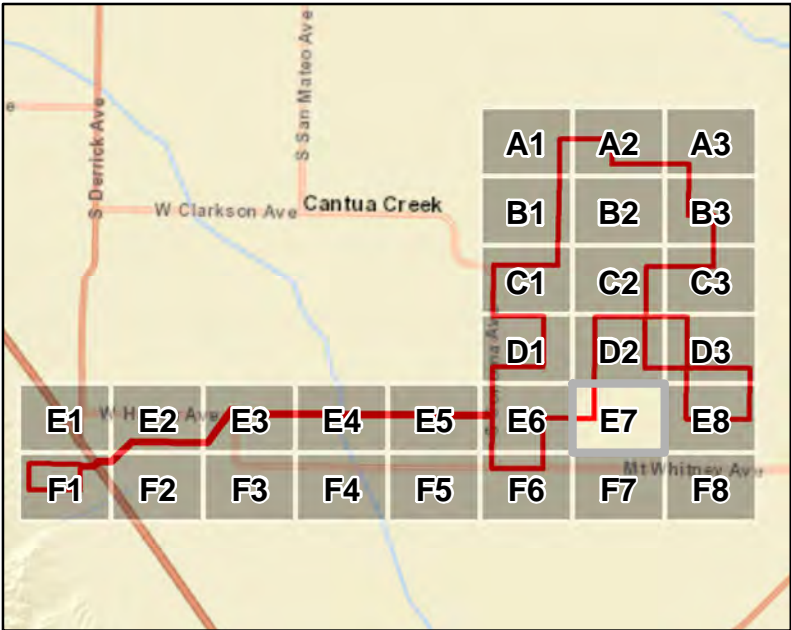
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Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
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COUNTY:  
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STATE:  
CALIFORNIA

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WRMA  
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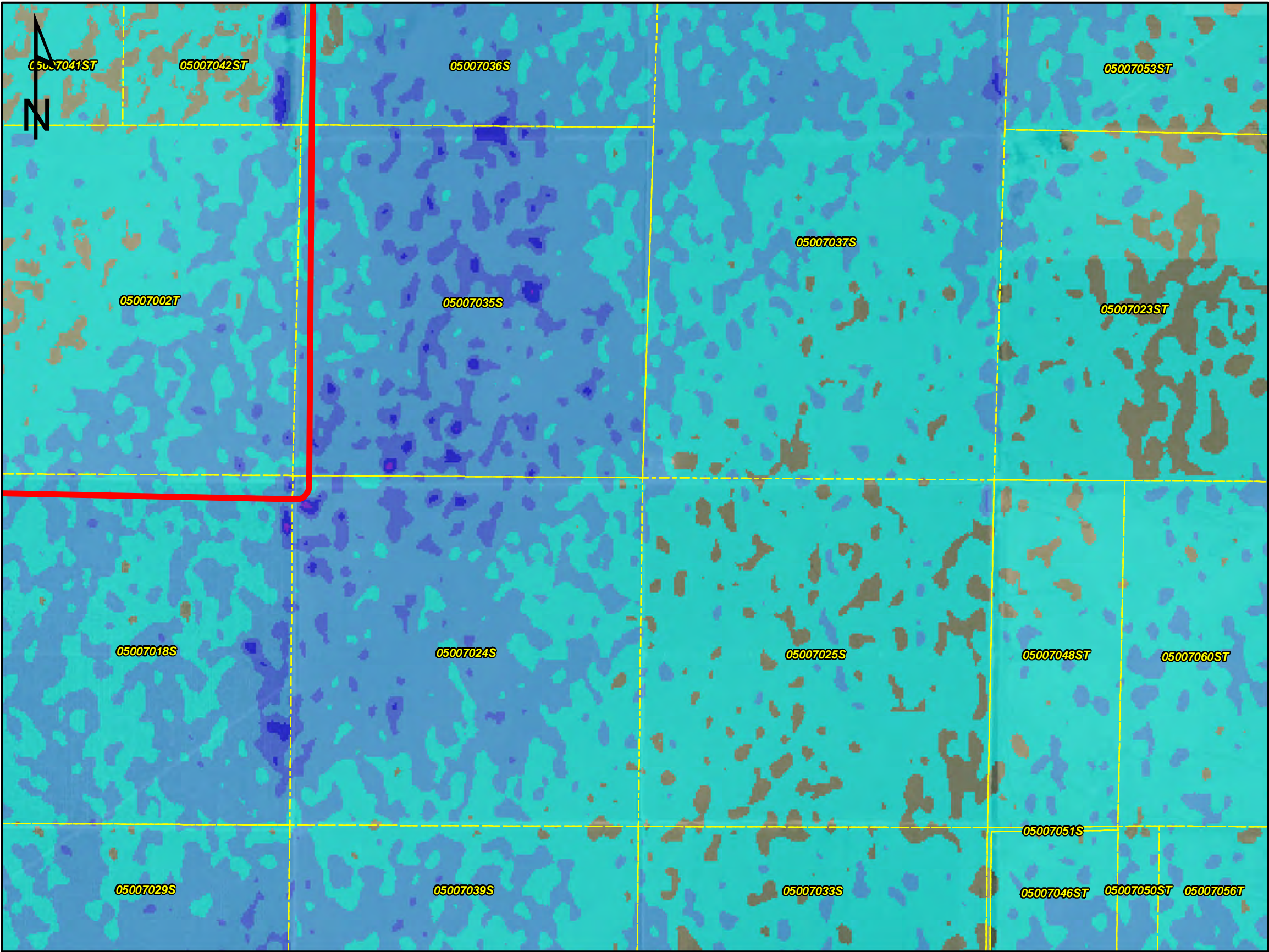
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
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False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
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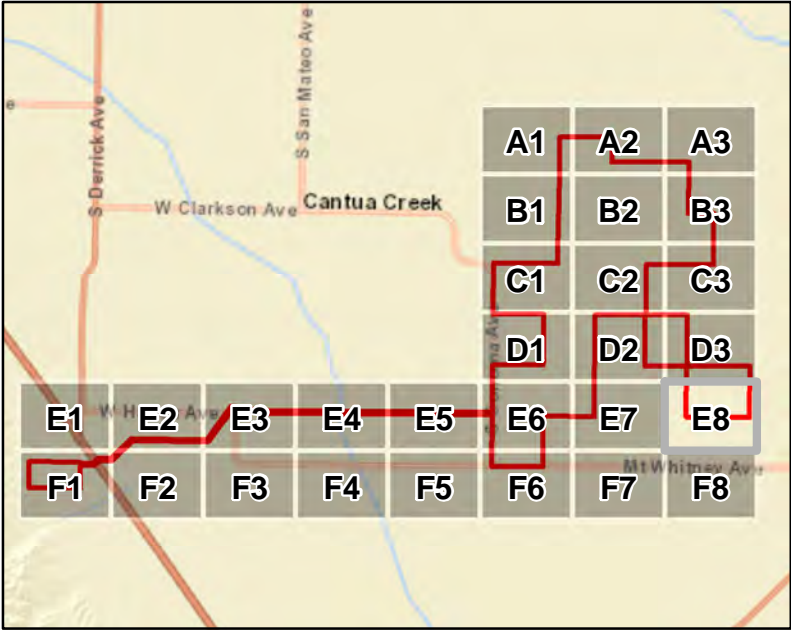
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Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
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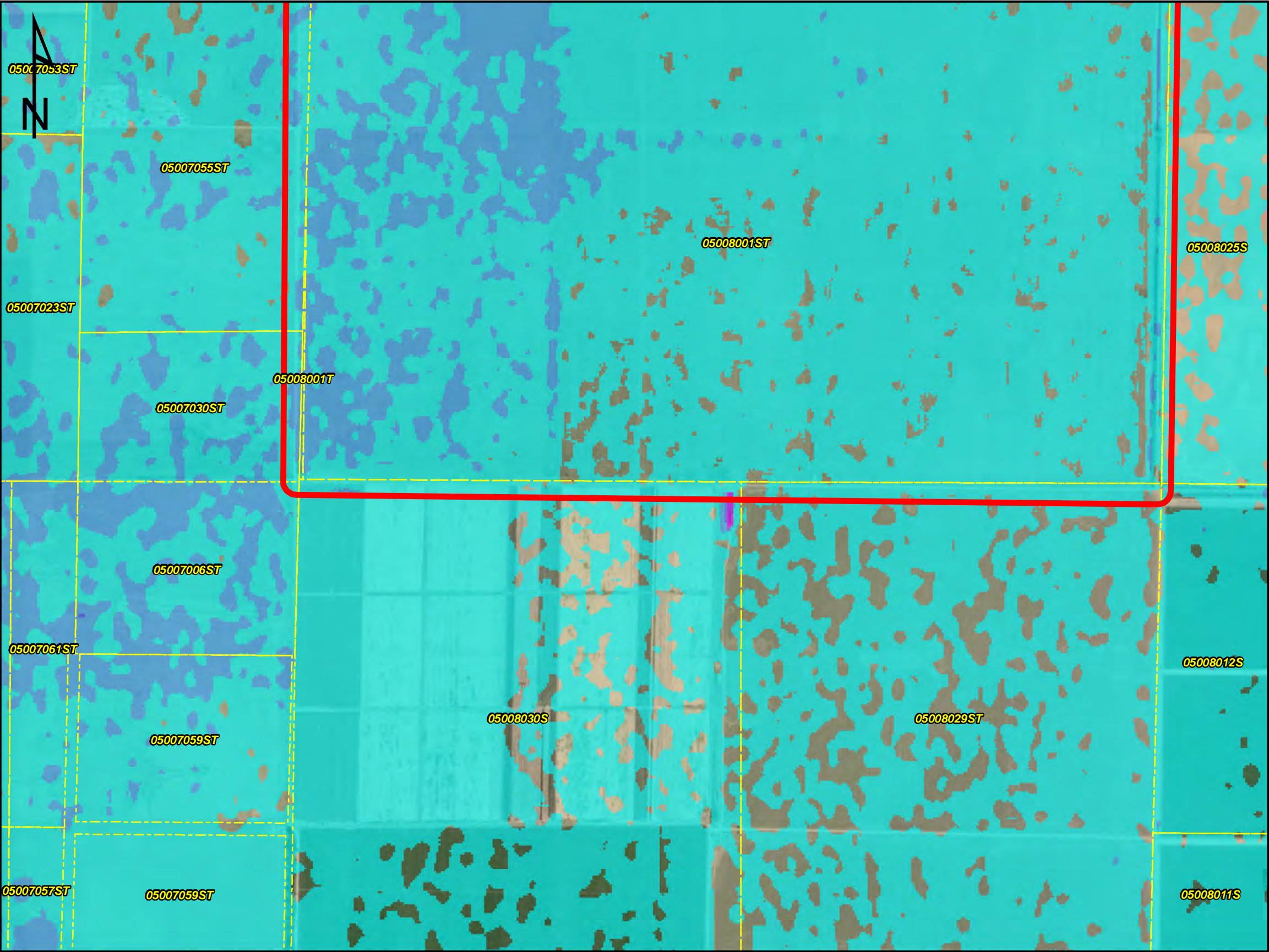
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
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UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

