

**Lauren Hollenbeck**

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**From:** Jim Barnes <jim@cascadia-inc.com>  
**Sent:** Thursday, November 16, 2017 6:52 AM  
**To:** Carsner, James H CIV USARMY CENWS (US)  
**Cc:** rebecca.rothwell@ecy.wa.gov; Lauren Hollenbeck  
**Subject:** Re: Union Self-Storage NWS-2017-845 (UNCLASSIFIED)

Jim,

I'll make that change. I got the number on the report from one of the emails for the project. Thanks.

Jim Barnes  
Cascadia Ecological Services, Inc.  
360-601-8631

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**From:** James Carsner  
**Date:** Thursday, November 16, 2017 at 6:47 AM  
**To:** Jim Barnes  
**Cc:** "rebecca.rothwell@ecy.wa.gov" , Lauren Hollenbeck  
**Subject:** RE: Union Self-Storage NWS-2017-845 (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Jim,

Thanks. Also, the Corps project number is NWS-2017-345.

Jim

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**From:** Jim Barnes [mailto:jim@cascadia-inc.com]  
**Sent:** Wednesday, November 15, 2017 1:46 PM  
**To:** Carsner, James H CIV USARMY CENWS (US)  
**Cc:** rebecca.rothwell@ecy.wa.gov; Lauren Hollenbeck  
**Subject:** [EXTERNAL] RE: Union Self-Storage NWS-2017-845 (UNCLASSIFIED)

Good afternoon Jim,

I made the requested changes to the report/mitigation plan. Let me know if you have any additional comments or questions. Thanks.

Jim Barnes  
Cascadia Ecological Services, Inc.  
360-601-8631  
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**From:** Carsner, James H CIV USARMY CENWS (US) [mailto:James.H.Carsner@usace.army.mil]  
**Sent:** Tuesday, November 14, 2017 2:25 PM  
**To:** Jim Barnes  
**Cc:** rebecca.rothwell@ecy.wa.gov; Lauren Hollenbeck  
**Subject:** RE: Union Self-Storage NWS-2017-845 (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Jim,

How the areas are separated is up to you. Just be clear in the narrative how this would be/was accomplished and you would want to include a figure showing the separation of mitigation areas in the report. It is not clear if the proposed mitigation abuts the existing mitigation.

When listing acreage where the wetland extends offsite, be sure to clarify the onsite area as well as the estimated offsite area. If zoomed in on the project site, then identify the area as being onsite.

Table 8: again the approach to meet the PS is up to you. As for the column headings of Table 8: (an example is below)

Mitigation/Invasive	Performance Standard	Methodology	Monitoring Year	Contingency
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The goal of any wetland mitigation is to be successful. Irrigation is typically needed to have success (although there are exceptions) and loss of plants can lead to extending the monitoring period. If the plan is to provide irrigation as needed, then describe how and when would this decision will be made, who would make this decision and would that alter the monitoring period, what method of irrigation would be used (i.e. tanker truck, back pack, etc.), how much water would be applied at the time of irrigation (i.e. equivalent to 1", 2", etc.). Having this information will help in the evaluation process should a failure occur.

While it was clear during the conversation, the documents may be reviewed by others not familiar with the process and the table makes for a clearer presentation on how the mitigation areas were derived. Your choice whether or not to use a table but the question may be raised again, especially if there are more than one wetland.

Jim

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**From:** Jim Barnes [mailto:jim@cascadia-inc.com]  
**Sent:** Tuesday, November 14, 2017 12:52 PM  
**To:** Carsner, James H CIV USARMY CENWS (US) <James.H.Carsner@usace.army.mil>  
**Cc:** rebecca.rothwell@ecy.wa.gov; Lauren Hollenbeck <LHollenbeck@cityofcamas.us>  
**Subject:** [EXTERNAL] RE: Union Self-Storage NWS-2017-845 (UNCLASSIFIED)

Jim,

I have a couple of questions regarding your comments (in red).

