

CALIFORNIA ENERGY COMMISSION
REPORT OF CONVERSATION Page 1 of 1

DOCKET	
11-AFC-4	
DATE	MAY 03 2012
RECD.	MAY 10 2012



Siting, Transmission, and Environmental Protection Division	File: 11-AFC-04	
	Project Title: Rio Mesa Solar Electric Generating Facility	
<input checked="" type="checkbox"/> Telephone:	<input type="checkbox"/> Meeting Location:	
Name(s): Scott White	Date: 5/3/12	Time: 10:00 a.m.
With: Derek Langsford (URS)		
Subject: Jurisdictional Streambed Delineation		
<p>On April 26 2012, Dr. Derek Langsford of URS sent an email to Dr. Shankar Sharma of CDFG, discussing the calculation of state jurisdictional acreage within the Rio Mesa project area. The email was cc'd to Energy Commission staff and it is attached to this Report of Conversation. Energy Commission staff biologist Scott White noted that the email refers to a total jurisdictional area of 2,126 acres. Mr. White asked Dr. Langsford to clarify whether this acreage refers to the project footprint (i.e., the acreage that would be directly affected by project construction), or to the larger project study area, described in the AFC. Dr. Langsford replied that the current estimate of jurisdictional area within the proposed project footprint has not changed, and still is 1,265 acres as stated in the AFC.</p> <p>Mr. White and Dr. Langsford also discussed the methods URS used to estimate jurisdictional acreage, and to evaluate whether any revisions to the delineation report can be expected to significantly alter the acreage reported in the AFC. Dr. Langsford reviewed the information presented in his email. As described in the email, he concluded that the methods used to estimate streambed widths somewhat overestimate total jurisdictional area and that any potential revisions to account for narrow channels that may have been missed in the delineation would not substantially affect the total jurisdictional acreage.</p>		
		Signed:
		Name:

Scott White

From: Langsford, Derek <derek.langsford@urs.com>
Sent: Thursday, April 26, 2012 11:22 PM
To: Shankar Sharma
Cc: Scott White; Heather Blair; Pierre Martinez; Magdalena Rodriguez (MCRodriguez@dfg.ca.gov); Leiba, Angela; Mock, Patrick; Goin, Jon
Subject: RE: Thank you for the meeting yesterday (RE: Hardcopy of map and table for JD)

Dear Dr. Shankar,

I am glad we were able to get closer to reaching agreement on our delineation of waters of the state. I've been thinking about our meeting much of the day.

As was stated yesterday we do not expect that many, if any, extensions of waters of the state will occur from the result of the field visit that is to be planned. More so, after thinking about it more today, I don't think any additional acreage found would be significant and is more than compensated for by our initial overestimate of CDFG jurisdiction.

The focus of our meeting was on the narrowest of channels found on site; whether some might be a little longer than shown or other smaller features that were not mapped as CDFG jurisdiction but which you thought might be waters of the state. I would like to reiterate that the original intent of being conservative with our width estimation was to compensate for any errors or omissions in our process, and thus obviate the need for additional work.

Because our calculation of the acreage of non-vegetated waters of the state were rounded up to the nearest 3 feet, the additional acreage incorporated in our existing calculation more than compensates for any additional areas that might be found. To support this contention I did some simple calculations.

We have two scenarios.

1. our conservative approach which was to round each drainage within each width class up to the next 3 feet.
2. making the assumption that the widths are normally distributed within each width class resulting in the mean for each width being half way between the upper and lower limits of the width class.

With the use of some estimated total lengths for each width class on site (out of a total estimate of 272,530 feet) we can then compare acreages for each width class under the two scenarios.

		Scenario 1 Rounding to Next 3 ft		Scenario 2 Average width		
Width Class (ft)	Hypothetical linear ft*	width	acres	width	acres	
0-3	100,000	3	6.89	1.5	3.44	
3-6	50,000	6	6.89	4.5	5.17	
6-9	20,000	9	4.13	7.5	3.44	
9-12	10,000	12	2.75	10.5	2.41	
12-15	5,000	15	1.72	13.5	1.55	
TOTAL	185,000		22.38		16.01	

* can be calculated more precisely

Overestimate = 6.37 acres or 39.8%

6.37 acres would be equivalent

to	185,000	ft (35.0 miles) of 1.5-foot wide drainage
	61,662	ft (11.7 miles) of 4.5-foot wide drainage
	36,997	ft (7.0 miles) of 7.5-foot wide drainage
	26,426	ft (5.0 miles) of 10.5-foot wide drainage
	20,554	ft (3.9 miles) of 13.5-foot wide drainage

If one assumes that the estimate of linear feet for each drainage width is reasonable, then 16 acres is only 0.75% of the 2,126 acres of CDFG jurisdiction we have estimated for the project site and well within any reasonable margin of error for a sampling procedure. This calculation shows that the vast majority of the waters of the state are in the large washes and not in the fine unvegetated channels.