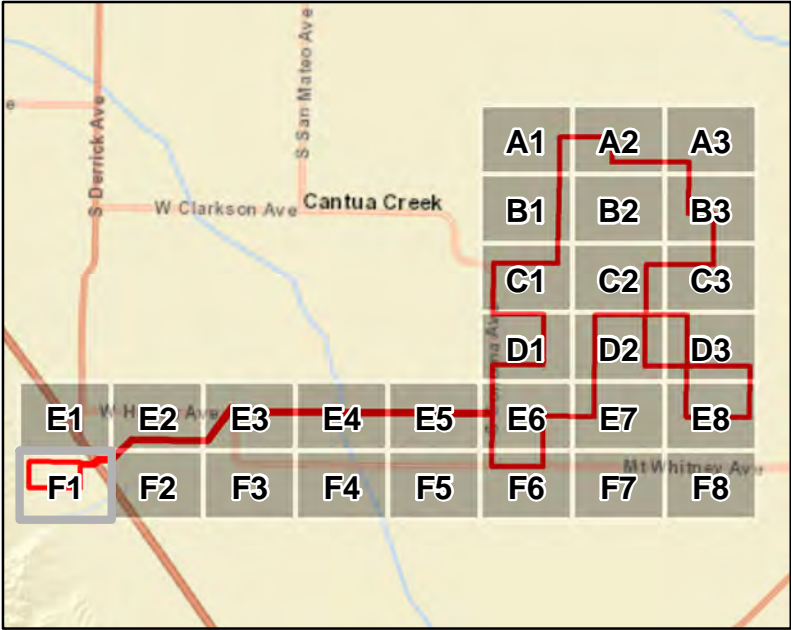
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Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
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SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: E8
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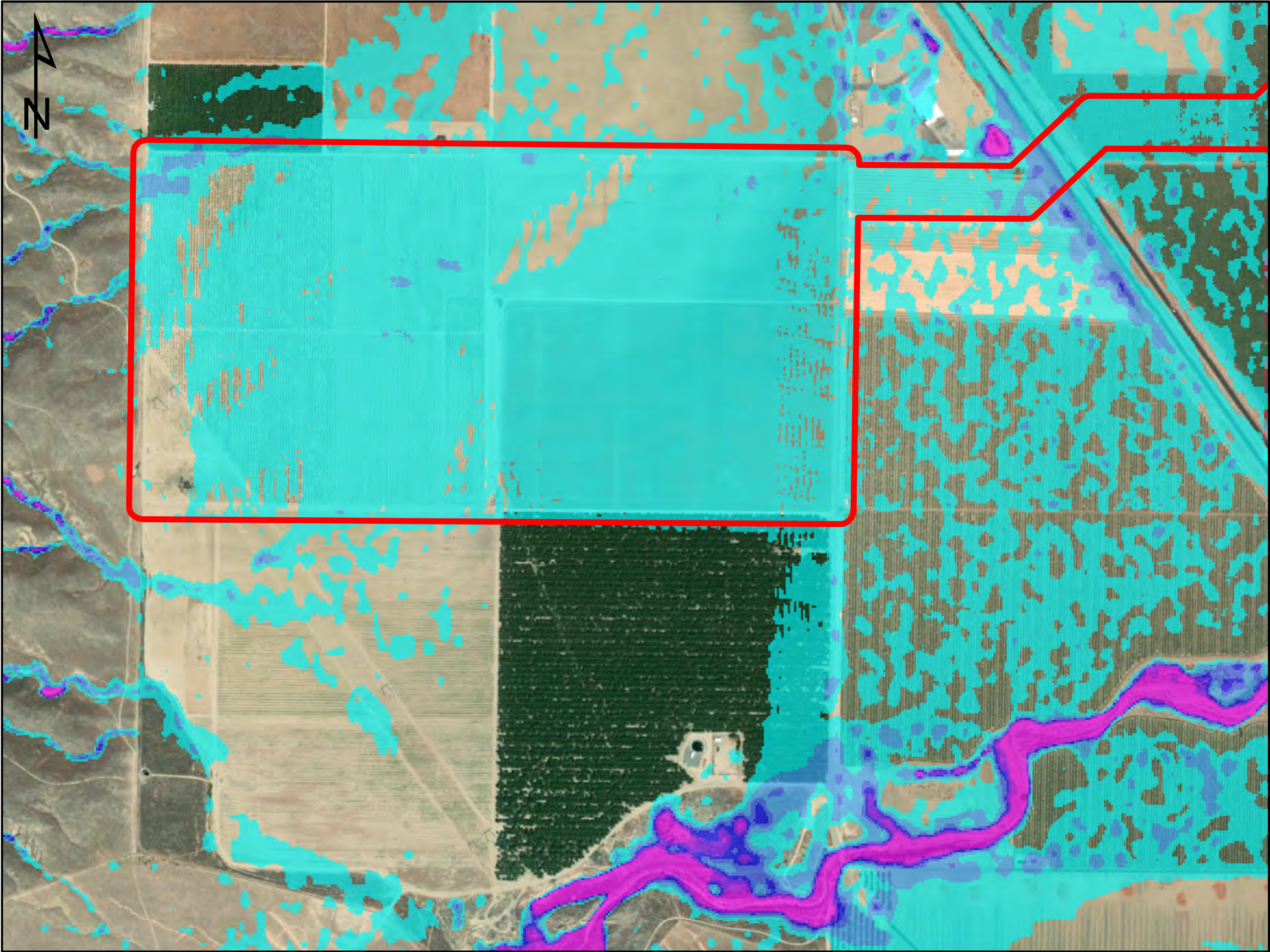
**Legend**

