AQUATIC RESOURCES DELINEATION AND JURISDICTIONAL DETERMINATION

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13 April 2018

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DELINEATION

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DETERMINATION

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PJD VS. AJD

Preliminary Jurisdictional Determination	Approved Jurisdictional Determination
Not appealable (instead request an AJD)	Appealable
No set expiration date	Expires after 5 years
Cannot use to disclaim jurisdiction	Required to disclaim jurisdiction
Not posted on the web	Posted on the web
Sufficient for permitting	Sufficient for permitting

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AJD, PJD, AQUATIC RESOURCE DELINEATION FAQS

Do I need an AJD or PJD to get a permit?

No, Regulatory Guidance Letter 16-01 makes it clear that a jurisdictional determination is not required to get a permit. An aquatic resources delineation is fine.

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AJD/PJD FAQS

I have a non-tidal irrigation ditch excavated on dry land in my study area. Can I just leave it off the map and do a PJD?

No, if it's an aquatic resource it needs to be on the map. If it's a preamble excluded water then the Corps will need to do an AJD to disclaim jurisdiction.

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AJD/PJD FAQS

Is the Corps required to coordinate all Approved JDs with EPA?

No, the Corps is only required to coordinate isolated & significant nexus calls with EPA. Other non-jurisdictional findings (i.e., preamble excluded waters) do not required EPA coordination but do require an AJD.

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AJD/PJD FAQS

What about puddles? The stayed rule talks about these in the same context as the 1986 preamble excluded waters. Do I need to map those?

No, puddles are not aquatic resources since they do not have an OHWM nor are they wet long enough to meet the definition of wetland.

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AJD, PJD, AQUATIC RESOURCE DELINEATION FAQS

What about rills and gullies? Do I need to map those?

No, rills and gullies are not aquatic resources since they do not have an OHWM nor are they wet long enough to meet the definition of wetland.

We'll see it in the aerials, so take a sample point, describe the situation, take a picture so that I know you didn't just miss it!

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AJD, PJD, AQUATIC RESOURCE DELINEATION FAQS

How long is EPA's review of an Approved JD?

Region VIII has agreed to review positive significant nexus determinations in 3 days

15 days for a significant nexus determination, 21 days for isolated

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AJD, PJD, AQUATIC RESOURCE DELINEATION FAQS

What does the aquatic resource delineation verification say about jurisdiction?

Absolutely nothing. A delineation is purely about the extent of aquatic resources (streams, lakes, ponds, wetlands, etc.) within the review area. It will not discuss whether or not those areas are jurisdictional.

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AJD, PJD, AQUATIC RESOURCE DELINEATION FAQS

Can I appeal an aquatic resources delineation verification?

No, but if you have new information you can always ask us to reconsider a delineation verification. You can also request an AJD, which is appealable.

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AJD, PJD, AQUATIC RESOURCE DELINEATION FAQS

I believe my activity is exempt. What do I need from the Corps?

You don’t need anything from the Corps…as long as you are right. If you want us to check we can. If we agree we will issue a no permit required letter.

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AJD/PJD FAQS

Where can I find jurisdictional determinations on the web?

The Sacramento District publishes all of its approved jurisdictional determinations at http://www.spk.usace.army.mil/Missions/Regulatory/Jurisdiction.aspx

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AJD, PJD, AQUATIC RESOURCE DELINEATION FAQS

I don’t have any aquatic resources on my property, will the Corps issue me a “no permit required” letter?

The no permit required letter is not necessary in this case, but what is necessary is an AJD. We cannot say that a review area has no waters of the U.S. without an AJD.

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AJD, PJD, AQUATIC RESOURCE DELINEATION FAQS

If an aquatic resource delineation verification is fine for permitting and only an AJD can disclaim jurisdiction, what is the PJD for?

Hmm…that's a good question. But if you need one maybe for a state or local approval we can do that.

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AJD, PJD, AQUATIC RESOURCE DELINEATION FAQS

Do I have to use the jurisdictional determination request form?

No, but we are going to need all the information that's contained in the form so it would really help us out if you'd use it. Thanks!

