

Crivella, Ellen/PDX

From: Shaich, Joel/PDX
Sent: Thursday, April 08, 2010 10:42 AM
To: Seidell, Nichole/PDX
Cc: Parsons, Forrest/PDX
Subject: Teanaway Solar Site Visit
Attachments: Saturated Areas.pdf

Nichole,
We looked at all the areas with Cathy Reed that she had concerns about.

Saturated Soil Areas/Wetlands

We observed a number of saturated areas (see attached map) that we had not delineated as wetlands. We explained to Cathy our rationale for not delineating these areas when we did the delineation in summer 2009. At that time these areas had no wetland hydrology indicators, little to no hydric soil indicators and facultative to fac-upland vegetation. She agreed that our approach was reasonable but was concerned that these areas could be wetlands based on the current saturation and using problem area procedures to meet hydric soils criteria. Alternatively, we discussed the possibility that it is still too early in the growing season for the saturation to be influencing soils and vegetation and that the saturation may not indicate wetland hydrology but pre-growing season runoff. Because it is early in the growing season we couldn't ID many of the plants so that also complicated the issue. Cathy wants to discuss the site with her colleagues before determining how to proceed. She will contact us after that to discuss.

Cathy was concerned about protecting the saturated soil areas whether they are wetlands or not to maintain their functions as recharge areas/hydrology sources for wetlands and streams and to protect water quality. If they aren't wetland Ecology may still want them protected in some manner. Those that are in wetland buffers will be considered protected, those outside wetlands and wetland buffers would need to be protected by some other mechanism. Again, Cathy will be discussing the issue with her colleagues and getting back to us to discuss.

We discussed riparian buffers. Ecology's concern is protection of water quality and depending on the site may require 50 - 100' buffers (those are just general estimates, not hard numbers). She didn't want to discuss PHS as that's WDFW's designation.

We took photos and notes on the riparian areas but didn't have time to do and GPS'd the culvert locations and sizes.

I'm in an all-day meeting at Iberdrola's offices but you can email me questions.
Joel

Joel Shaich, Associate Scientist

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(503) 736-2000 fax
CH2M HILL
2020 SW 4th Avenue, Suite 300
Portland, OR 97201

From: Reed, Catherine D. (ECY) [CRAJ461@ECY.WA.GOV]
Sent: Monday, April 12, 2010 1:17 PM
To: Parsons, Forrest/PDX
Subject: RE: Teanaway Solar Reserve visit

Follow Up Flag: Follow up
Flag Status: Completed

I hope this e-mail from home via the internet works. I am on sick leave, but I hate to get behind with the e-mails as they stack up pretty fast.

I was wrong about how deep to put in the thermometer to test soil temp. (Sorry about that). We should have gone down to 17 inches or so. I want to do more reading about how that protocol was decided and about how important it is relative to other observations we made.

I hope to have some kind of decision for you by about April 21. I enjoyed our site visit, but I am guessing that the pollen and molds up there might be part of the reason that I am ill. Yakima also has one of the highest pollen counts in the County (at least as of late last week) so that's not helping either.

-----Original Message-----

From: Forrest.Parsons@CH2M.com [<mailto:Forrest.Parsons@CH2M.com>]
Sent: Thu 4/8/2010 1:18 PM
To: Reed, Catherine D. (ECY)
Cc: Joel.Shaich@CH2M.com
Subject: Teanaway Solar Reserve visit

Hi Cathy,

We appreciate you taking the time to join us for the site visit at Teanaway Solar Reserve site.

At the request of the developer, I wanted to ask you when you think you might be able to discuss your findings and analysis of what we saw at the site yesterday.

I understand you have to do some research and talk to others, so I'm basically looking for a general timeline.

Hope you made it back home at a reasonable time last night.

Thanks so much,

Forrest Parsons
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Crivella, Ellen/PDX

From: Parsons, Forrest/PDX
Sent: Tuesday, May 11, 2010 9:24 AM
To: Seidell, Nichole/PDX
Subject: RE: Teanaway Solar Reserve visit

Nichole,

Jeff called me early this morning (left a message) and concurred that Type 4 and 5 streams should be governed by county ordinances or shoreline master program. From a regulatory stance, he also said the 97 PHS riparian guidance is the best available science

However, I would recommend extending the wetland Cathy thought extended further north. He said he thought it extended about 50' beyond where we delineated it.

Jeff also mentioned that at a SEPA level, they are just making recommendations to the county about wetlands.

However, if they need to issue a 401 cert, then they could impose buffers on the area Cathy thought was a wetland that we didn't delineate far enough north.

Forrest

From: Parsons, Forrest/PDX
Sent: Monday, May 10, 2010 1:52 PM
To: Seidell, Nichole/PDX
Subject: RE: Teanaway Solar Reserve visit

That statement makes sense to me, but can Ecology come back with something else. Ecology mentioned that if we need a 401 cert. that they could impose buffers on "wetlands" if they didn't think they were conservative enough. I'm not sure if they can do that for steams.

I hope Jeff calls me back today.