- Darden Study Area
- Parcel Lines

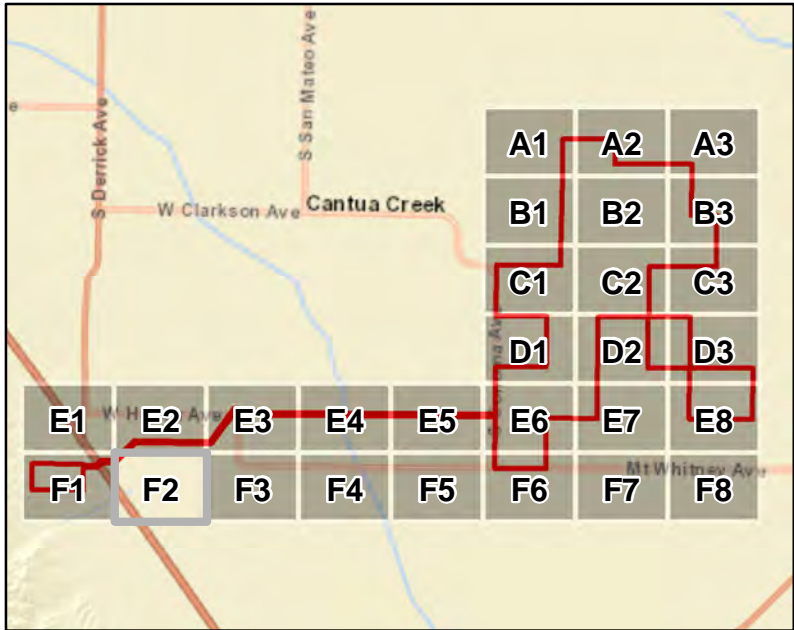
**Floodplain Max Depth (ft)**

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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Latitude Of Origin: 35.3333  
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**GRID INDEX**

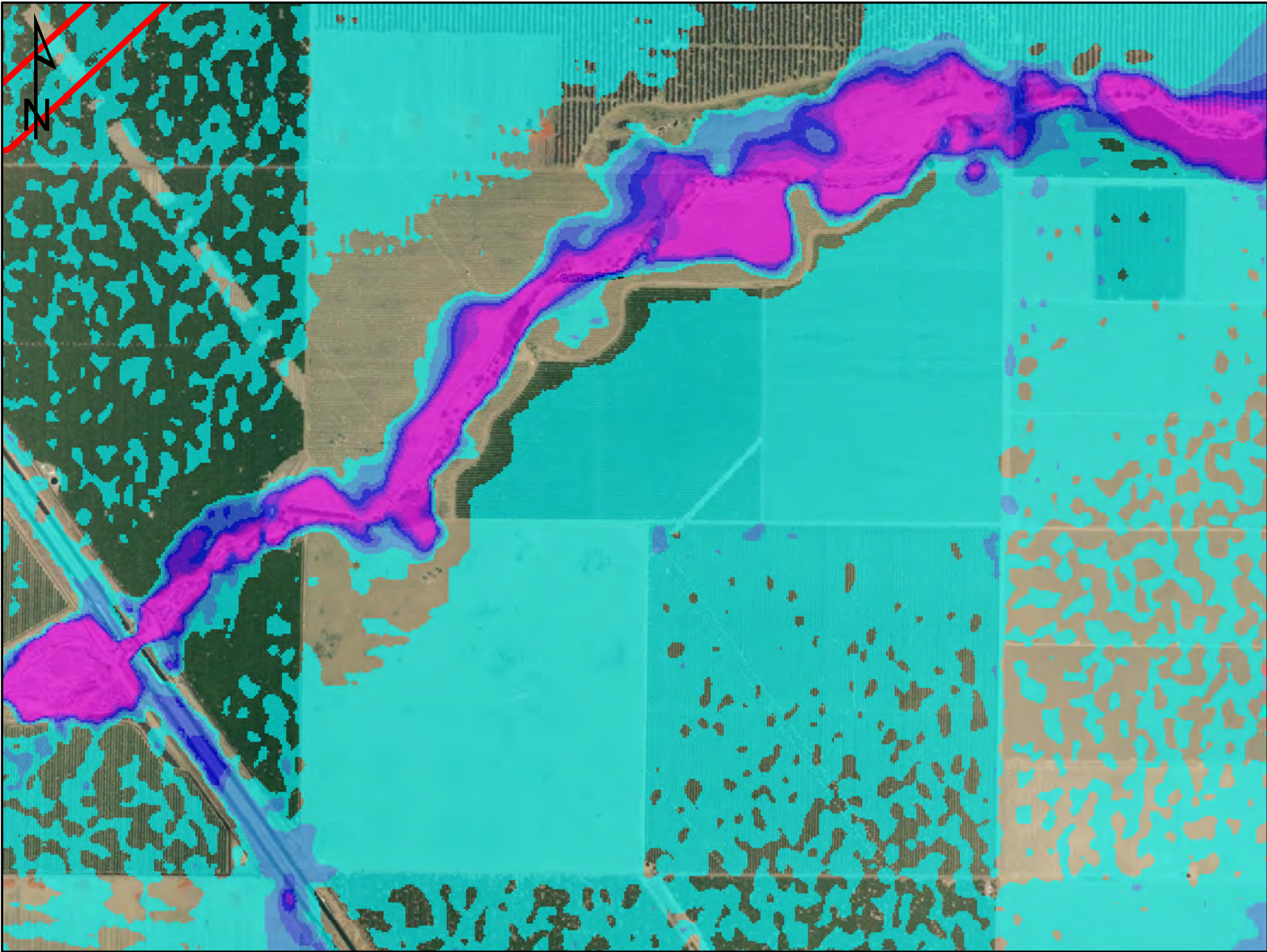
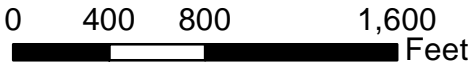
**Legend**