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ORDINARY HIGH WATER MARK (OHWM) FUNDAMENTALS

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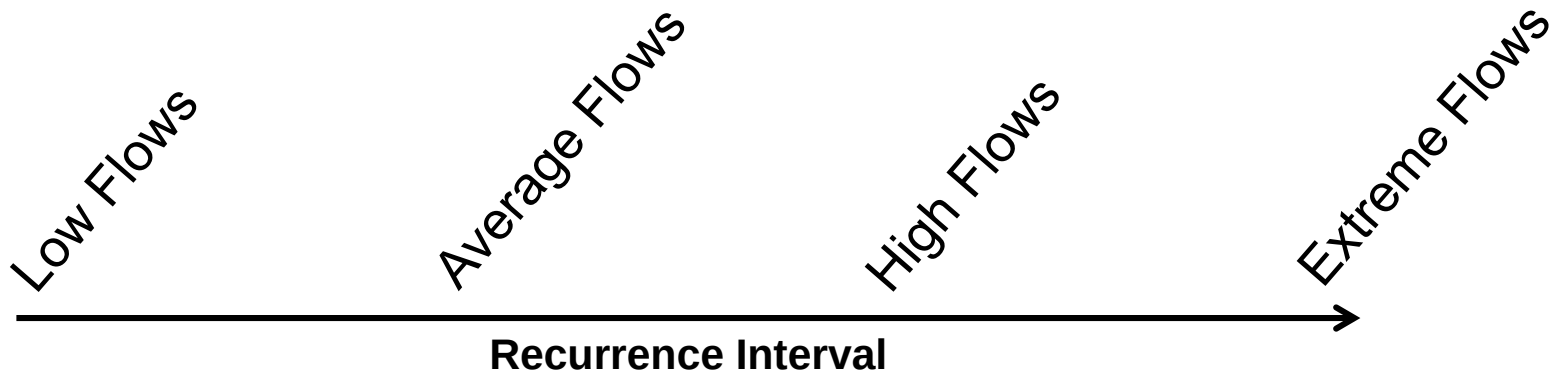
HOW IS THE OHWM CHARACTERIZED HYDROLOGICALLY?

- "ordinary high water" implies flow levels that are above average, but less than extreme, and that occur with some regularity



- But the OHWM is **NOT** associated with a specific streamflow recurrence interval (e.g., the 2-yr discharge)

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CONCEPTS OF THE OHWM

We have a general notion of the hydrology associated with the OHWM (average < OHWM < extreme)

BUT, the OHWM is ultimately defined by physical characteristics and should be represented by an actual mark on the landscape

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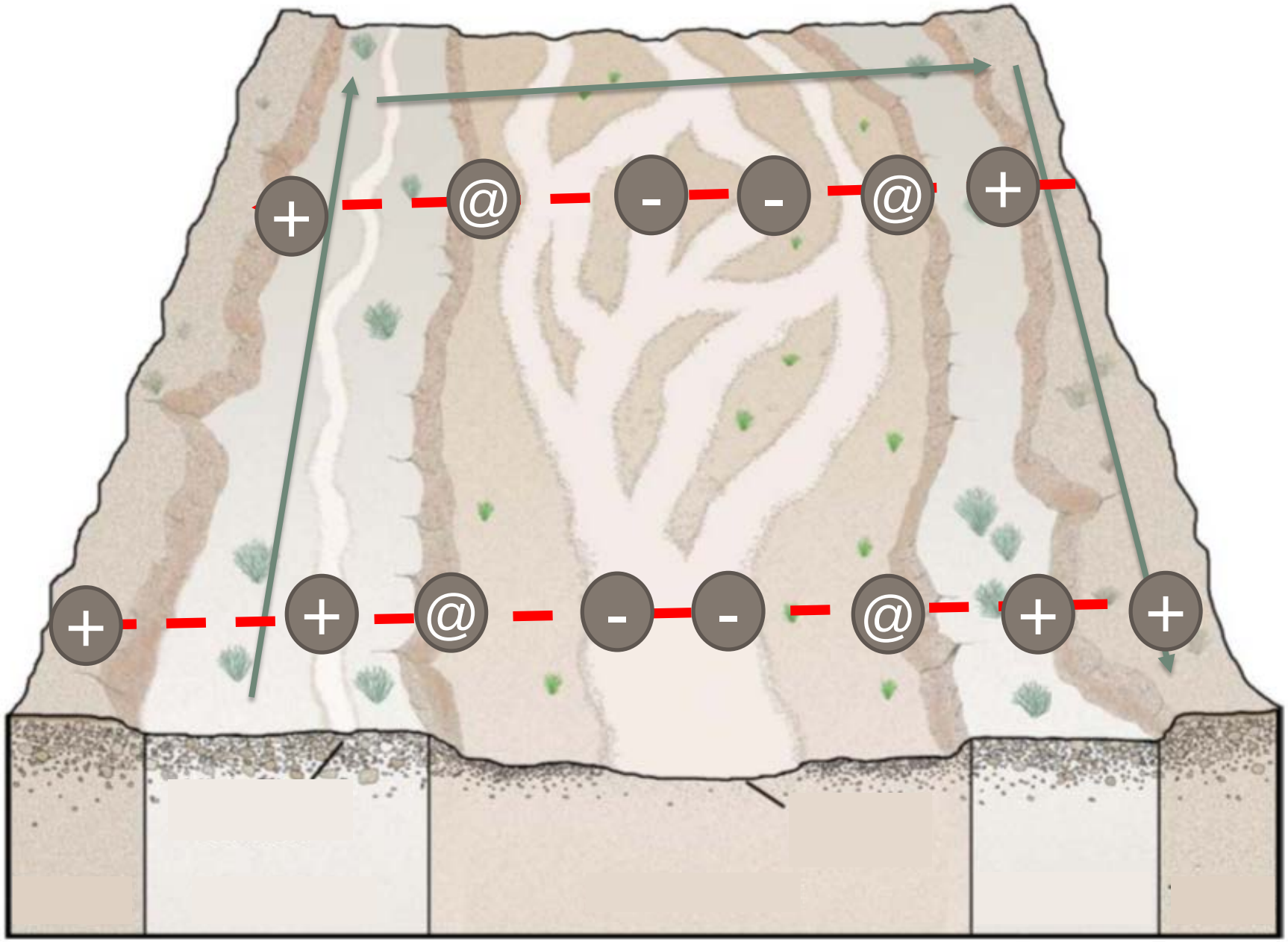