There is an existing wetland mitigation site between the proposed development and the creek but it is not shown on any figure. Please provide a figure that shows the development site, the proposed mitigation adjacent to the development site, and the existing mitigation area and elaborate how the proposed and existing mitigation areas are to be kept separate. (how would you like us to show that the sites are being separated? The City site has been in place for several years and the mitigation plantings are pretty large in size. That alone will make the delineation of the sites readily apparent. Let me know how you would like it delineated and we'll do it.)

Table 3 shows the wetland size as 2.59 acres and a Cowardin classification as PEM. Is this onsite acreage and classification or does this include offsite areas as well? Please clarify. (That is for the on-site acreage only)

Performance criteria should include a reference to native volunteer species counting toward meeting the performance standard. Volunteer species, if present, should be included in the annual reports.

Table 8 describes performance standards (i.e. at least 1 tree at 10 foot on center). Explain how the monitoring approach relate to the performance standard. It would be good to include column headings with the tables. (Please clarify as to how the Corps would like this language to read).

The monitoring plan describes the method as to be determined. Would you provide a narrative on the general approach that you are considering (i.e. line-intercept, quadrant, etc.) or that may be employed. Are photo points to be established, if so, what about a panorama shot?

Table 10 provides a list and quantity of plant species to be installed but needs to include size (i.e. bare root, container (1 gallon, 2 gallon, etc.)). How will the reed canary grass be monitored and controlled to help ensure plant survival?

Will temporary irrigation be available to help ensure plant survivorship? Please explain. (if that is a requirement of the Corps, I'll include it, otherwise, it will be a contingency measure and done if needed).

Understanding the math: there is 0.49 acre of direct wetland impact and 0.90 acre of indirect for a total of 1.49 acres of impact of which 1.97 acres of mitigation will be provided onsite and 0.36 acre will be provided at Terrace Mitigation Bank. Please include the ratios and areas required for Corps and Ecology using permittee-responsible mitigation. Below is a sample table that may be useful. (I thought this was made clear in the plan and on the attached drawing which you, Rebecca, and I agreed to on the phone but I'll look it over again.)

Jim Barnes  
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360-601-8631  
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**From:** Carsner, James H CIV USARMY CENWS (US) [<mailto:James.H.Carsner@usace.army.mil>]  
**Sent:** Tuesday, November 14, 2017 11:25 AM  
**To:** Jim Barnes <[jim@cascadia-inc.com](mailto:jim@cascadia-inc.com)>; Lauren Hollenbeck <[LHollenbeck@cityofcamas.us](mailto:LHollenbeck@cityofcamas.us)>

Cc: [rebecca.rothwell@ecy.wa.gov](mailto:rebecca.rothwell@ecy.wa.gov)

Subject: RE: Union Self-Storage NWS-2017-845 (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Hi Jim,

Can you mail me a hard copy of the revised critical areas report.

There is an existing wetland mitigation site between the proposed development and the creek but it is not shown on any figure. Please provide a figure that shows the development site, the proposed mitigation adjacent to the development site, and the existing mitigation area and elaborate how the proposed and existing mitigation areas are to be kept separate.

Table 3 shows the wetland size as 2.59 acres and a Cowardin classification as PEM. Is this onsite acreage and classification or does this include offsite areas as well? Please clarify.

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Will temporary irrigation be available to help ensure plant survivorship? Please explain.

Understanding the math: there is 0.49 acre of direct wetland impact and 0.90 acre of indirect for a total of 1.49 acres of impact of which 1.97 acres of mitigation will be provided onsite and 0.36 acre will be provided at Terrace Mitigation Bank. Please include the ratios and areas required for Corps and Ecology using permittee-responsible mitigation. Below is a sample table that may be useful.

Wetland	Category	Impact Area (acre)		Mitigation Proposed	Required Ratio		Mitigation		Area over/under (+/-) (acre)	Bank Credits Required (under/ratio)
		Direct	Indirect		Direct	Indirect	Required Onsite (acre)	Provided Onsite (acre)		
A	III	0.49		Enhancement	8:1		3.92	1.07	-2.85	0.36
A	III		0.90	Enhancement		1:1	0.90	0.90	0.0	NA

I will need a figure showing the development site and the mitigation site. Figure E-1 will work. Label the impact site and the mitigation site.