From: Seidell, Nichole/PDX
Sent: Monday, May 10, 2010 1:44 PM
To: Parsons, Forrest/PDX; Storey, Renee/PDX
Cc: Shaich, Joel/PDX; Ryan, Patrick W. (Perkins Coie)
Subject: RE: Teanaway Solar Reserve visit

Thanks, Forrest. What we need to push back on are the extremely wide stream buffers. If the CAO at the County only asks for minimal buffers then we should not have to adhere to PHS buffers. Do you think that is a true statement?

When you talk to Cathy or her boss, I think we need to make them understand that we based our site design around the CAO not PHS...since no PHS were mapped for the area.

Renee, do you have a figure that shows the area Cathy wants to extend? Also, how does this correlate with the attached that Joel sent several weeks ago?

Please let me know if someone calls you back today. 250' buffers could be debilitating for this project.

Thanks

From: Parsons, Forrest/PDX
Sent: Monday, May 10, 2010 11:10 AM
To: Seidell, Nichole/PDX
Subject: RE: Teanaway Solar Reserve visit

Nichole,

Still waiting to hear back from Jeff Lewis. His voicemail says he is only in Monday this week so hopefully he'll call me back.

1) Below is the original reason we established stream buffers the way we did:

"Response: Water flows in mapped ephemeral streams is less than 12 hours, based on observed rain events (June 9th), and field observations. All onsite streams were determined to be Type 4 [channel widths greater than 2' (10'-20' buffer needed)] and Type 5 [less than 2' (no buffer needed)] according to Kittitas County Code and Ns (no buffer needed) according to Washington state classification systems. The maximum 20' buffer was applied to all streams within the project site. Stream widths were based on observed ordinary high water marks. More detailed information can be found in the Waters section, Hydrology Report, and Wetland Delineation Reports."

2) Cathy wanted bigger stream buffers than 20-40' during Joel/my site visit. I'll try to clarify with Jeff what our options are with stream buffers, whether we can a) use silt fence and monitoring etc. until restoration occurs to avoid impacts b) or increase buffers to ~150-250' or something more reasonable.

3) During Cathy's visit with Renee she wanted to extend the north-south finger of the big wetland in the northeast corner of the site about 50-100' or so because of observed hydrology. This could impact conceptual plan.

I'll let you know more details 'when' he calls me.

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From: Seidell, Nichole/PDX
Sent: Wednesday, May 05, 2010 3:01 PM
To: Ryan, Patrick W. (Perkins Coie); howard@sawtoothdg.com; Garton, Brittany/PDX; Adam Roberts; 'kent@studio-greene.com'; MattS@strategies360.com
Cc: Parsons, Forrest/PDX; Storey, Renee/PDX; Shaich, Joel/PDX; Crivella, Ellen/PDX
Subject: FW: Teanaway Solar Reserve visit

Hi All,

I wanted to keep you all in the loop on the email exchanges we have been having with Ecology regarding the wetlands at the site. Renee met with Cathy Reed on Monday, the 26th. Cathy

committed to having a field map mark up back to us by early this week. We have now come to find out that Cathy is on vacation until May 13th. As you can see from the email below, we have attempted to contact her supervisor also, but he is out of the office until the 10th.

We can:

- a. wait until Cathy comes back to give us a final determination on the location of the wetlands as she delineated them in the field last week before we work on our site design or
- b. start to redefine the site based on the field work that Joel and Forrest did with Cathy back in early April (see attached email).

I vote we choose path A, as it would save us money on the redesign. However, I know we are eager to complete the layout and the hydrology pieces which can not be done until the wetlands issue is resolved.

Please let me know what your thoughts are on how to proceed.

From: Parsons, Forrest/PDX
Sent: Wednesday, May 05, 2010 9:52 AM
To: Seidell, Nichole/PDX; Crivella, Ellen/PDX; Shaich, Joel/PDX; Storey, Renee/PDX
Subject: FW: Teanaway Solar Reserve visit

I left Jeff Lewis (Cathy's sup) a voicemail as well, but he is out of the office until Monday the 10th.

From: Reed, Catherine D. (ECY) [mailto:CRAJ461@ECY.WA.GOV]
Sent: Wednesday, May 05, 2010 9:47 AM
To: Parsons, Forrest/PDX
Subject: Out of Office AutoReply: Teanaway Solar Reserve visit

I will be out of the office until Thursday, May 13, 2010. If you need immediate assistance, please contact Gary Graff at 454-4260, Johnie Tynan at 457-7121, or my supervisor, Jeff Lewis at 574-3992. You can also leave me a voice mail message at (509) 575-2616, which I will review when I return. Thank you for your patience.

Crivella, Ellen/PDX

From: Parsons, Forrest/PDX
Sent: Tuesday, July 13, 2010 3:18 PM
To: Seidell, Nichole/PDX
Cc: Crivella, Ellen/PDX
Subject: RE: Wetlands and TSR

Nichole,

Still no response from the email we sent Cathy on 7/8.

I'll check in with her next week and remind you about sending wetland report to USACE.

From: Seidell, Nichole/PDX
Sent: Tuesday, July 20, 2010 10:48 AM
To: Parsons, Forrest/PDX
Subject: RE: Teanaway Solar Reserve visit

Thanks for taking the lead here!