LOW-FLOW CHANNEL(S)

- Contains water most frequently
- Unstable; migrates within the active channel
- Formed during flood recession and/or maintained by persistent low flows

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ACTIVE CHANNEL

- Principle zone of erosion and sediment transport
- Typically shaped & maintained by moderate floods
- Typically characterized by relative lack of vegetation, abundance of coarse sediment

***OHWM typically corresponds with active channel boundary**

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FLOODPLAIN

- Zone of deposition
- Characterized by well-established vegetation and fine sediment relative to the active channel
- Term has many meanings/uses
- Not always present

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OHWM INDICATORS IN THE ARID WEST

Above (+), At (@) or Below (-) the OHWM

Drift (organic debris, larger than twigs)

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Desiccation/mud cracks

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Scour holes downstream of obstructions

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Change in particle size distribution

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Soil development

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Break in bank slope

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Flaser bedding (organics & fines between ripples/dunes)

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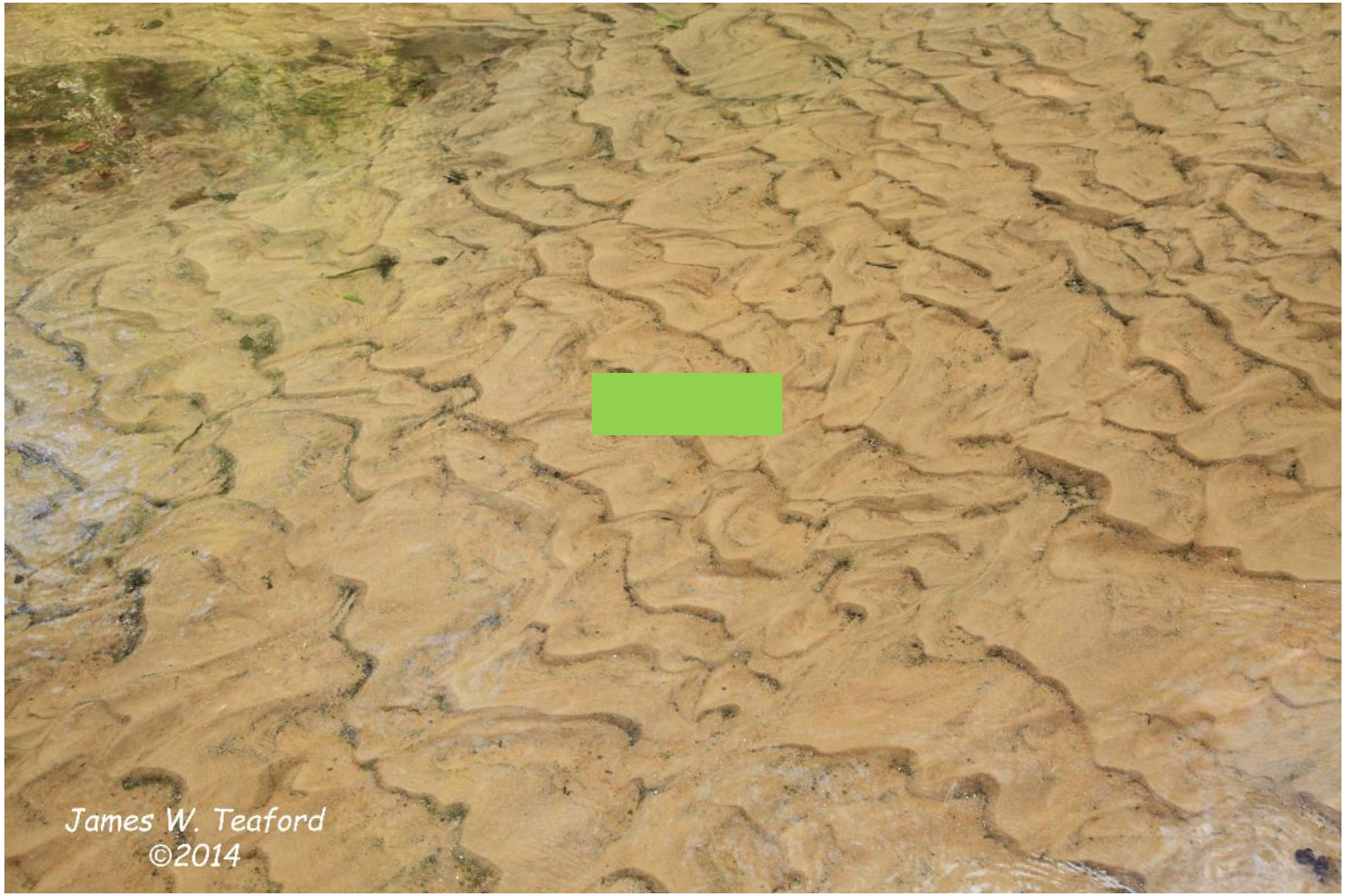

Ripples or Dunes

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Change in particle size distribution & break in slope

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Sparse low vegetation

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Break in slope

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Mature Trees

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VERIFYING AQUATIC RESOURCES DELINEATIONS

What do I look for? How can you help?

