



March 18, 2022

Skagit County Planning and Development Services 1800 Continental Place Mount Vernon, WA 98273

Attn: Kevin Cricchio, Senior Planner

RE: Reply to Public Comments regarding February 24, 2022 SEPA MDNS Comments

Dear Mr. Cricchio,

We have reviewed the public comments received relative to the February 22, 2022 SEPA MDNS prepared by Skagit County Planning & Development Services for File #'s PL16-0097 and PL16-0098 and are providing our reply below.

- 1. Public comments and process: I wanted to address an overarching theme with regard to some of the public comments and the appropriate weight and consideration that they are given. As required by Skagit County Code in preparation of this application for Mining Special Use, Concrete Nor'West has retained independent third party professionals and technical experts to study, evaluate, assist in the design of the proposal and ultimately document compliance with all of the various requirements to obtain a permit to mine. In addition, in some cases Skagit County has retained third party experts to review our expert's reports. These studies are all a part of the application and record and can be found on the County's website: https://www.skagitcounty.net/Departments/PlanningAndPermit/gravelmine.htm When a member of the public elects to comment, they are speaking from their experience and perspective, and rightfully so. They may or may not have the background needed to offer a technical opinion on the subject at hand. Many of the comments present generally valid concerns and suggestions that should be and in fact were taken into account. The process of public comment on this application has been extensive and ongoing for over 6 years, with most every conceivable concern being raised. As required, additional studies have been prepared to evaluate, address and mitigate concerns that were raised. Given the long history of public participation with this application, I believe the technical experts have addressed the wide range of issues that have been raised. At this point in the process, Skagit County must rely primarily upon the technical experts and those conclusions supported by science with regard to environmental impacts, hydrology, noise, dust, vibration, cultural resources, traffic and other items where subject matter experts have been required to evaluate the issue. When public comments urge technical conditions or outcomes of decision makers that are unsupported by the science and data they must be rejected.
- 2. Zoning / Land Use: This project area consists of 3 parcels totaling 68 acres, of which 51 acres is proposed to be disturbed by mining. These parcels are all within a larger ownership of approximately 728 acres. The proposed mine site is zoned Rural Resource Natural Resource Land and is designated and protected with a Mineral Resource Overlay (MRO) by Skagit





County Code 14.16.440. It is worth reviewing the purpose of the MRO from Skagit County Code as follows: 14.16.440 Mineral Resource Overlay (MRO):

"(1) Purpose. The purpose of the Mineral Resource Overlay (MRO) is to maintain and enhance natural resource-based industries by conserving mineral resource lands, allowing continued operation of existing legally established uses, and by assuring that use of adjacent lands does not interfere with the extraction and quarrying of minerals. A MRO overlays Natural Resource Lands (NRL) zoning districts and imposes regulations in addition to those normally required in the underlying NRL zoning district. Mineral extraction and processing activities are allowed as a Hearing Examiner special use, and must comply with the Surface Mining Act, Chapter 78.44 RCW. The MRO recognizes those areas that are designated to protect long-term, commercially viable mineral Natural Resource Lands and recognizes that mineral resources must be in close and economic proximity to the market to be served."

Long before Concrete Nor'West acquired the property, this site was set aside and protected by Skagit County in the Comprehensive Plan and Zoning Maps as an area that should be protected and utilized to supply the essential sand and gravel resources that Skagit County residents and businesses require. Concrete Nor'West acquired the property with the intent and understanding that mining is an allowed use with Hearing Examiner approval and continues to have an expectation of permit approval once all requirements have been met. Some of the public comments acknowledge the legal right for this essential use of the property for mining and we appreciate that recognition.

- 3. Traffic: There are many public comments stating that the proposed conditions to mitigate traffic impacts are insufficient to protect the public. As stated above, these are issues that have been previously raised in earlier comments. Based on those comments and requirements of Skagit County Code, these issues have now been thoroughly studied by technical experts. This proposal has been evaluated not only by Concrete Nor'West's consultant, DN Traffic Consultants, but also independently reviewed by HDR Traffic Consultants and the professional staff of Skagit County Public Works. The cumulative result of all of this work are conditions reflected in the MDNS that range from restrictions and limitations on hours of operations, daily limits on truck trips, applicant-funded flashing amber beacon for the Mine Entrance and the Grip/Prairie Intersection, applicant-funded road widening and others. Collectively these conditions have been determined by the County to meet all County requirements. The public comments to the contrary are not supported by the science and the record for this project.
  - **4.** Hours of Operation: Skagit County has presented a condition in the MDNS to limit hours of operation to Monday through Friday from 7:00a.m to 5:00p.m with an exception for temporary demand. Concrete Nor'West has voluntarily agreed to this condition although it is actually not supported in the code or necessary to comply with maximum allowable noise levels per WAC Chapter 173-60. This has generated a lot of public comments, some