- Darden Study Area
- Parcel Lines

**Floodplain Max Depth (ft)**

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
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**UPPER DRY SUB-BASIN  
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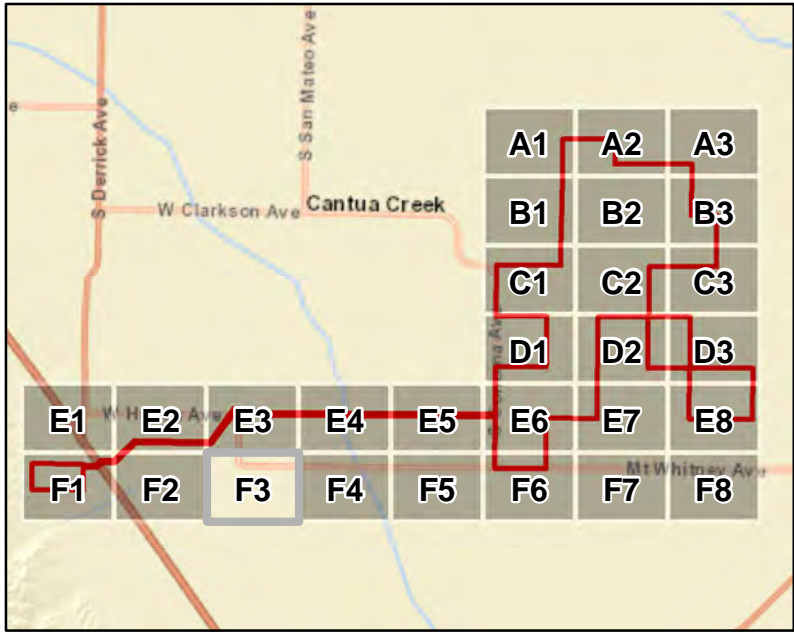
**Darden  
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Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

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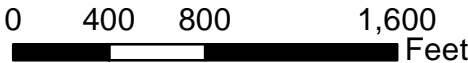
**Legend**