From: Parsons, Forrest/PDX
Sent: Tuesday, July 20, 2010 10:31 AM
To: Parsons, Forrest/PDX; Reed, Catherine D. (ECY)
Cc: Crivella, Ellen/PDX; Seidell, Nichole/PDX
Subject: RE: Teanaway Solar Reserve visit

Hi Cathy,

Just wanted to follow up with you to see if you have any other questions or comments about the Teanaway site.

Thanks,

Forrest

From: Parsons, Forrest/PDX
Sent: Thursday, July 08, 2010 10:22 AM
To: 'Reed, Catherine D. (ECY)'
Cc: Crivella, Ellen/PDX; Seidell, Nichole/PDX
Subject: RE: Teanaway Solar Reserve visit

Cathy,

Hope your staying cool today.

Instead of writing a white paper I simply summarized the changes we made to the Teanaway Solar Reserve Project design to show how we further avoid and minimize impacts to wetlands and streams at the Teanaway Solar Reserve project.

We are keeping the wetland boundaries the same as originally delineated in the wetland report for the Teanaway Solar Reserve Project except for wetland W7 which we extended 50 feet to the north. Modifications have also been made to the proposed site design so that we now avoid all wetlands and streams. From the figure I sent, you can also see that proposed setbacks from wetlands are much larger than the actual wetland buffers to further minimize any unanticipated impacts to wetlands.

Regarding the "wet areas", electrical conductors from the array field to the field inverters will be supported aboveground and will not require trenching so hydrology in "wet areas" that we looked at won't be affected or drained by underground facilities. In addition, the site design was specifically revised to avoid "wet areas" located immediately upslope from wetland W10 (near the aspen stands) where we visited.

Please let me know if I can further clarify any of these developments or answer any other questions.

Thanks,

Forrest Parsons

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Email: Forrest.Parsons@ch2m.com

From: Parsons, Forrest/PDX
Sent: Wednesday, July 07, 2010 2:31 PM
To: 'Reed, Catherine D. (ECY)'
Cc: Crivella, Ellen/PDX; Seidell, Nichole/PDX
Subject: RE: Teanaway Solar Reserve visit

Cathy,

Just wanted to catch up with you.

We have modified the wetland boundaries of wetland W7 and extended it 50' to the north. I've attached an updated map showing the new boundaries, however the changes are barely visible and the wetland is still approximately 150' from any proposed development. I sent this instead of the entire wetland report since this is the only change. The acreage of wetland W7 has also changed if you would like me to send you that.

I'll also be sending you a white paper soon describing our justification for wetland boundaries and stream buffers.

Please let me know if you have any questions or need more details.

Thanks,

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From: Reed, Catherine D. (ECY) [<mailto:CRAJ461@ECY.WA.GOV>]
Sent: Friday, May 14, 2010 5:30 PM
To: Parsons, Forrest/PDX; Shaich, Joel/PDX
Cc: Crivella, Ellen/PDX; Seidell, Nichole/PDX
Subject: RE: Teanaway Solar Reserve visit

Sorry I didn't get back sooner – 774 e-mails during vacation to get through. Yes, I did stop by on April 27 with Rene. It is my conclusion that the northern boundary of the wetland finger should be moved to the north about 50 feet from where you had flagged it to just shy (maybe 20 feet down slope from it) of where the southern-most Ponderosa pine tree (young or stunted) is growing within the northern bowl area in question. The area met soil and hydrologic parameters – I took sample plugs of the grass plants and am trying to get them to grow to maturity so that I can identify them and be 100 percent certain.

It amazed me that lupine plants were already showing up on the hillside between the existing road and my recommended adjusted wetland boundary location.

Do you need a letter from our agency or will this e-mail suffice?

Catherine Reed
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craj461@ecy.wa.gov

From: Forrest.Parsons@CH2M.com [mailto:Forrest.Parsons@CH2M.com]
Sent: Wednesday, May 05, 2010 9:47 AM
To: Reed, Catherine D. (ECY); Joel.Shaich@CH2M.com
Cc: Ellen.Crivella@CH2M.com; Nichole.Seidell@ch2m.com
Subject: RE: Teanaway Solar Reserve visit

Cathy,

I spoke with Joel Shaich/CH2M Hill and he mentioned you were going to revisit the Teanaway Solar Reserve site.

Did you have a chance to do that last week? If so, please let Joel or I know what you found out.

Thanks,

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Email: Forrest.Parsons@ch2m.com

From: Parsons, Forrest/PDX
Sent: Thursday, April 08, 2010 1:18 PM
To: Reed, Catherine D. (ECY)
Cc: Shaich, Joel/PDX
Subject: Teanaway Solar Reserve visit

Hi Cathy,

We appreciate you taking the time to join us for the site visit at Teanaway Solar Reserve site.

At the request of the developer, I wanted to ask you when you think you might be able to discuss your findings and analysis of what we saw at the site yesterday.

I understand you have to do some research and talk to others, so I'm basically looking for a general timeline.

Hope you made it back home at a reasonable time last night.

Thanks so much,

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