demanding that hours be further restricted. It is worth noting what Skagit County Code (SCC) has to say about this. The ability to limit hours of operation lies with the Hearing Examiner, but only in certain situations. SCC 14.16.440(10)(i) states: Hours of operation shall vary according to the locations on the site as stated below and may be shortened by the HE based on site-specific circumstances.

(i) Within designated natural resource lands, the hours of operation may be unlimited. The Hearing Examiner may limit hours of operation to daylight hours or to such other reasonable limitation deemed necessary to address potential significant adverse impacts to existing adjacent land uses, on any portion of the mining site where mining activity is proposed to occur less than 1/4 mile from existing Rural Intermediate, Rural Village, or Urban Growth Area designated lands;

Three significant facts are presented in this code section. First is that the Hearing Examiner is the authority charged with imposing limits to hours of operation. The Planning Department staff are to make recommendations and act as the SEPA Official. Based on the noise study, there is no basis for a finding of a probable significant noise impact to support the proposed MDNS condition limiting hours of operation. Second, in Natural Resource Lands, like the property here, hours of operation may be unlimited. That is the default standard. Third, the Hearing Examiner may consider limiting hours of operation on "any portion of the mine site where mining activity is less than ¼ mile from Rural Intermediate, Rural Village, or Urban Growth Area designated lands." Since our project is not within ¼ mile from any of those zones, our hours of operation are not required to be limited. Concrete Nor'West has voluntarily agreed to the proposed limits on the hours of operations, but will resist any further unsubstantiated restrictions.

5. Critical Areas and Buffers / Medium vs. High Impact Land Use: Critical Areas Assessments for the mine site and the proposed haul road have been completed and are a part of the record. Beyond the general concern for critical areas identification and protection, which has been addressed through conditions requiring compliance with the Critical Areas Ordinance, a recurring public comment is related to Medium vs. High Impact Land Use for the purposes of determining the appropriate buffer between the mine site and the wetlands to the east along the Samish River. The Washington State Growth Management Act (GMA) provides a framework for zoning and development in Washington. Mining, Agriculture and Forestry comprise the three Resource Based Industries (RBI's). While all of these RBI's are commercial in nature, the GMA and local regulations recognize that they must be managed differently that other commercial and industrial zoned properties where paving and complete build out of the site is expected. RBI's, on the other hand, rely on making the best use of the land, in perpetuity, to productively produce the natural resources that we all require to sustain daily life. So with regard to this application and the appropriate Land Use Impact under SCC 14.24.230(1)(a), we have previously presented our rationale for a Medium Impact Land Use in the August 20, 2015 Fish & Wildlife Site Assessment prepared by Graham-Bunting Associates (GBA). This Medium Impact Land Use has been previously accepted by Skagit County and relied upon in prior approvals for this project, including the Forest Practice Conversion PL16-0098. Comments urging the County to require a High Impact Land Use are scientifically unsupported and unnecessary. The Medium Impact Land Use and the associated 200' buffer





will provide a high level of habitat protection to the wetland and riparian area as documented by GBA. Actual mining activities in the area nearest the wetland will occur for a relatively brief period. After mining and reclamation are complete, the topsoil will be replaced and the mine site will be replanted with trees, returning to a rural resource and forestry use. I believe everyone can recognize how different that is from a permanent commercial type development such as a mall, gas station, or similar "Commercial" High Impact Land Use.

6. Request for Environmental Impact Statement: Some commenters repeat the demand for the County to withdraw the Mitigated Determination of Non Significance (MDNS) and issue a Determination of Significance (DS) and preparation of an Environmental Impact Statement (EIS). The public comments have not raised any new questions or issues not previously considered by Skagit County. An EIS would, under the applicable regulations, would focus on the same areas that have already been the subject of extensive expert analysis and public comment. Based on the extensive expert analysis and record of public comment in this application and the robust conditions of the MDNS addressing these comments, the potential for significant adverse environmental impacts have been mitigated and the requirements of SEPA have been met.

