

FOIA/PA NO: 2015-0488

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The following types of information are being withheld:

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- Ex. 2: Records regarding personnel rules and/or human capital administration
- Ex. 3: Information about the design, manufacture, or utilization of nuclear weapons
 Information about the protection or security of reactors and nuclear materials
 Contractor proposals not incorporated into a final contract with the NRC
 Other _____
- Ex. 4: Proprietary information provided by a submitter to the NRC
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 Records prepared by counsel in anticipation of litigation (A.W.P. Privilege)
 Privileged communications between counsel and a client (A.C. Privilege)
 Other _____
- Ex. 6: Agency employee PII, including SSN, contact information, birthdates, etc.
 Third party PII, including names, phone numbers, or other personal information
- Ex. 7(A): Copies of ongoing investigation case files, exhibits, notes, ROI's, etc.
 Records that reference or are related to a separate ongoing investigation(s)
- Ex. 7(C): Special Agent or other law enforcement PII
PII of third parties referenced in records compiled for law enforcement purposes
- Ex. 7(D): Witnesses' and Allegers' PII in law enforcement records
 Confidential Informant or law enforcement information provided by other entity
- Ex. 7(E): Law Enforcement Technique/Procedure used for criminal investigations
 Technique or procedure used for security or prevention of criminal activity
- Ex. 7(F): Information that could aid a terrorist or compromise security

Other/Comments: _____

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From: Pineda, Christine
To: Fedors, Randall
Subject: Re: eco info
Date: Thursday, June 04, 2015 6:50:42 PM

You just helped with our figure so thanks!

On: 04 June 2015 15:17, "Fedors, Randall" <Randall.Fedors@nrc.gov> wrote:
After adding some comments below for you, I decided to just annotate one of the figures
(the same one as the last page of Chapter 2)

From: Pineda, Christine
Sent: Thursday, June 04, 2015 1:49 PM
To: Amy Hester (ahester@swri.org)
Cc: Fedors, Randall; Miriam Juckett; David Pickett (dpickett@swri.org); Rubenstone, James
Subject: eco info

Hi Amy,

We will probably need you to help with descriptions of farmed area (i.e., the irrigation area – Amargosa Farms), but that info should be readily available in the SAR (was part of info used to develop the RMEI) and might even be in the SER to some extent, I don't know.

For some plant descriptions, you can look at Appendix A (Guide to Plant Species...) of the NRC's Yucca Mountain field trip guide book. The vegetation is focused on Yucca Mountain, but you still might find some useful info in it. I don't have the guide electronically, but I imagine someone at the Center does. Randy actually co-authored this appendix, so he might have it or the ML#.

I have a book called Native Plants of Southern Nevada, which someone at the Center might also have. It was written by David Rhode, published by the U of Utah Press, 2002. It was written to support DOE's site characterization efforts. I can FedEx it if you think it would be helpful and you can't find it elsewhere.

Randy – Amy was asking about which figures to use for finding the various locations. Can you provide an answer for the yellow one and correct others if needed? Miriam, Amy and I discussed having the Center develop a figure specifically for our purposes. I can talk to you about it tomorrow, or call me at the office today if you want to talk before 3m (415-6789).

--Furnace Creek springs: see Randy's proposed replacement option for figure 2-4. Furnace creek springs is cluster of springs shown on upper eastern border of Death Valley
Figure 2-1. Right above "3d" label is the word "Furnace Creek", the white dot with black outline is the populated area, the springs are along the green fault line in the cluster to the north of the populated area
Figure 2-5. There are about 6 springs marked along Furnace Creek, the westernmost ones has the label "NS"; this is where the 3 main springs are located.
Belcher and Sweetkind (2010), page 102, Figure C-7, has the springs labeled.

--Middle Basin (low point in Death Valley): not sure which figure to look at
Figure 2-1. Middle Basin is in the floor of Death Valley, downslope (south to southwest of) the cluster of springs; it's the lighter patch between the word "Furnace Creek and the cluster of springs (white dots with blue outlines). The lighter patch is also west and NW of the populated area dot for Furnace Creek.