- Darden Study Area
- Parcel Lines

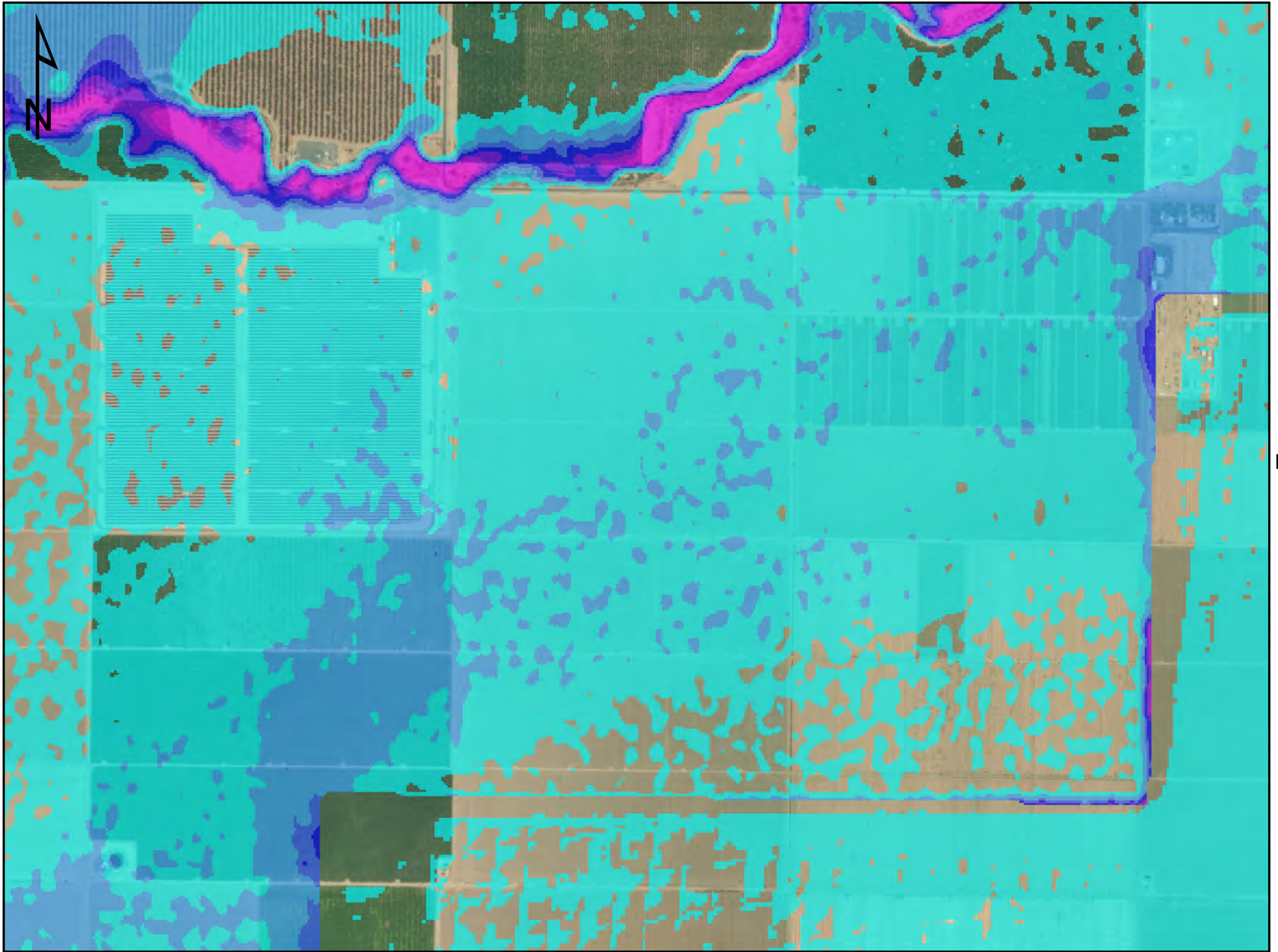
**Floodplain Max Depth (ft)**

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
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Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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**UPPER DRY SUB-BASIN  
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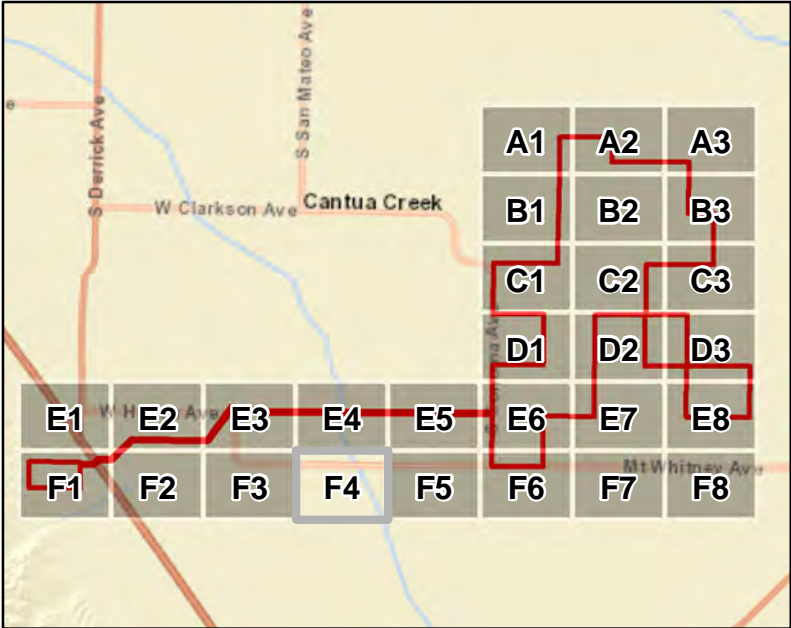
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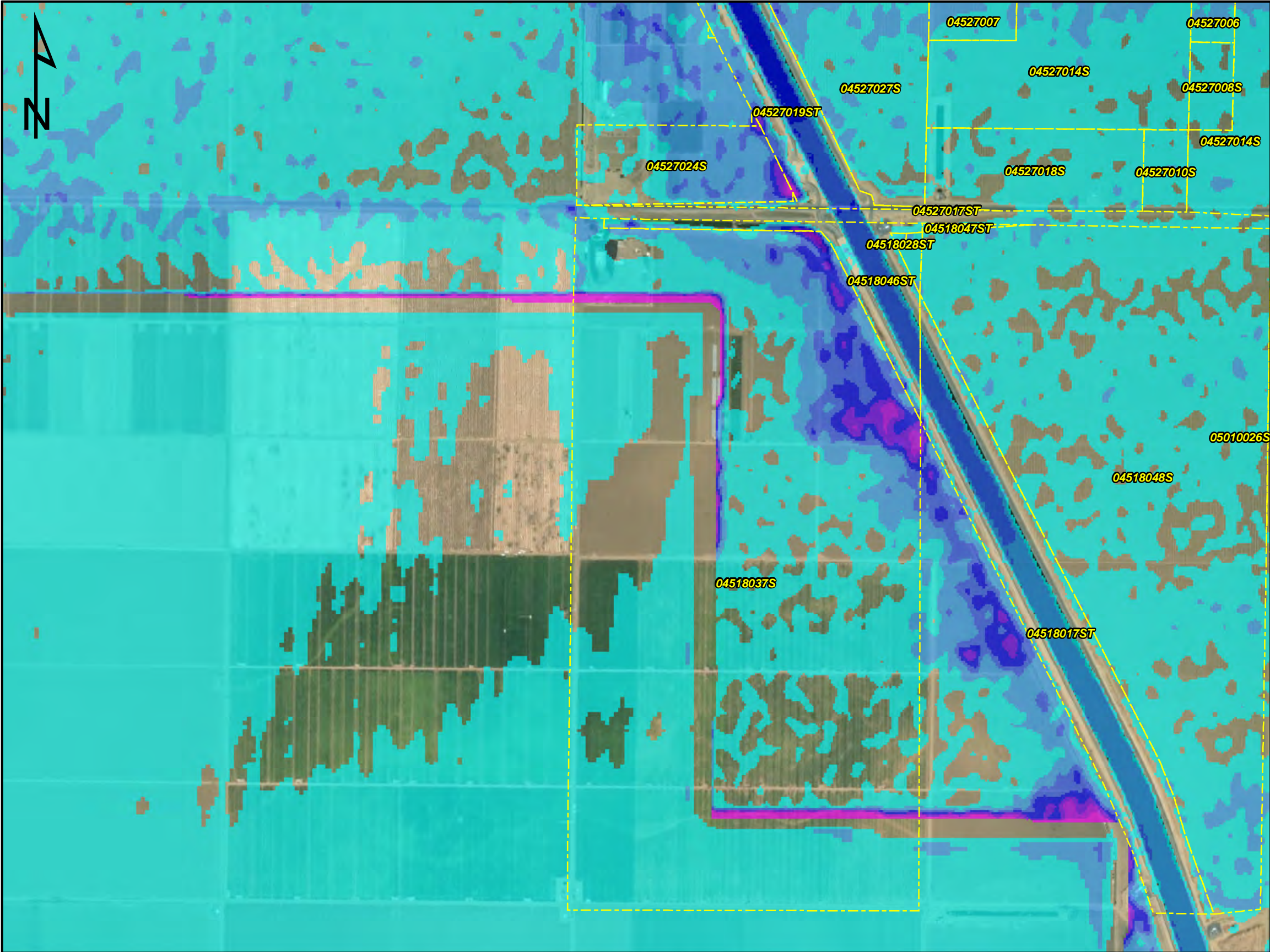
**Legend**

-  Darden Study Area
-  Parcel Lines

**Floodplain Max Depth (ft)**

-  0.0 - 1.0
-  1.1 - 2.0
-  2.1 - 2.5
-  2.6 - 3.0
-  3.1 - 3.5
-  3.6 - 4.0
-  > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



**UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA**

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INTERSECT POWER, INC.*

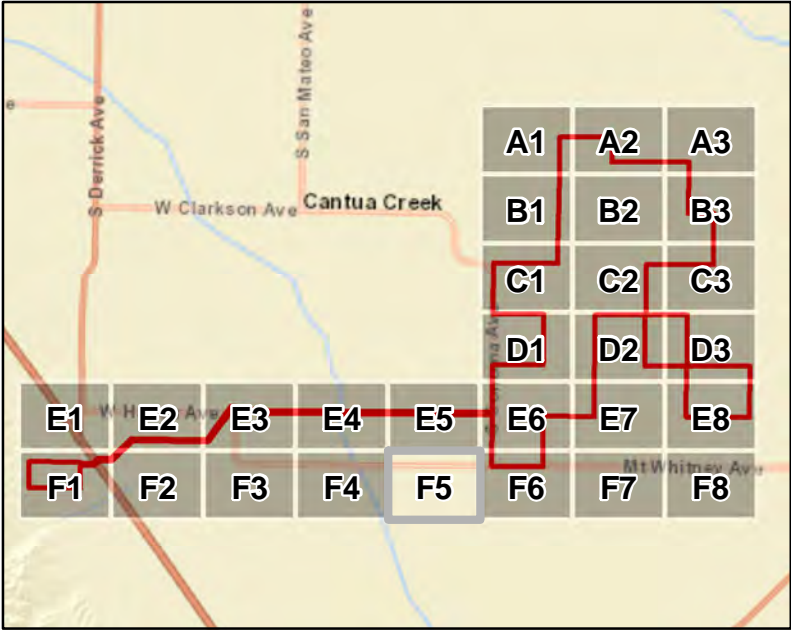
**Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)**