In closing, Concrete Nor'West division of Miles Sand & Gravel Company has been engaged in this application process since 2015 on property that is designated as a Mineral Resource Land and protected from other incompatible land uses with the intent to be mined. We have selected and pursued permitting on this site due to the fact that it is appropriately zoned and designated for this purpose and is able to meet all other criteria for special use. This site is unique it that it contains a pre-existing forest road that is adequate to provide access to the mine so that no new road will need to be built, further reducing impacts. We have voluntarily limited hours of operation and self-restricted annual mine production, which results in fewer daily truck trips. In addition, we have chosen not to pursue aggregate processing facilities on-site such as washing or crushing plants. To date we have met every application requirement, provided every response to requests for information, submitted all additional studies and complied with all other requests for information that have been asked of us by Skagit County. We have agreed to accept and comply with all of the conditions requested and proposed by Skagit County. Because the environmental impacts have been fully considered and mitigated, we ask this application be allowed to move forward to public hearing before the Skagit County Hearing Examiner. In this way the merits of the application can be heard and this matter can be brought to resolution without further delay. Please contact me if you require any additional information or to discuss any of the items above.

Sincerely,

Dan Cox

**General Manger** 

Dan Cox





March 18, 2022

Skagit County Planning and Development Services 1800 Continental Place Mount Vernon, WA 98273

Attn: Kevin Cricchio, Senior Planner

RE: Reply to Washington State Department of Ecology's public comments regarding February 24, 2022 SEPA MDNS

Dear Mr. Cricchio,

We have reviewed the March 11, 2022 comment letter prepared by Washington State Department of Ecology relative to the February 22, 2022 SEPA MDNS prepared by Skagit County Planning & Development Services for File #'s PL16-0097 and PL16-0098 and are providing our reply to those three points below.

- 1. Wetland Delineation: The method for wetland delineation was detailed by Graham-Bunting Associates (GBA) in the August 20, 2015 Fish & Wildlife Assessment, and further described in both the May 18, 2015 and April 18, 2017 reports by GBA. On December 27, 2016, Wetland Specialist Doug Gresham for the Washington State Department of Ecology commented to Skagit County regarding the GBA site assessment and had no issue with the delineation of the wetland edge. Finally, the wetland edge was marked in the field by GBA and later those points were picked up by Semrau Engineering and Surveying and are shown on the Mine Plan Set. This should address any confusion regarding the accurate delineation of the wetland edge. These documents are all available on Skagit County's website at <a href="https://www.skagitcounty.net/Departments/PlanningAndPermit/gravelmine.htm">https://www.skagitcounty.net/Departments/PlanningAndPermit/gravelmine.htm</a>.
- 2. Wetland Rating: Mining Special Use PL16-0097 was submitted on March 7, 2016 and the application was deemed complete on March 22, 2016 which vests it to the rules in effect at that time. Ecology is correct that the August 20, 2015 GBA Fish & Wildlife Assessment did use the 2004/2008 Wetland Rating Form, which was the form required by the Critical Areas Ordinance in effect by ordinance at the time of the submittal and determination of completeness. It wasn't until July 2016 under Critical Areas Ordinance Update 2006-0004 that the Critical Areas Ordinance was updated to require the use of the 2014 Wetland Rating System. Nonetheless in an attempt to avoid any debate on this issue, NW Ecological Services was able to apply the 2014 Wetland Rating Form to the subject wetland in time to be included in this reply and their results are attached. The subject wetland retains the Category II rating.
- 3. Critical Areas and Buffers / Medium vs. High Impact Land Use: The definition of Land Use Impact can be found in Skagit County Code (SCC) 14.04.020. With regard to this application and the appropriate Land Use Impact under SCC 14.24.230(1)(a), we have previously presented our rationale for a Medium Impact Land Use in the August 20, 2015 Fish & Wildlife





Site Assessment prepared by Graham-Bunting Associates (GBA). This Medium Impact Land Use has been previously accepted by Skagit County and relied upon in prior approvals for this project, including the Forest Practice Conversion PL16-0098. The Medium Impact Land Use and the associated 200' buffer will provide a high level of habitat protection to the wetland and riparian area as documented by GBA. The mining in the area closest to the wetland will occur for a relatively brief period. After mining and reclamation are complete, the topsoil will be replaced and the mine site will be replanted with trees, returning to a rural resource and forestry use.

We hope this addresses the concerns raised by Ecology in their letter. Please contact me if you require any additional information or to discuss any of the items above.