In Belcher and Sweetkind (2010), page 267, Figure F-7, Middle Basin is represented in the groundwater flow model by the yellow squares marked as "OBS-DV-MIDDLE"

--Alkali Flats: see location on Figure 2-1 (look just south of the Ash Meadows springs)

--Stateline/Franklin Well: See "SLD" on Figure 2-5

Or on the alternative Figure 2-5 on the next page. Franklin Well area is just on the south side of SLD

--Ash Meadows: should not need to add more info to this section; at most, save for last

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From: Hester Minor, Amy L.
To: Fedors, Randall; Pineda, Christine
Subject: RE: discuss figures
Date: Wednesday, June 17, 2015 11:03:15 AM

My apologies, the reference that I am looking at is
Belcher, W.R. 2004. *Death Valley Regional Ground-Water Flow System, Nevada and California - Hydrogeologic Framework and Transient Ground-Water Flow Model*. Scientific Investigations Report 2004-5205. U.S. Geological Survey Reston, Virginia.

From: Amy Minor
Sent: Wednesday, June 17, 2015 9:55 AM
To: Randall Fedors; Christine Pineda
Cc: Deborah Waiting
Subject: RE: discuss figures

We'll take a look at that figure Randy,
I have a question about the reference document for the figure you mention from the DOE 2014 report that Deb may be modifying - Belcher, 2004 (see reference below). Do you have a digital copy of that report? Deb will not be able to 'grab' the images from that scanned in version in the DOE report. I didn't see it in the reference folder, but I am not as familiar where everything is located.
Thank you for pointing me to it if it is your arsenal.

Amy

From: Fedors, Randall [mailto:Randall.Fedors@nrc.gov]
Sent: Wednesday, June 17, 2015 9:51 AM
To: Christine Pineda; Deborah Waiting; Amy Minor; James Rubenstone; Miriam R. Juckett; David Pickett
Subject: RE: discuss figures
Also have handy Figure D-10 of Belcher and Sweetkind (2010)

-----Original Appointment-----

From: Pineda, Christine
Sent: Wednesday, June 17, 2015 10:00 AM
To: Waiting, Deborah J.; Amy Hester (ahester@swri.org); Fedors, Randall; Rubenstone, James; Juckett, Miriam R.; Pickett, David A.
Subject: discuss figures
When: Wednesday, June 17, 2015 2:30 PM - 3:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: bridge: 877-449-6472 passcode: (b)(6)

Randy thinks he'd like to replace current figure 2-5 with the figure that Debi and Amy created, but we'll need to add/subtract some things. In addition, we probably need another figure at the beginning of Chapter 2 - Randy suggests that it should be similar to the figure on page 2-3 of the 2014 DOE report.

- So, it looks like we need to have in front of us for the discussion:
- Debi's figure - discuss what to add/subtract for use as figure 2-5
- Figure on page 2-3 of DOE 2014 report - discuss how to modify for a new figure 2-1
- Randy - please let the group know if there are other figures we need to have in front of us for the discussion.

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From: Hester_Minor_Amy_L
To: Fedors_Randall; Pineda_Christine
Cc: Waiting_Deborah_J
Subject: RE: discuss figures
Date: Wednesday, June 17, 2015 11:27:41 AM

Yes, Deb is able to use the data from the figures in Belcher and Sweetkind (2010). She can address any problems she may have come across in our call later today, but I'm not aware of any. I didn't think to look in the 2010 report, but I see figure D-5 is very similar to the DOE figure 2-1. Thank you for pointing that out!

Amy

From: Fedors, Randall [<mailto:Randall.Fedors@nrc.gov>]
Sent: Wednesday, June 17, 2015 10:09 AM
To: Amy Minor; Christine Pineda
Cc: Deborah Waiting
Subject: RE: discuss figures

Amy,

Belcher and Sweetkind (2010) replaces Belcher (2004); and in fact, most of the text and figures are the same. Belcher and Sweetkind (2010) was already on the shared drive, but it was mixed in the long list of files. Belcher (2004) was not there yet.

I put both of these documents into their own subdirectories in the following directory of the CNWRA/NRC shared drive (N: or X: drive for the center, I forget):

(shared drive):\\Yucca EIS Supplement\\References\\Articles&Reports\\

You implied that Deb is grabbing figures from the reports, thus raster images. Did she have a problem getting the geospatial data associated with the Belcher reports?