Map Produced:  
10/10/2023

SCALE:  
1 in = 800 ft  
COUNTY:  
FRESNO  
STATE:  
CALIFORNIA

BY:  
WRMA  
GRID INDEX NO.:  
**F4**  
PAGE:  
26 OF 30





GRID INDEX

Legend

- Darden Study Area
- Parcel Lines

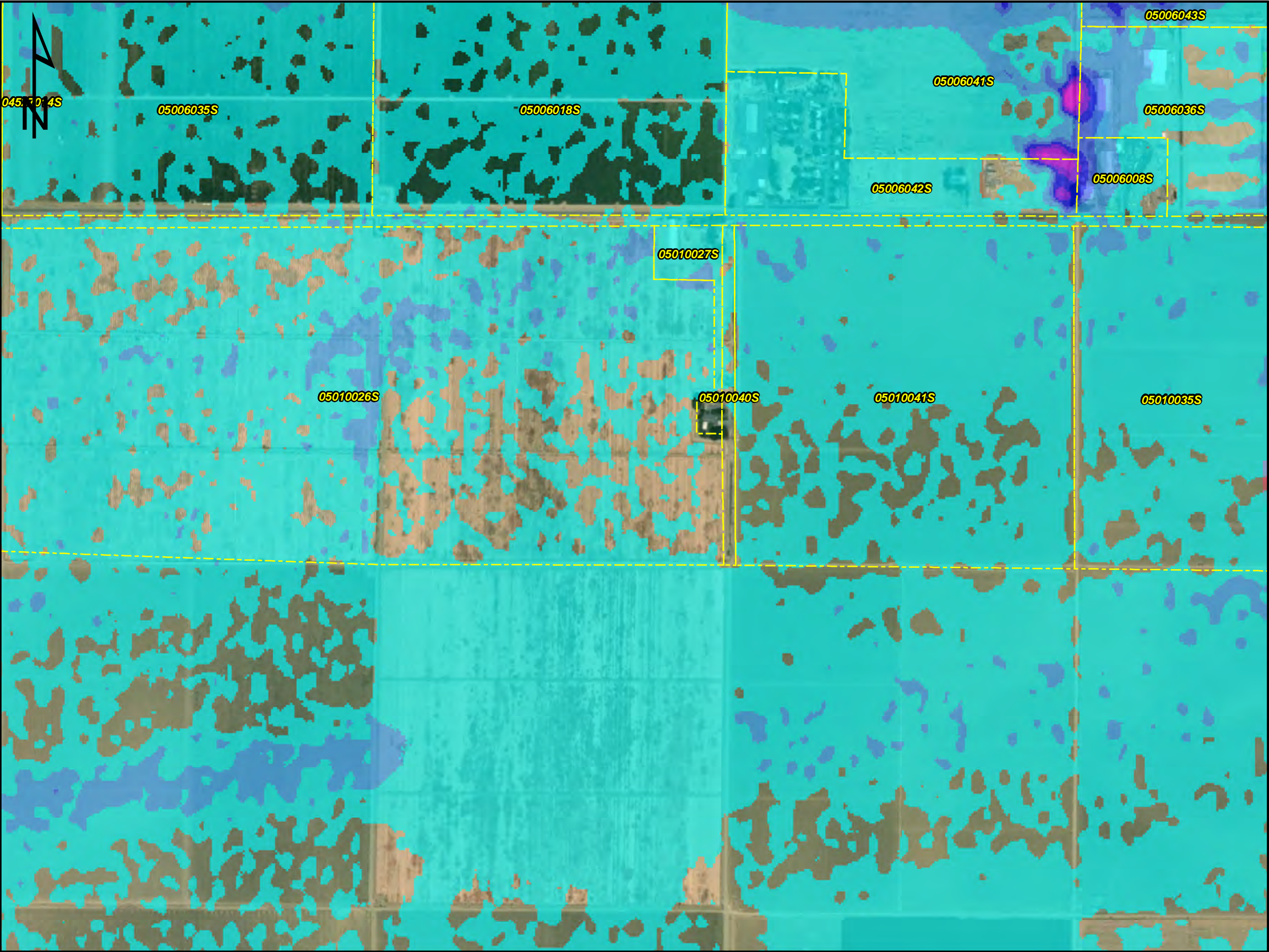
Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



F4



F6



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

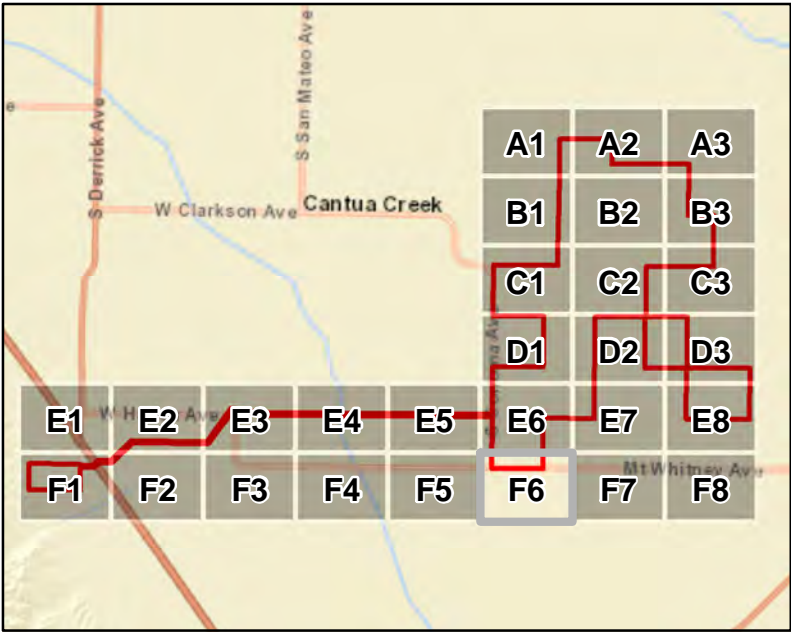
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Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

Map Produced:  
10/10/2023

SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: F5
STATE: CALIFORNIA	PAGE: 27 OF 30