Sincerely,

Dan Cox

**General Manger** 

Dan Cox

Encl: March 2022 NW Ecological Wetland Rating Update (2014 Wetland Rating Form)

## **RATING SUMMARY – Western Washington**

Name of wetland (or ID #): Samish River We	etland D	ate of site visit:
Rated by M. Porter; A. Pederson	Trained by Ecology? X Yes	sNo Date of training 2014
HGM Class used for rating Riverine	Wetland has multipl	e HGM classes?Y <u> </u>
NOTE: Form is not complete withou Source of base aerial photo/map		gures can be combined).
OVERALL WETLAND CATEGORY <u>"</u>	(based on functions $ imes$	or special characteristics)
1. Category of wetland based on FU	NCTIONS	
Category I – Total score =	= 23 - 27	
XCategory II – Total score	= 20 - 22	Score for each function based
Category III – Total score = 16 - 19		on three
Category IV – Total score		ratings (order of ratings is not
FUNCTION Improving Hydrol	logic Habitat	important)

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
		Circle the ap	propriate ratings	
Site Potential	HO MOLO	HO MO LO	HO MO LO	
Landscape Potential	HO MO LO	HO WO LO	HO MO LO	
Value	HO MOLO	HO MO LO	HO MO LO	TOTAL
Score Based on Ratings	7	6	8	21

Score for each function based on three ratings (order of ratings is not important)
9 = H,H,H 8 = H,H,M 7 = H,H,L 7 = H,M,M 6 = H,M,L 6 = M,M,M 5 = H,L,L 5 = M,M,L 4 = M,L,L 3 = L,L,L

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	X

# Maps and figures required to answer questions correctly for Western Washington

### **Depressional Wetlands**

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

#### Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	А
Hydroperiods	H 1.2	B1
Ponded depressions	R 1.1	B1
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	A
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	A
Width of unit vs. width of stream (can be added to another figure)	R 4.1	B1
Map of the contributing basin	R 2.2, R 2.3, R 5.2	B2
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	С
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	D
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	D

### Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

### Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	S 4.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

### **HGM Classification of Wetlands in Western Washington**

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

_			
1.	Are the water levels in	n the entire unit usually control	led by tides except during floods?
	NO – go to 2	YES – the w	etland class is <b>Tidal Fringe</b> – go to 1.1
	1.1 Is the salinity of the	water during periods of annual	low flow below 0.5 ppt (parts per thousand)?
	If your wetland can l	inge it is an <b>Estuarine</b> wetland	<b>YES – Freshwater Tidal Fringe</b> all Fringe use the forms for <b>Riverine</b> wetlands. If it and is not scored. This method <b>cannot</b> be used to
2.		nit is flat and precipitation is the noff are NOT sources of water to	e only source (>90%) of water to it. Groundwater to the unit.
	NO – go to 3 If your wetland can be	classified as a Flats wetland, us	<b>YES</b> – The wetland class is <b>Flats</b> e the form for <b>Depressional</b> wetlands.
<ol> <li>Does the entire wetland unit meet all of the following criteria?        The vegetated part of the wetland is on the shores of a body of permanent open wat plants on the surface at any time of the year) at least 20 ac (8 ha) in size;        At least 30% of the open water area is deeper than 6.6 ft (2 m).     </li> </ol>		of a body of permanent open water (without any ast 20 ac (8 ha) in size;	
	NO – go to 4	<b>YES</b> – The wetland cla	ass is <b>Lake Fringe</b> (Lacustrine Fringe)
4. Does the entire wetland unit meet all of the following criteria?The wetland is on a slope (slope can be very gradual),The water flows through the wetland in one direction (unidirectional) and useeps. It may flow subsurface, as sheetflow, or in a swale without distinct baThe water leaves the wetland without being impounded.		tion (unidirectional) and usually comes from a swale without distinct banks,	
	NO – go to 5		<b>YES</b> - The wetland class is <b>Slope</b>
			wetlands except occasionally in very small and

shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

- 5. Does the entire wetland unit **meet all** of the following criteria?
  - X The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
  - X The overbank flooding occurs at least once every 2 years.

NO - go to 6

**YES** - The wetland class is **Riverine** 

**NOTE**: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? This means that any outlet, if present, is higher than the interior of the wetland.