--Randy

From: Hester Minor, Amy L. [<mailto:amy.hester@swri.org>]
Sent: Wednesday, June 17, 2015 10:55 AM
To: Fedors, Randall; Pineda, Christine
Cc: Waiting, Deborah J.
Subject: RE: discuss figures

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Sent: Wednesday, June 17, 2015 9:51 AM
To: Christine Pineda; Deborah Waiting; Amy Minor; James Rubenstone; Miriam R. Juckett; David Pickett
Subject: RE: discuss figures

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-----Original Appointment-----

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Sent: Wednesday, June 17, 2015 10:00 AM

To: Waiting, Deborah J.; Amy Hester (ahester@swri.org); Fedors, Randall; Rubenstone, James; Juckett, Miriam R.; Pickett, David A.

Subject: discuss figures

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Figure on page 2-3 of DOE 2014 report – discuss how to modify for a new figure 2-1

Randy – please let the group know if there are other figures we need to have in front of us for the discussion.

From: Waiting, Deborah J.
To: Fedors, Randall; Juckett, Miriam R.
Cc: Pineda, Christine
Subject: RE: EIS references and figure
Date: Tuesday, June 09, 2015 12:53:52 PM

Randy,

What are we keeping/discarding from Figure 2-1?

Miriam,

What is the project number to charge.

Thanks,

Debi

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dwaiting@swri.org

From: Fedors, Randall [mailto:Randall.Fedors@nrc.gov]
Sent: Tuesday, June 09, 2015 11:25 AM
To: Miriam R. Juckett
Cc: Christine Pineda; Deborah Waiting; Deborah Waiting
Subject: EIS references and figure

Miriam,

Per the telecon discussion today:

(1) I updated the references file on the shared drive for Art to start. We can update the file (track changes) as long as he leaves a version in place (he can keep a "master" version wherever he wants.
[SharedDrive]:\Yucca EIS Supplement\References\References
master_9June2015.docx

(2) The geospatial data for the figure is at <http://pubs.usgs.gov/pp/1711/>

--Randy

From: Pineda, Christine
To: Fedors, Randall
Subject: RE: SEIS, Chapter 2
Date: Thursday, June 25, 2015 12:39:53 PM

Ok, so only reference issues remain. Did you update Figure 2-1 with Debi's more recent version, or should Art do that when he fixes references?

From: Fedors, Randall
Sent: Thursday, June 25, 2015 12:37 PM
To: Pineda, Christine
Subject: RE: SEIS, Chapter 2

I fixed the figures. I presume OGC will not have the reference list for their review of Chapter 2 (so this is not a problem now). My email was really my notes for you to pass on to Art, once you were done (but yes, no need reason not to send to OGC before having Art fix things with the references).

From: Pineda, Christine
Sent: Thursday, June 25, 2015 12:32 PM
To: Fedors, Randall
Subject: RE: SEIS, Chapter 2

Sorry things are messed up. I hope I didn't mess them up in accepting/commenting on Art's formatting changes.

We weren't planning to give the file back to Art before giving to OGC, but do I understand correctly that Art will need to reinsert the figures into Chapter 2?

From: Fedors, Randall
Sent: Thursday, June 25, 2015 12:27 PM
To: Pineda, Christine
Subject: SEIS, Chapter 2

Christine,

Things were a bit messed up, and it's taking longer than I thought it should. I'm still grinding through the file, but here's a couple things for Art

Figures:

For future reference, I put a file into the directory below with all the figures for chapter 2. They got mixed up in the current draft of the chapter ("EIS SupplementChapter2 24June2015_JR.docx")
(SharedDrive):\\Yucca EIS Supplement\CNwRA Tech and Format Edits\Figures

References:

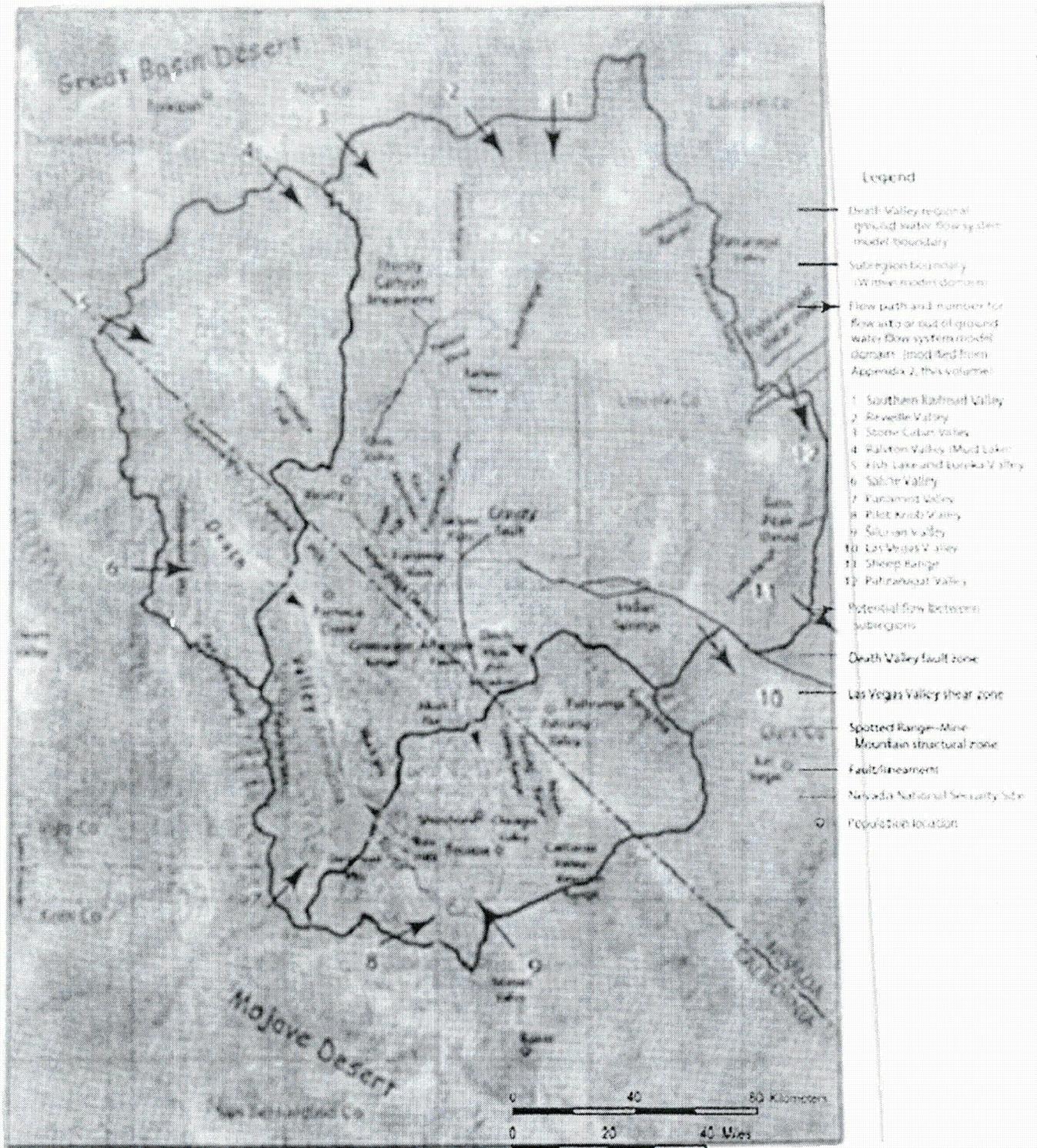
There are two files in the (SharedDrive):\\Yucca EIS Supplement\CNwRA Tech and Format Edits * directory that have references to add to the list. I think these address many of your comments on Chapter citations in the text. Jim put these together awhile ago.

I'll follow up with another email when I am done.

Thanks, Randy

Figure 2-1, DOE, 2014

(6)



UTM coordinates, see BelcherSweetkind to get labeling correct

Figure 2-1. Boundaries and prominent topographic features of the Death Valley regional groundwater flow system.