GRID INDEX

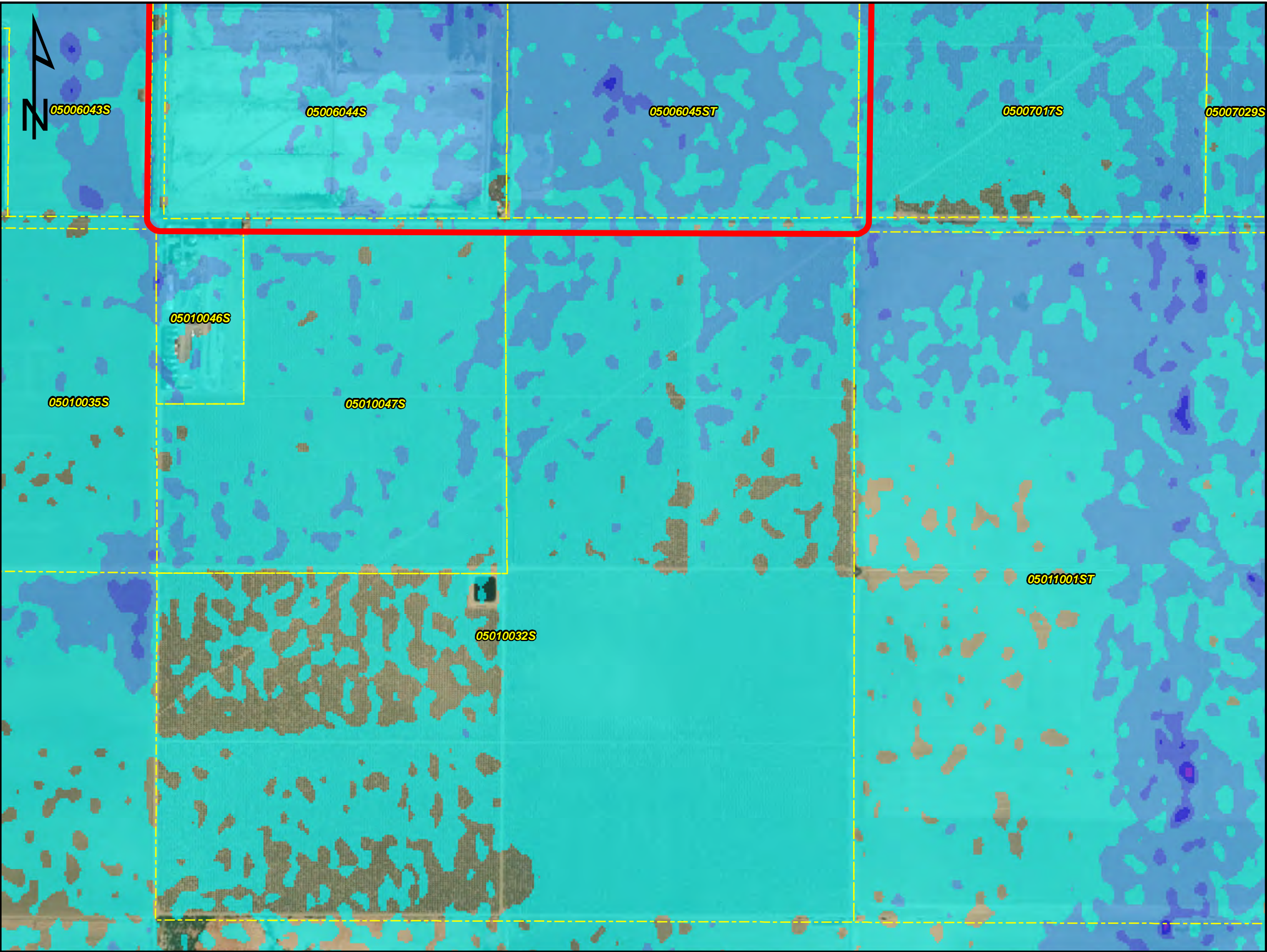
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

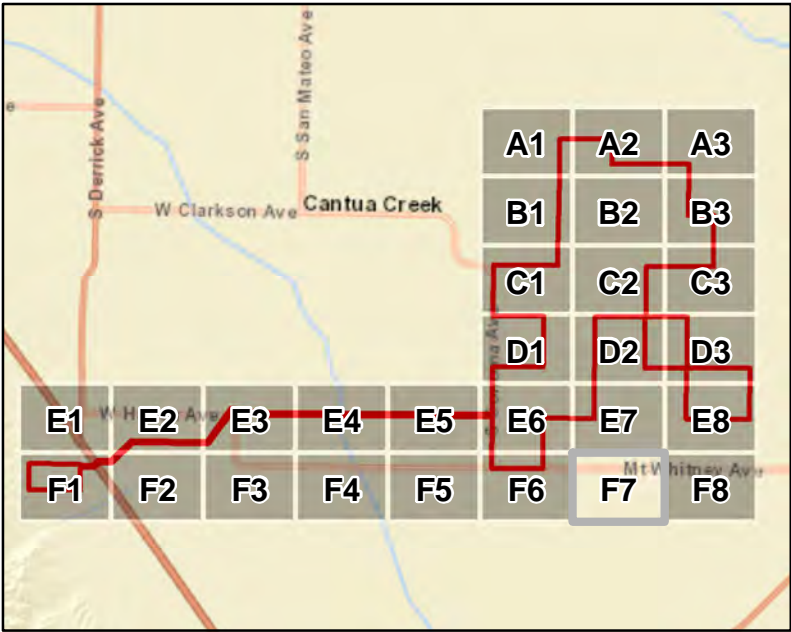
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Darden  
Maximum Flood Depth Classification  
500 Year - 24 Hour Storm (0.2% Annual Chance)

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SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: F6
STATE: CALIFORNIA	PAGE: 28 OF 30





GRID INDEX

Legend

- Darden Study Area
- Parcel Lines

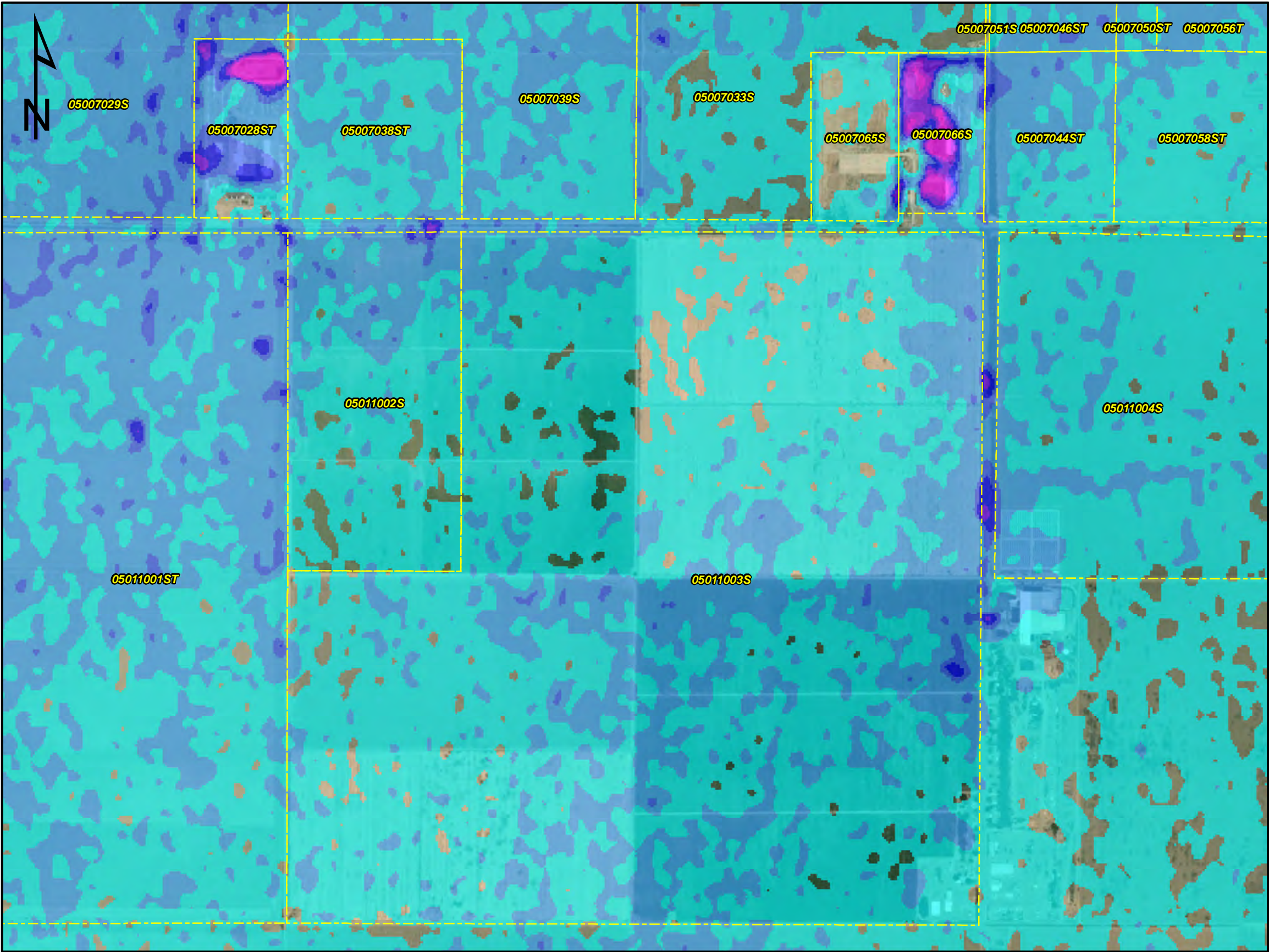
Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
Projection: Lambert Conformal Conic  
Datum: North American 1983  
False Easting: 6,561,666.6667  
False Northing: 1,640,416.6667  
Central Meridian: -119.0000  
Standard Parallel 1: 36.0000  
Standard Parallel 2: 37.2500  
Latitude Of Origin: 35.3333  
Units: Foot US