NO - go to 7

### YES - The wetland class is Depressional

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO - go to 8

#### **YES** – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

**NOTE**: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS		
Water Quality Functions - Indicators that the site functions to improve water quality		
R 1.0. Does the site have the potential to improve water quality?		
R 1.1. Area of surface depressions within the Riverine wetland that can trap sediments during a flooding event:		
Depressions cover $> \frac{3}{4}$ area of wetland points = 8		
Depressions cover > ½ area of wetland points = 4	2	
Depressions present but cover < ½ area of wetland points = 2		
No depressions present points = 0		
R 1.2. Structure of plants in the wetland (areas with >90% cover at person height, <b>not</b> Cowardin classes)		
Trees or shrubs $> \frac{2}{3}$ area of the wetland points = 8		
Trees or shrubs $> \frac{1}{3}$ area of the wetland points = 6	8	
Herbaceous plants (> 6 in high) > $^2/_3$ area of the wetland points = 6		
Herbaceous plants (> 6 in high) > $^{1}/_{3}$ area of the wetland points = 3		
Trees, shrubs, and ungrazed herbaceous $< \frac{1}{3}$ area of the wetland points = 0		
Total for R 1 Add the points in the boxes above	10	
Rating of Site Potential If score is:12-16 = H6-11 = M0-5 = L	he first page	
R 2.0. Does the landscape have the potential to support the water quality function of the site?		
R 2.1. Is the wetland within an incorporated city or within its UGA? Yes = $2 \text{ No} = 0$	0	
R 2.2. Does the contributing basin to the wetland include a UGA or incorporated area? Yes = 1 No = 0	0	
R 2.3. Does at least 10% of the contributing basin contain tilled fields, pastures, or forests that have been clearcut within the last 5 years?  Yes = 1 No = 0	1	
R 2.4. ls > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0	0	
R 2.5. Are there other sources of pollutants coming into the wetland that are not listed in questions R 2.1-R 2.4  Other sources Yes = 1 No = 0	0	
Total for R 2 Add the points in the boxes above	1	
Rating of Landscape Potential If score is:3-6 = H1 or 2 = M0 = L	he first page	
R 3.0. Is the water quality improvement provided by the site valuable to society?		
R 3.1. Is the wetland along a stream or river that is on the 303(d) list or on a tributary that drains to one within 1 mi?	1	
Yes = 1 No = 0		
R 3.2. Is the wetland along a stream or river that has TMDL limits for nutrients, toxics, or pathogens?  Yes = 1 No = 0	1	
R 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? (answer YES if there is a TMDL for the drainage in which the unit is found)  Yes = 2 No = 0	2	
Total for R 3 Add the points in the boxes above	4	
Rating of Value If score is: X2-4 = H1 = M0 = L Record the rating on t	he first page	

RIVERINE AND FRESHWATER TIDAL FRINGE WETLANDS		
Hydrologic Functions - Indicators that site functions to reduce floor	oding and stream erosio	n
R 4.0. Does the site have the potential to reduce flooding and erosion?		
R 4.1. Characteristics of the overbank storage the wetland provides:		
Estimate the average width of the wetland perpendicular to the direction of the flow	and the width of the	
stream or river channel (distance between banks). Calculate the ratio: (average wid		
width of stream between banks).	, , , , ,	
If the ratio is more than 20	points = 9	2
If the ratio is 10-20	points = 6	-
If the ratio is 5-<10	points = 4	
If the ratio is 1-<5	points = 2	
If the ratio is < 1	points = 1	
R 4.2. Characteristics of plants that slow down water velocities during floods: Treat large v		
shrub. Choose the points appropriate for the best description (polygons need to have		
height. These are <u>NOT Cowardin</u> classes).	,	
Forest or shrub for $>^{1}/_{3}$ area OR emergent plants $>^{2}/_{3}$ area	points = 7	7
Forest or shrub for $> \frac{1}{10}$ area OR emergent plants $> \frac{1}{3}$ area	points = 4	
Plants do not meet above criteria	points = 0	
Total for R 4 Add the	points in the boxes above	9
Rating of Site Potential If score is:12-16 = H 6-11 = M 0-5 = L	Record the rating on th	he first page
		, , ,
R 5.0. Does the landscape have the potential to support the hydrologic functions o	f the site?	
R 5.1. Is the stream or river adjacent to the wetland downcut?	Yes = 0 No = 1	0
R 5.2. Does the up-gradient watershed include a UGA or incorporated area?	Yes = 1 No = 0	0
R 5.3. Is the up-gradient stream or river controlled by dams?	Yes = 0 No = 1	1
Total for R 5 Add the p	points in the boxes above	1
Rating of Landscape Potential If score is:3 = H1 or 2 = M0 = L	Record the rating on th	ne first page
R 6.0. Are the hydrologic functions provided by the site valuable to society?		
R 6.1. Distance to the nearest areas downstream that have flooding problems?		
Choose the description that best fits the site.		
The sub-basin immediately down-gradient of the wetland has flooding problems that	t result in damage to	
human or natural resources (e.g., houses or salmon redds)	points = 2	1
Surface flooding problems are in a sub-basin farther down-gradient	points = 1	
No flooding problems anywhere downstream	points = 0	
	<u> </u>	
R 6.2. Has the site been identified as important for flood storage or flood conveyance in a r	· ·	0
T. 15. D.C.	Yes = 2 No = 0	
Total for R 6 Add the p	points in the boxes above	1
Rating of Value If score is:2-4 = H1 = M0 = L	Record the rating on th	ne first page