Also, from this example we can see that we would need to map an additional 35 miles of 1.5-foot wide drainage length to exceed the existing potential 6.37-acre overestimate. This seems highly unlikely based on the areas looked at yesterday on the imagery. The possibility of a 2-3% change because of mismapped smaller drainages is actually impossible as the total contribution of these drainages to the total CDFG jurisdiction is likely less than 1%.

I suggest that the precision we have achieved from our sampling and desktop approach is adequate to address the regulatory needs of CDFG; that any extra effort will not produce a significant change in the total acreage of CDFG jurisdiction, and any additional acreage, if actually identified, is more than compensated for by the conservative approach we took.

Please consider this before we take valuable time and money that in my estimation will not yield a significant change in acreage total.

Sincerely,

Derek H. Langsford, PhD, CSE
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From: Shankar Sharma [mailto:SSharma@dfg.ca.gov]
Sent: Thursday, April 26, 2012 7:34 AM
To: Langsford, Derek
Cc: Scott White; Heather Blair; Pierre Martinez
Subject: Thank you for the meeting yesterday (RE: Hardcopy of map and table for JD)

Good morning Dr. Langsford.

Thank you for visiting us yesterday at the CDFG Ontario for discussing the state water delineation and subsequent need for on-site ground-truthing. I look forward to visiting the site with you and assessing the areas of my concern.

Best regards,

SS

>>> "Langsford, Derek" <derek.langsford@urs.com> 4/24/2012 6:16 PM >>>
Dr. Shankar,

I will bring 11x17 versions of the maps and save a few trees. The table is attached though which wish to discuss it tomorrow.

See you between 9 and 9:30 AM (depending on traffic).

Regards,

Derek H. Langsford, PhD, CSE
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From: Shankar Sharma [<mailto:SSharma@dfg.ca.gov>]
Sent: Tuesday, April 24, 2012 5:47 PM
To: Langsford, Derek
Cc: Scott White; Heather Blair; Pierre Martinez; Leiba, Angela
Subject: RE: Hardcopy of map and table for JD

Good afternoon Dr. Langsford.

Thank you for the hardcopy of the maps. I am reviewing the maps, and highlighting the areas that might have been missed in your earlier delineation. It would help the process if you please could bring a copy of the maps and make annotations on your pages during our discussion tomorrow.

I hope to receive the tables soon, and look forward to meeting you and Ms. Rothbard tomorrow.

Best Regards,
SS

>>> "Langsford, Derek" <derek.langsford@urs.com> 4/20/2012 4:32 PM >>>
Dr. Sharma,

I had stepped out of my office when you called.

FYI,

1. The requested maps (17 D-sized sheets) are going out tonight for delivery Monday by Fedex.
2. The requested table is in preparation and I hope to get it you Monday as well.
3. I can confirm that I and Heather Rothbard will meet you at your office on Wednesday morning at 9 or 9:30 AM to noon or 12:30 PM to go over the maps and answer your questions regarding the Waters of State assessment. I will send an invitation via Outlook.

Regards,

Derek

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From: Shankar Sharma [<mailto:SSharma@dfg.ca.gov>]
Sent: Friday, April 20, 2012 12:14 PM
To: Langsford, Derek
Cc: Scott White; Heather Blair
Subject: Hardcopy of map and table for JD

Dr. Langsford,

I am following up to check when I should be expecting the following documents that we discussed during our call on last Wednesday:

- (1) Hardcopy of the JD maps in 1:3,600 scale; and
- (2) A table with pertinent rationale as requested below.

Data response p. 45-46 (March 8, 2012) states: "*URS wetland specialists examined a high resolution (one-foot pixel) aerial image of the Project site and gen-tie line, and identified 11, mostly separate, drainage systems on the main Project site. Out of the 11 drainage systems, URS identified 6 that appeared representative of the variety of drainage....*"

Please provide a table summarizing the size, flow direction, connectivity, flow patterns, vegetation composition, topography, existing and potential wild life habitat, and any other features of the "*11 mostly separate, drainage systems*" identified by URS. Out of the 11 drainage systems, explain how "*URS identified 6 that appeared representative of the variety of drainage*", and provide specific rationale for excluding the remaining 5 drainage systems from the pedestrian survey.

Thank you.
SS

Dr. Shankar Sharma
Staff Environmental Scientist of Renewable Energy

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