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DOES IT MAKE SENSE?

Check for past verifications/delineations
Check the dates
Check for corroborating sources of information
Check for difficult situations

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DATE	DESCRIPTION	EVENT
10/3/2005	[redacted] sample point	[redacted]01
10/6/2005	[redacted] sample point	[redacted]01
6/29/2015	[redacted] sample point	[redacted]01
6/30/2015	[redacted] sample point	[redacted]02
2/3/2016	[redacted] sample point	[redacted]03
2/25/2016	[redacted] sample point	[redacted]04
2/26/2016	[redacted] sample point	[redacted]05
2/29/2016	[redacted] sample point	[redacted]06
3/1/2016	[redacted] sample point	[redacted]07
4/19/2016	DA site visit	DA01
4/20/2016	DA site visit	DA02
4/21/2016	DA site visit	DA03

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DATE	DESCRIPTION	EVENT	Season
10/3/2005	[redacted] sample point	[redacted]01	Dry
10/6/2005	[redacted] sample point	[redacted]01	Dry
6/29/2015	[redacted] sample point	[redacted]01	Dry
6/30/2015	[redacted] sample point	[redacted]02	Dry
2/3/2016	[redacted] sample point	[redacted]03	Wet
2/25/2016	[redacted] sample point	[redacted]04	Wet
2/26/2016	[redacted] sample point	[redacted]05	Wet
2/29/2016	[redacted] sample point	[redacted]06	Wet
3/1/2016	[redacted] sample point	[redacted]07	Wet
4/19/2016	DA site visit	DA01	Wet
4/20/2016	DA site visit	DA02	Wet
4/21/2016	DA site visit	DA03	Wet

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DATE	DESCRIPTION	EVENT	Season	PDSI
10/3/2005	[redacted] sample point	[redacted]01	Dry	mid
10/6/2005	[redacted] sample point	[redacted]01	Dry	mid
6/29/2015	[redacted]sample point	[redacted]01	Dry	severe drought
6/30/2015	[redacted]sample point	[redacted]02	Dry	severe drought
2/3/2016	[redacted]sample point	[redacted]03	Wet	moderate drought
2/25/2016	[redacted]sample point	[redacted]04	Wet	moderate drought
2/26/2016	[redacted]sample point	[redacted]05	Wet	moderate drought
2/29/2016	[redacted]sample point	[redacted]06	Wet	moderate drought
3/1/2016	[redacted]sample point	ESA07	Wet	mid
4/19/2016	DA site visit	DA01	Wet	
4/20/2016	DA site visit	DA02	Wet	
4/21/2016	DA site visit	DA03	Wet	

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DIFFICULT SITUATION?

Did they follow the proper procedure concerning *drought?*

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ANTECEDENT PRECIPITATION

Arid West Supplement cites two methods

- "Hydrology tools for wetland determination" (Chapter 19 in Engineering Field Handbook USDA 1997)
- *Accessing and Using Meteorological Data to Evaluate Wetland Hydrology* (ERDC/EL TR-WRAP-00-1, Sprecher and Warne 2000)

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Figure 19–7 Rainfall documentation worksheet

Rainfall Documentation
(use with photographs)

Date: 9/9/15

Weather station: Colusa 2 SSW

Landowner: [redacted]

Tract no. [redacted]

County: Colusa

State: CA

Soil name: Moonband

Growing season: _____

Photo date: 8/25/15

	Long-term rainfall records							
	Month	3 yrs. in 10 less than	Normal	3 yrs. in 10 more than	Rain fall	Condition dry, wet, normal	Condition value	Month weight value	Product of previous two columns
1st prior month*	AUG	NA	0.04	NA	0.00	normal	2	3	6
2nd prior month*	JUL	NA	0.04	NA	0.03	normal	2	2	4
3rd prior month*	JUN	0.00	0.20	0.24	0.00	normal	2	1	2
								Sum	12