### These questions apply to wetlands of all HGM classes. HABITAT FUNCTIONS - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bed 4 structures or more: points = 4 **X**Emergent 3 structures: points = 2 Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). Permanently flooded or inundated 4 or more types present: points = 3 X Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 Saturated only 1 type present: points = 0 Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points Freshwater tidal wetland 2 points H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft<sup>2</sup>. Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 2 If you counted: > 19 species points = 2 points = 1 5 - 19 species < 5 species points = 0 H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. None = 0 points Moderate = 2 points Low = 1 point All three diagrams in this row are HIGH = 3points

H 1.5. Special habitat features:	
Check the habitat features that are present in the wetland. The number of checks is the number of points.	
Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).	
_X Standing snags (dbh > 4 in) within the wetland	
Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 n	1)
over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)	"
Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree	
slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered	6
where wood is exposed)	
permanently or seasonally inundated (structures for egg-laying by amphibians)	
strata)	
Total for H 1 Add the points in the boxes above	13
Rating of Site Potential If score is:15-18 = HX7-14 = M0-6 = L	on the Jirst page
H 2.0. Does the landscape have the potential to support the habitat functions of the site?	
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).	
Calculate: % undisturbed habitat $\frac{38}{38}$ + [(% moderate and low intensity land uses)/2] $\frac{2}{38}$ = $\frac{40}{38}$ %	
If total accessible habitat is:	
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	3
20-33% of 1 km Polygon points = 2	
10-19% of 1 km Polygon points = 1	
< 10% of 1 km Polygon points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	
Undisturbed habitat > 50% of Polygon points = 3	1 3 1
Undisturbed habitat 10-50% and in 1-3 patches points = 2	
Undisturbed habitat 10-50% and > 3 patches points = 1	
Undisturbed habitat < 10% of 1 km Polygon points = 0	
H 2.3. Land use intensity in 1 km Polygon: If	
> 50% of 1 km Polygon is high intensity land use points = (-2)	0
≤ 50% of 1 km Polygon is high intensity points = 0	
Total for H 2 Add the points in the boxes above	6
Rating of Landscape Potential If score is: 4-6 = H1-3 = M<1 = L Record the rating of	n the first page
H 3.0. Is the habitat provided by the site valuable to society?	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score	
that applies to the wetland being rated.	
Site meets ANY of the following criteria: points = 2	
✓ It has 3 or more priority habitats within 100 m (see next page)	
<ul> <li>It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists</li> </ul>	, [
<ul> <li>It is mapped as a location for an individual WDFW priority species</li> </ul>	2
<ul> <li>It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</li> </ul>	
— It has been categorized as an important habitat site in a local or regional comprehensive plan, in a	
Shoreline Master Plan, or in a watershed plan	
Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1	
Site does not meet any of the criteria above points = 0	
Rating of Value If score is: $\times 2 = H$ 1 = M0 = L Record the rating	on the first page

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

### **WDFW Priority Habitats**

<u>Priority habitats listed by WDFW</u> (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <a href="http://wdfw.wa.gov/publications/00165/wdfw00165.pdf">http://wdfw.wa.gov/publications/00165/wdfw00165.pdf</a> or access the list from here: <a href="http://wdfw.wa.gov/conservation/phs/list/">http://wdfw.wa.gov/conservation/phs/list/</a>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** This question is independent of the land use between the wetland unit and the priority habitat.

_	<b>Aspen Stands:</b> Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
×	<b>Biodiversity Areas and Corridors</b> : Areas of habitat that are relatively important to various species of native fish and wildlife ( <i>full descriptions in WDFW PHS report</i> ).

- Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: Old-growth west of Cascade crest Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 see web link above*).
- Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 see web link above*).
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page).
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

**Note:** All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

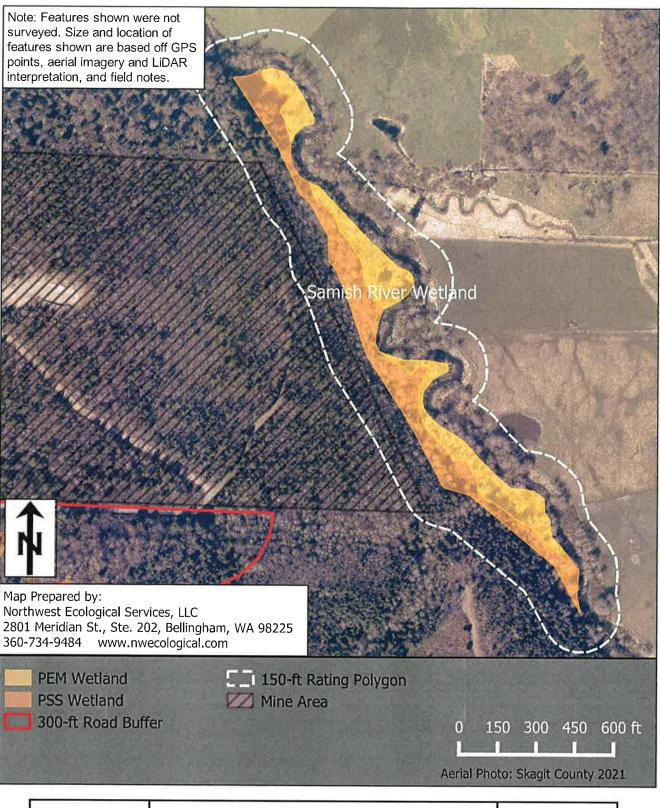
### **CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS**

Wetland Type	Category
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands  Does the wetland meet the following criteria for Estuarine wetlands?  — The dominant water regime is tidal,	
<ul> <li>Vegetated, and</li> <li>With a salinity greater than 0.5 ppt</li> <li>Yes –Go to SC 1.1</li> <li>No= Not an estuarine wetland</li> </ul>	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? Yes = Category I No - Go to SC 1.2	Cat. I
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?  — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25)  — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-	Cat. I
mowed grassland.  — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.  Yes = Category I No = Category II	Cat. II
SC 2.0. Wetlands of High Conservation Value (WHCV)  SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?  Yes – Go to SC 2.2  No – Go to SC 2.3  SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?  Yes = Category I  No = Not a WHCV	Cat. I
SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? <a href="http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf">http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf</a> Yes – Contact WNHP/WDNR and go to SC 2.4  No = Not a WHCV	
SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?  Yes = Category I  No = Not a WHCV	
SC 3.0. Bogs  Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key below. If you answer YES you will still need to rate the wetland based on its functions.  SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile?  Yes – Go to SC 3.3  No – Go to SC 3.2  SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or	
pond?  Yes – Go to SC 3.3 No = Is not a bog SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?  Yes = Is a Category I bog No – Go to SC 3.4  NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog.  SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?  Yes = Is a Category I bog No = Is not a bog	Cat. I

SC 4.0. Forested Wetlands	
Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA	
Department of Fish and Wildlife's forests as priority habitats? If you answer YES you will still need to rate	
the wetland based on its functions.	
<ul> <li>Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of</li> </ul>	
age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more.	
— Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the	
species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).	
Yes = Category I No = Not a forested wetland for this section	Cat. I
SC 5.0. Wetlands in Coastal Lagoons	
Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?	
— The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from	
marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks	
<ul> <li>The lagoon in which the wetland is located contains ponded water that is saline or brackish (&gt; 0.5 ppt)</li> <li>during most of the year in at least a portion of the lagoon (needs to be measured near the bottom)</li> </ul>	Cat. I
Yes – Go to SC 5.1 No = Not a wetland in a coastal lagoon	"""
SC 5.1. Does the wetland meet all of the following three conditions?	
— The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less	
than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).	Cat. II
— At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-	
mowed grassland.	
— The wetland is larger than $\frac{1}{10}$ ac (4350 ft <sup>2</sup> )	1
Yes = Category I No = Category II	
SC 6.0. Interdunal Wetlands	
Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If	
you answer yes you will still need to rate the wetland based on its habitat functions.  In practical terms that means the following geographic areas:	
Long Beach Peninsula: Lands west of SR 103	
Grayland-Westport: Lands west of SR 105	Cat I
<ul> <li>Ocean Shores-Copalis: Lands west of SR 115 and SR 109</li> </ul>	_
Yes – Go to <b>SC 6.1</b> No = <b>not an interdunal wetland for rating</b>	
	Cat. II
SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)?  Yes = Category I  No – Go to SC 6.2	"""
SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	
Yes = Category II No – Go to SC 6.3	Cat. III
SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?	
Yes = Category III No = Category IV	
	Cat. IV
Category of wetland based on Special Characteristics	<b>1 3</b>
If you answered No for all types, enter "Not Applicable" on Summary Form	