F6



F8

E7



UPPER DRY SUB-BASIN  
DARDEN STUDY AREA  
FRESNO COUNTY, CA

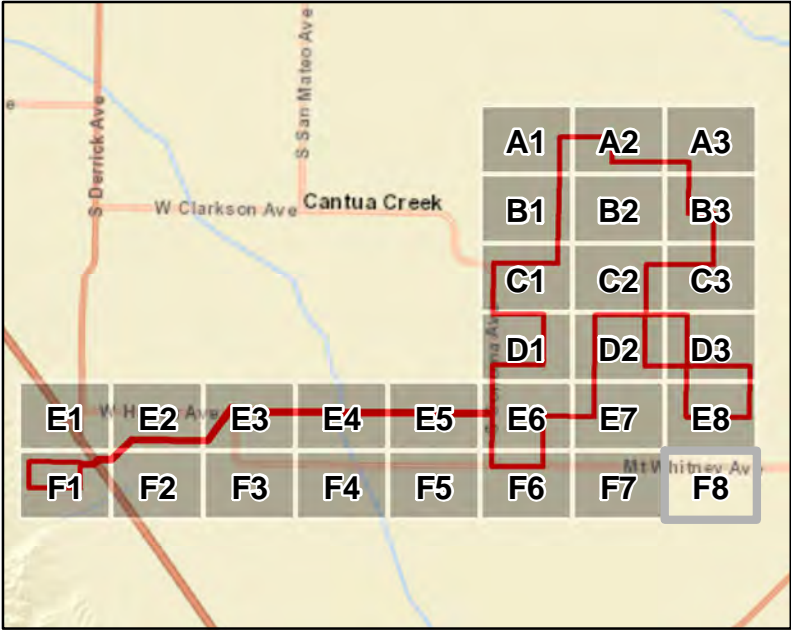
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Darden  
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500 Year - 24 Hour Storm (0.2% Annual Chance)

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SCALE: 1 in = 800 ft	BY: WRMA
COUNTY: FRESNO	GRID INDEX NO.: F7
STATE: CALIFORNIA	PAGE: 29 OF 30





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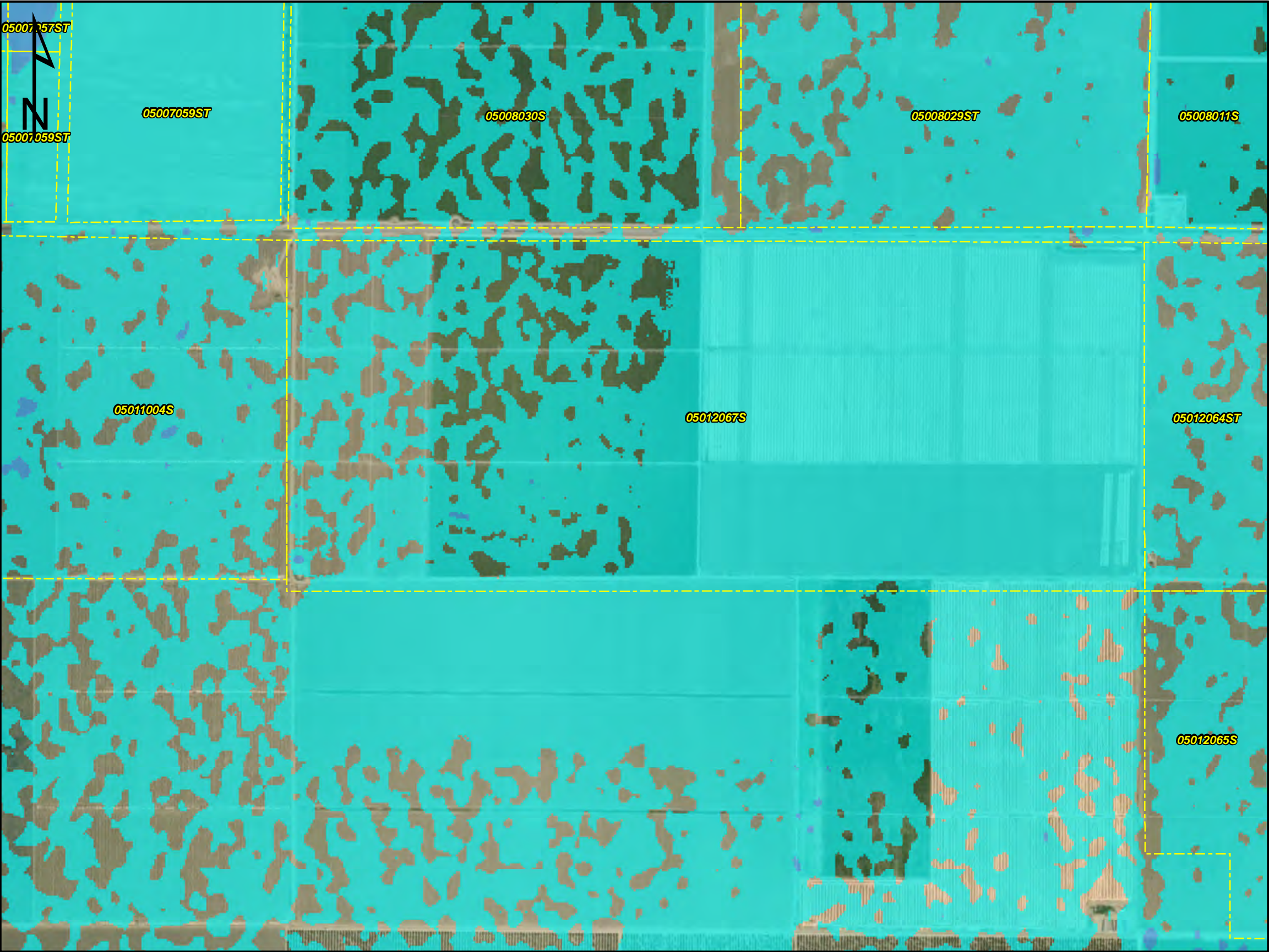
Legend

- Darden Study Area
- Parcel Lines

Floodplain Max Depth (ft)

- 0.0 - 1.0
- 1.1 - 2.0
- 2.1 - 2.5
- 2.6 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0
- > 4.0

Coordinate System: NAD 1983 StatePlane California IV FIPS 0404 Feet  
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SCALE:  
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COUNTY:  
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BY:  
WRMA  
GRID INDEX NO.:  
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PAGE:  
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