* Compared to photo date

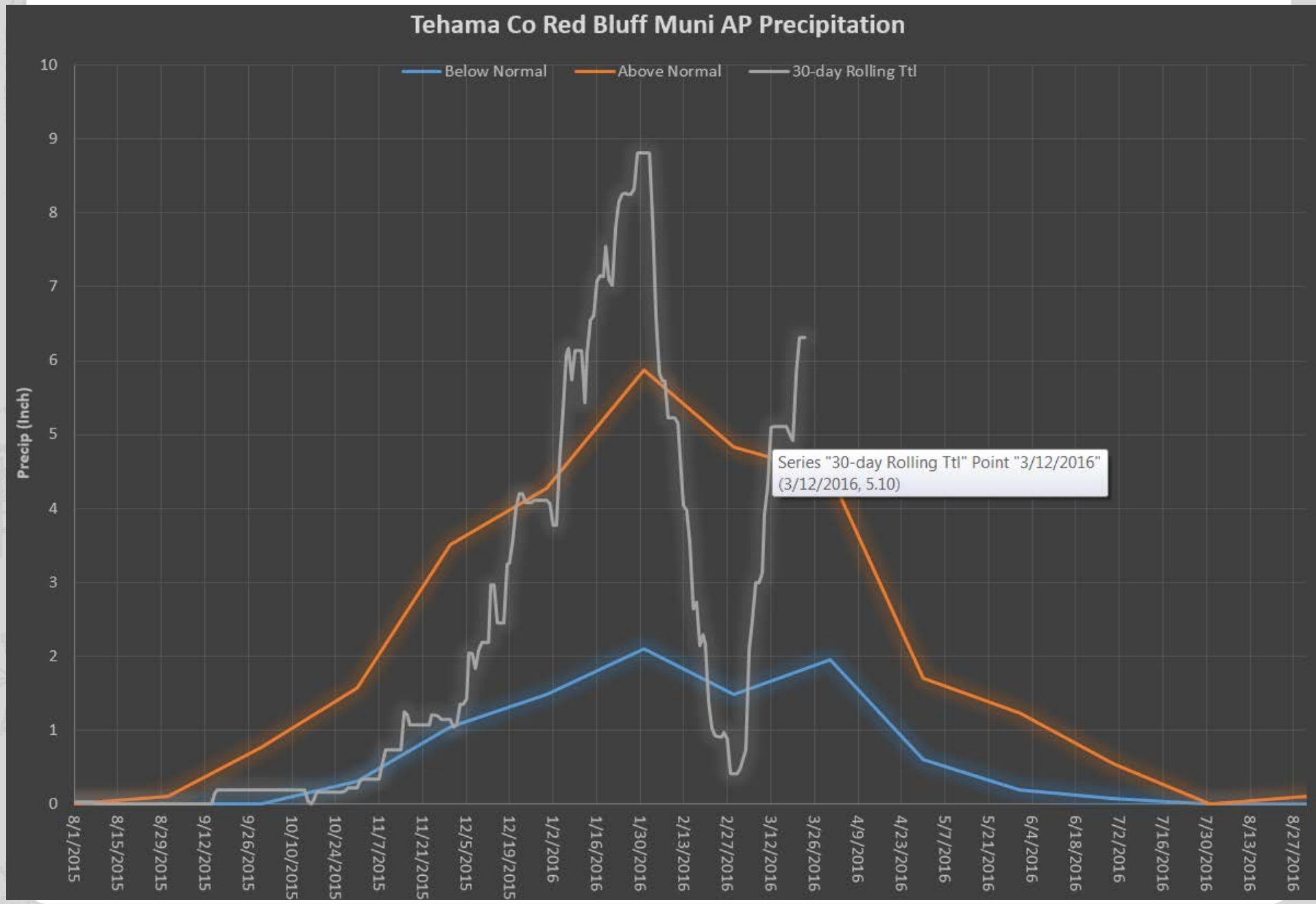
Note: If sum is

6 - 9	then prior period has been drier than normal
10 - 14	then prior period has been normal
15 - 18	then prior period has been wetter than normal

Condition value:

Dry	=1
Normal	=2
Wet	=3

Conclusions: Antecedent precip was within the range of normal.


Tehama Co Red Bluff Muni AP Precipitation
Below Normal
Above Normal
30-day Rolling Ttl
Precip (Inch)
10
9
8
7
6
5
4
3
2
1
0
Series "30-day Rolling Ttl" Point "3/12/2016"
(3/12/2016, 5.10)
8/1/2015
8/15/2015
8/29/2015
9/12/2015
9/26/2015
10/10/2015
10/24/2015
11/7/2015
11/21/2015
12/5/2015
12/19/2015
1/2/2016
1/16/2016
1/30/2016
2/13/2016
2/27/2016
3/12/2016
3/26/2016
4/9/2016
4/23/2016
5/7/2016
5/21/2016
6/4/2016
6/18/2016
7/2/2016
7/16/2016
7/30/2016
8/13/2016
8/27/2016

DATE	DESCRIPTION	EVENT	2nd Prior 30 days	3rd Prior 30 Days	Condition (1st Prior 30 Days)	Condition (2nd Prior 30 Days)	Condition (3rd Prior 30 Days)	Antecedent Precip
10/3/2005	[redacted] sample point	[redacted]01	9/3/2005	8/4/2005	Normal	Normal	Normal	Normal
10/6/2005	[redacted] sample point	[redacted]01	9/6/2005	8/7/2005	Normal	Normal	Normal	Normal
6/29/2015	[redacted] sample point	[redacted]01	5/30/2015	4/30/2015	Normal	Dry	Normal	Normal
6/30/2015	[redacted] sample point	[redacted]02	5/31/2015	5/1/2015	Normal	Dry	Normal	Normal
2/3/2016	[redacted] sample point	[redacted]03	1/4/2016	12/5/2015	Normal	Dry	Normal	Normal
2/25/2016	[redacted] sample point	[redacted]04	1/26/2016	12/27/2015	Dry	Normal	Dry	Dry
2/26/2016	[redacted] sample point	[redacted]05	1/27/2016	12/28/2015	Dry	Normal	Dry	Dry
2/29/2016	[redacted] sample point	[redacted]06	1/30/2016	12/31/2015	Dry	Normal	Dry	Dry
3/1/2016	[redacted] sample point	[redacted]07	1/31/2016	1/1/2016	Dry	Normal	Dry	Dry
4/19/2016	DA site visit	DA01	3/20/2016	2/19/2016	Dry	Wet	Dry	Normal
4/20/2016	DA site visit	DA02	3/21/2016	2/20/2016	Dry	Wet	Dry	Normal
4/21/2016	DA site visit	DA03	3/22/2016	2/21/2016	Dry	Wet	Dry	Normal