An aside and in future reports:

- It would be helpful to include Ecology and Corps project numbers on the title page.
- The title suggests the report is for critical areas only and not mitigation.

- The introduction describes the purpose as identifying City of Camas regulated critical areas. This suggests other agencies, such as the Corps and Ecology, are not involved. This should be clarified in future documents.
- The methods section does not discuss other documents, such as a previous delineation reports (such as the one prepared for the widening of NE Freiberg Road). Such documents may provide additional support to the current report.

Jim

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**From:** Jim Barnes [<mailto:jim@cascadia-inc.com>]

**Sent:** Monday, November 13, 2017 3:21 PM

**To:** Lauren Hollenbeck <[LHollenbeck@cityofcamas.us](mailto:LHollenbeck@cityofcamas.us)>

**Cc:** [rebecca.rothwell@ecy.wa.gov](mailto:rebecca.rothwell@ecy.wa.gov); Carsner, James H CIV USARMY CENWS (US) <[James.H.Carsner@usace.army.mil](mailto:James.H.Carsner@usace.army.mil)>

**Subject:** [EXTERNAL] RE: Union Self-Storage NWS-2017-845

Lauren,

That is a typo and I fixed it. Thanks for catching that.

The mitigation works out like this:

Permanent Wetland Buffer Impact: 0.90 acres

Mitigation areas 1 & 2 compensate for that impact by enhancing wetlands at 1:1 ratio for the buffer impact.

This compensates for the city's on-site requirement for mitigating for the loss of the wetland buffer.

Direct Wetland Impact: 0.49 acres

Mitigation area 3 is 46,839 sf in area. That area is proposed for wetland enhancement to partially mitigate for the direct wetland impacts. Ecology's wetland enhancement mitigation ratio is 8:1.  $46,839 \text{ sf} / 8 = 1.07$  acres of credit for the direct wetland impacts. That still leaves a deficit of 0.36 acres. That deficit will be made up by the purchase of wetland bank credits.

Indirect Wetland Impacts (Ecology/Corps)

Ecology and the Corps consider the indirect wetland impacts to be adequately compensated for through the on-site enhancement of wetlands in areas 1-3 which is required by the city.

Let me know if you have any other questions. Thanks.

Jim Barnes

Cascadia Ecological Services, Inc.

360-601-8631

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**From:** Lauren Hollenbeck [<mailto:LHollenbeck@cityofcamas.us>]

**Sent:** Monday, November 13, 2017 10:39 AM

**To:** Jim Barnes <[jim@cascadia-inc.com](mailto:jim@cascadia-inc.com)>

**Subject:** RE: Union Self-Storage NWS-2017-845

Hi Jim,

I think this might be a typo but on page 18 section 7.6, it states 0.66 mitigation credits will be purchased? Please confirm and make correction if needed.

Just for my clarification, would you mind providing the calculation on how to determine the 8:1 mitigation ratio with 0.49 acres of wetland impact? I am trying to understand how you end up with 1.07 acres.

Thanks again Jim,

**Lauren Hollenbeck**

*Senior Planner*

City of Camas

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Camas, WA 98607

360-817-1568 ext. 4253

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**From:** Jim Barnes [<mailto:jim@cascadia-inc.com>]

**Sent:** Friday, November 10, 2017 8:09 AM

**To:** Rothwell, Rebecca (ECY)

**Cc:** Carsner, James H CIV USARMY CENWS (US); Lauren Hollenbeck; Gayle Gerke; TOM

**Subject:** RE: Union Self-Storage NWS-2017-845

Good morning,

Please find attached a revised critical areas report for Union Self Storage. I believe all of the issues with mitigation have been resolved. If you have any comments, please let me know. Thanks.

Jim Barnes

Cascadia Ecological Services, Inc.