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DRAFT

SPK-[redacted]

Antecedent Precip by Event Date

Weather Station: Modesto CITY CO AP

DATE	DESCRIPTION	EVENT	2nd Prior 30 days	3rd Prior 30 Days	Condition (1st Prior 30 Days)	Condition (2nd Prior 30 Days)	Condition (3rd Prior 30 Days)	Antecedent Precip	Season
12/11/1940	USGS Aerial Photo	19401211_USGS	11/11/1940	10/12/1940	Dry	Normal	Dry	Dry	Wet
4/22/1982	USGS Aerial Photo	19820422_USGS	3/23/1982	2/21/1982	Wet	Wet	Normal	Wet	Wet
8/15/1998	Digital Ortho Quad	19980815_DOQ	7/16/1998	6/16/1998	Normal	Normal	Wet	Normal	Dry
2/24/2006	Quick Bird satellite image	20060224_QB02	1/25/2006	12/26/2005	Dry	Normal	Wet	Normal	Wet
12/4/2006	Quick Bird satellite image	20061204_QB02	11/4/2006	10/5/2006	Normal	Dry	Normal	Normal	Wet
3/26/2010	Orb View satellite image	20100326_OV05	2/24/2010	1/25/2010	Normal	Normal	Wet	Normal	Wet
2/8/2011	World View satellite image	20110208_WV02	1/9/2011	12/10/2010	Dry	Wet	Wet	Normal	Wet
11/4/2013	World View satellite image	20131104_WV01	10/5/2013	9/5/2013	Dry	Normal	Normal	Dry	Dry
6/18/2014	World View satellite image	20140618_WV02	5/19/2014	4/19/2014	Normal	Normal	Normal	Normal	Dry
3/15/2015	World View satellite image	20150315_WV01	2/13/2015	1/14/2015	Dry	Normal	Normal	Dry	Wet
3/27/2015	World View satellite image	20150327_WV01	2/25/2015	1/26/2015	Dry	Normal	Dry	Dry	Wet
6/16/2015	[redacted] sample point range 6/16-	[redacted]01	5/17/2015	4/17/2015	Normal	Normal	Dry	Normal	Dry
6/17/2015	[redacted] sample point range 6/16-	[redacted]02	5/18/2015	4/18/2015	Normal	Normal	Dry	Normal	Dry
6/18/2015	[redacted] sample point range 6/16-	[redacted]03	5/19/2015	4/19/2015	Normal	Normal	Dry	Normal	Dry
6/19/2015	[redacted] sample point range 6/16-	[redacted]04	5/20/2015	4/20/2015	Normal	Normal	Dry	Normal	Dry
6/20/2015	[redacted] sample point range 6/16-	[redacted]05	5/21/2015	4/21/2015	Normal	Normal	Dry	Normal	Dry
7/3/2015	World View satellite image	20150703_WV02	6/3/2015	5/4/2015	Normal	Normal	Normal	Normal	Dry
9/22/2015	World View satellite image	20150922_WV02	8/23/2015	7/24/2015	Normal	Normal	Normal	Normal	Dry

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DIFFICULT SITUATION?

Did the observer follow the proper procedure concerning *periods with below-normal rainfall?*