360-601-8631

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**From:** Rothwell, Rebecca (ECY) [<mailto:rebs461@ECY.WA.GOV>]

**Sent:** Friday, November 3, 2017 2:31 PM

**To:** Jim Barnes <[jim@cascadia-inc.com](mailto:jim@cascadia-inc.com)>

**Cc:** Carsner, James H CIV USARMY CENWS (US) <[James.H.Carsner@usace.army.mil](mailto:James.H.Carsner@usace.army.mil)>

**Subject:** RE: Union Self-Storage NWS-2017-845

Hi Jim,

I agree with your list below and also that you do not need to do a credit-debit analysis. Thanks for summarizing.

**Rebecca Rothwell**

Wetlands/Shorelands Specialist

Shorelands and Environmental Assistance Program

WA Department of Ecology | Southwest Regional Office | ☎ 360-407-7273

🏢 300 Desmond Drive SE, Lacey, WA 98503 | 📬 PO Box 47775 Olympia, WA 98504-7775

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

From: Jim Barnes [<mailto:jim@cascadia-inc.com>]

Sent: Thursday, November 02, 2017 1:11 PM

To: Rothwell, Rebecca (ECY) <[rebs461@ECY.WA.GOV](mailto:rebs461@ECY.WA.GOV)>

Cc: Carsner, James H CIV USARMY CENWS (US) <[James.H.Carsner@usace.army.mil](mailto:James.H.Carsner@usace.army.mil)>

Subject: RE: Google Earth Placemark: UNION SELF STORAGE.kmz

Hi Rebecca,

I'm finally getting around to finalizing a draft mitigation plan for the Union Self Storage Project based on the phone conversation I had with you and Jim Carsner on the 10/20. Before I get into it, I wanted to summarize the points from our phone call based on my notes to make sure we're all on the same page regarding what is left to include in the revised plan:

1. Show the same wetland boundaries from the Corps JD in both the wetland report and mitigation plan.
2. Provide a cross-section drawing in the mitigation plan which shows the entire site extending west from Friberg-Strunk St. to the east end of the project site.
3. Show the location of the retaining wall and fence along the east side of the development on a drawing with a detail.
4. Include language in the mitigation plan regarding wetland boundary signage and where it should be installed.
5. Describe the city and Corps/Ecology in separate sections of the plan and also in the wetland bank use plan.
6. Determine how stormwater is going to be handled for the project and include a drawing detail in the mitigation plan.
7. Provide information in the plan from the project engineer regarding how hydrology to the wetlands will not be affected by the development.
8. The wetland rating does not require further work beyond what we agreed to on 10/20.

Let me know if I missed anything. Thanks.

Jim Barnes

Cascadia Ecological Services, Inc.

360-601-8631

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

From: Jim Barnes  
Sent: Friday, October 20, 2017 1:04 PM  
To: 'Rothwell, Rebecca (ECY)' <rebs461@ECY.WA.GOV>  
Subject: RE: Google Earth Placemark: UNION SELF STORAGE.kmz

Good

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

From: Rothwell, Rebecca (ECY) [mailto:rebs461@ECY.WA.GOV]  
Sent: Friday, October 20, 2017 1:03 PM  
To: Jim Barnes <jim@cascadia-inc.com>  
Subject: RE: Google Earth Placemark: UNION SELF STORAGE.kmz

That worked!

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

From: Jim Barnes [mailto:jim@cascadia-inc.com]  
Sent: Friday, October 20, 2017 12:49 PM  
To: Rothwell, Rebecca (ECY) <rebs461@ECY.WA.GOV>  
Subject: Google Earth Placemark: UNION SELF STORAGE.kmz

Try this....

Google Earth streams the world over wired and wireless networks enabling users to virtually go anywhere on the planet and see places in photographic detail. This is not like any map you have ever seen. This is a 3D model of the real world, based on real satellite images combined with maps, guides to restaurants, hotels, entertainment, businesses and more. You can zoom from space to street level instantly and then pan or jump from place to place, city to city, even country to country.

Get Google Earth. Put the world in perspective.

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