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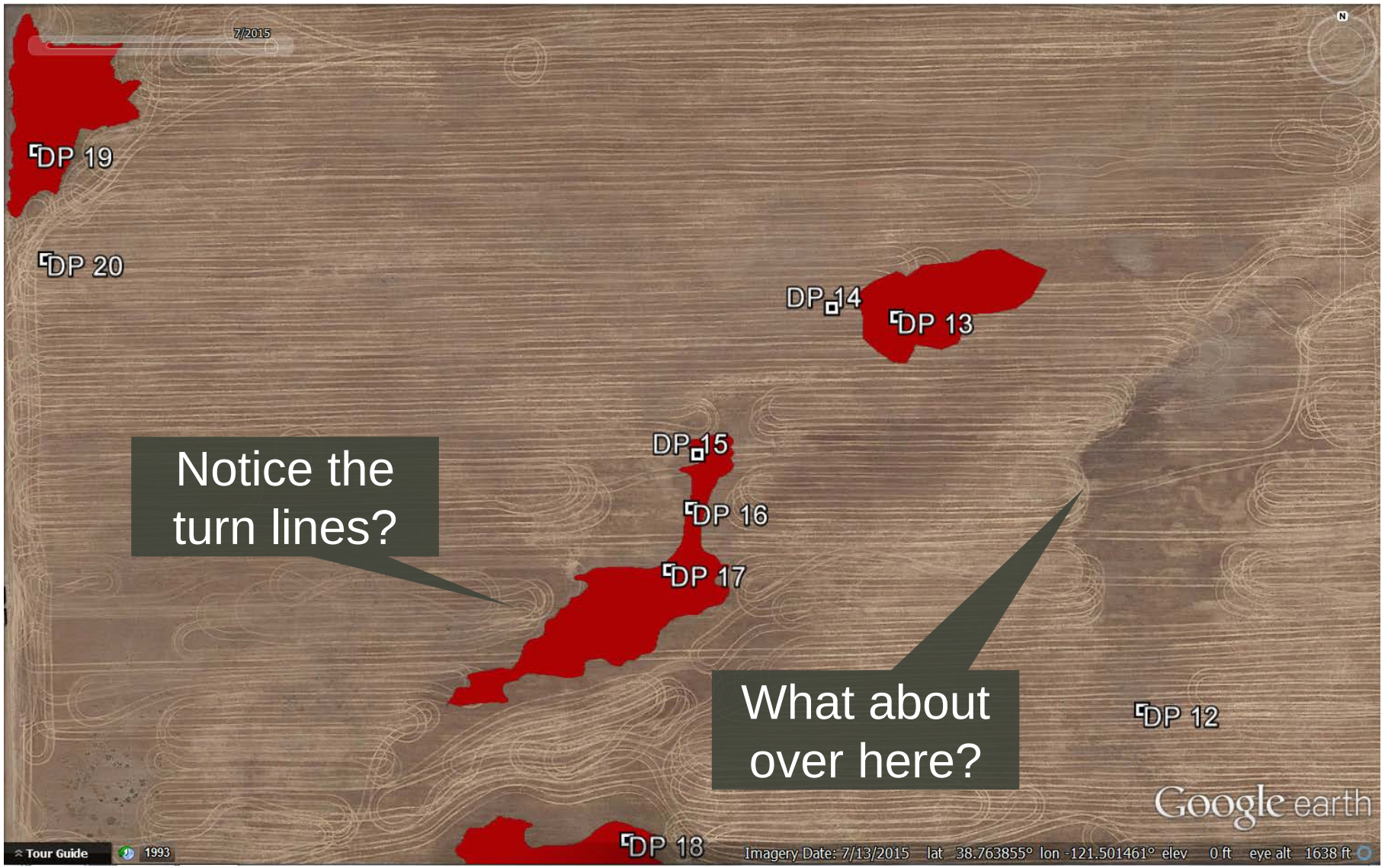

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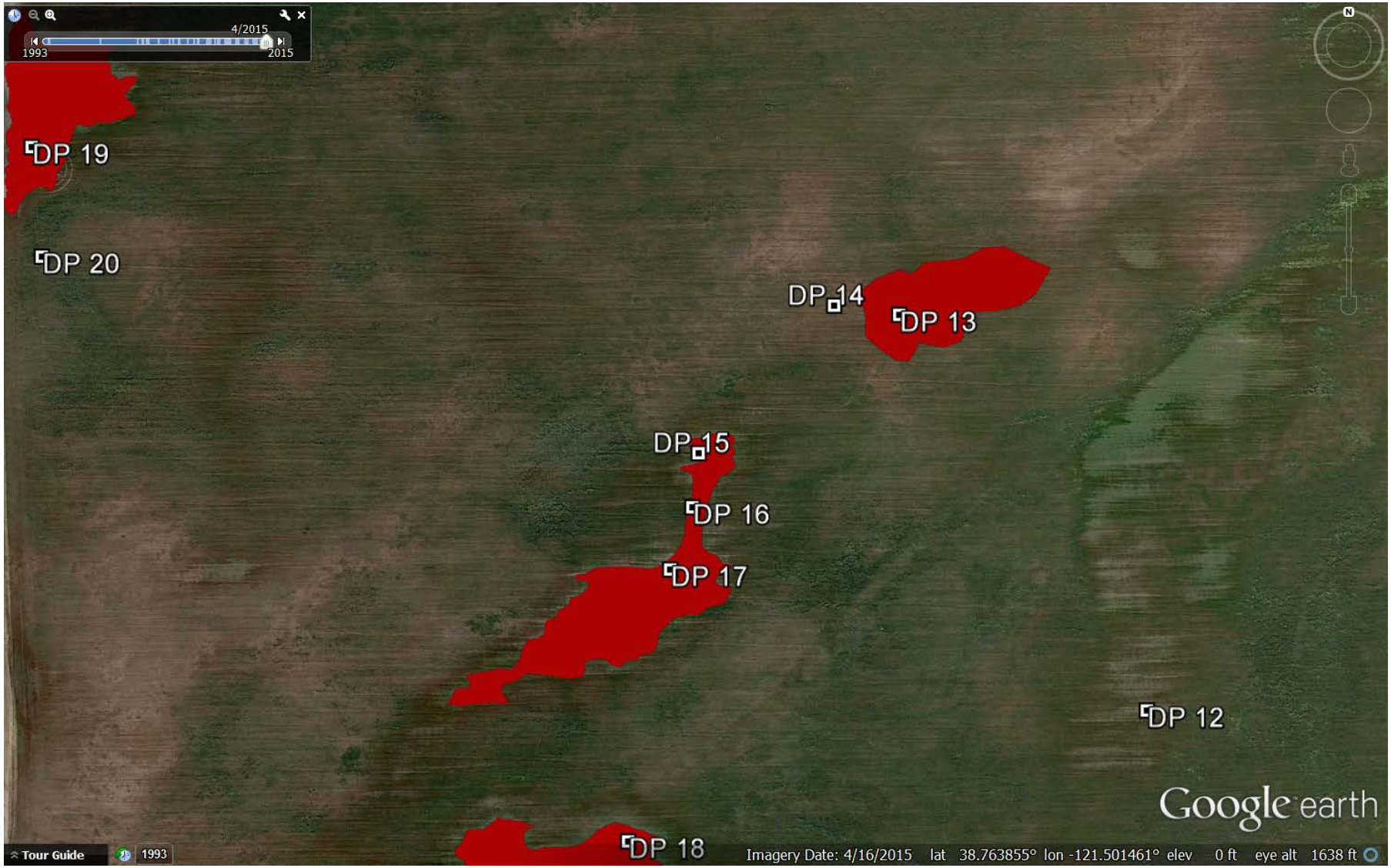

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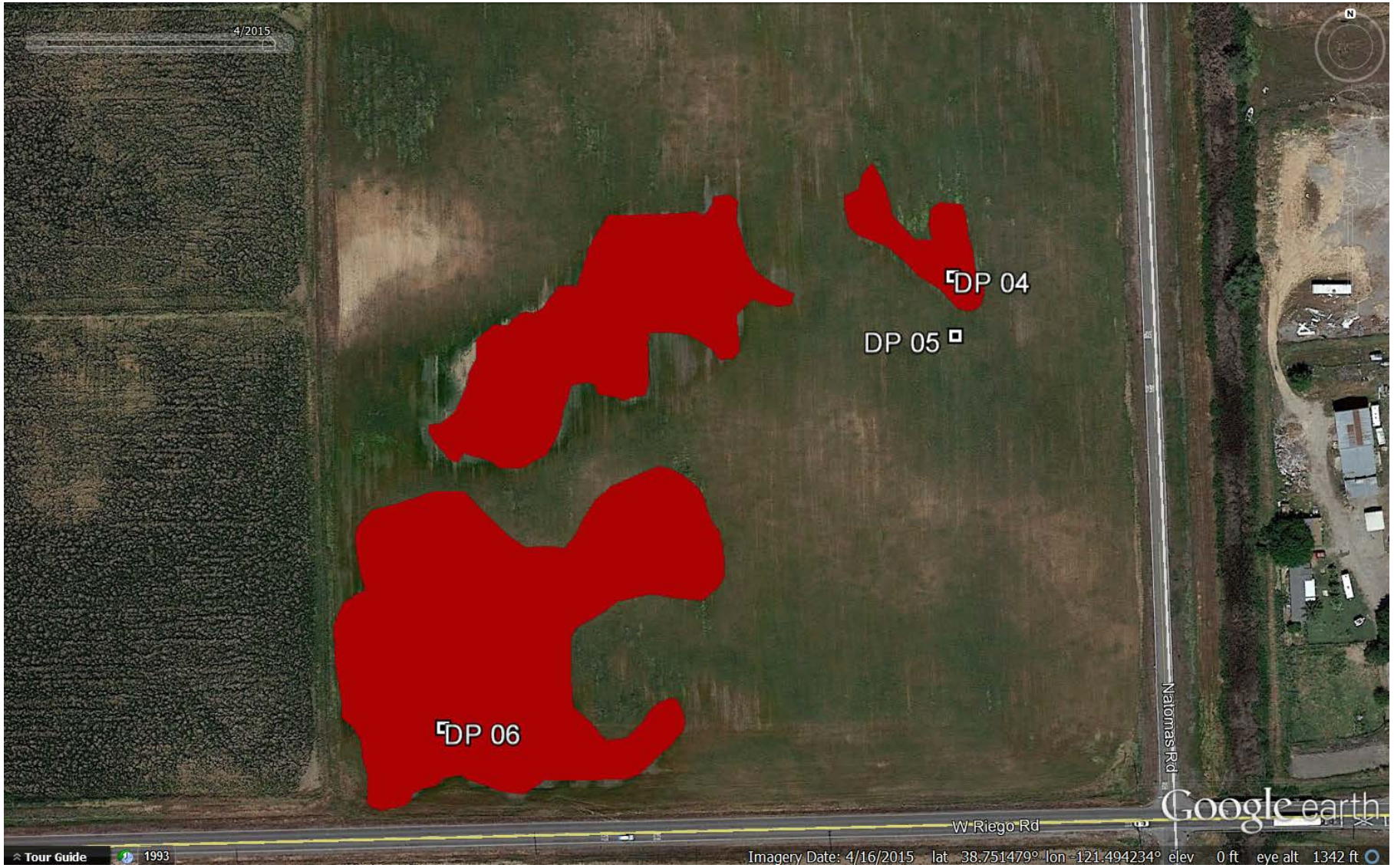

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126
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123
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122
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121
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134
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AQUATIC RESOURCES DELINEATION AND JURISDICTIONAL DETERMINATION

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Wetland Specialist, Sacramento District

13 April 2018

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