Wetland name or number Samish River Wetland

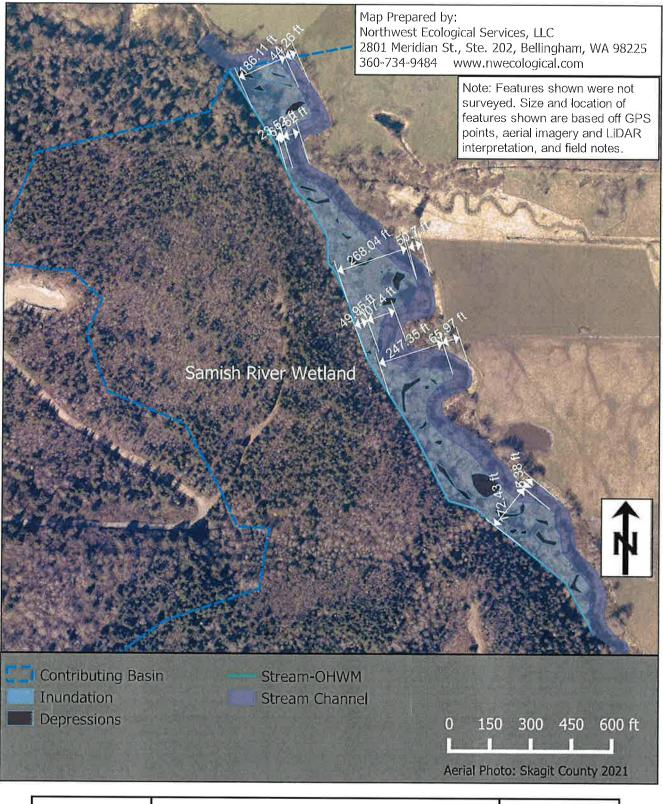
This page left blank intentionally





Wetland Rating Map (Vegetation)

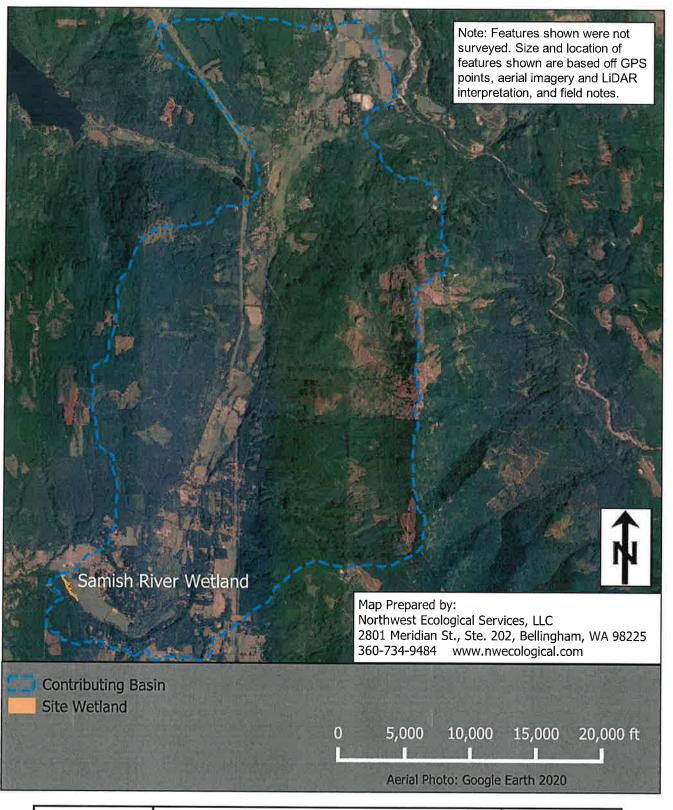
Grip Road Gravel Mine Project Critical Areas Assessment Attachment A





Wetland Rating Map (Hydrology)

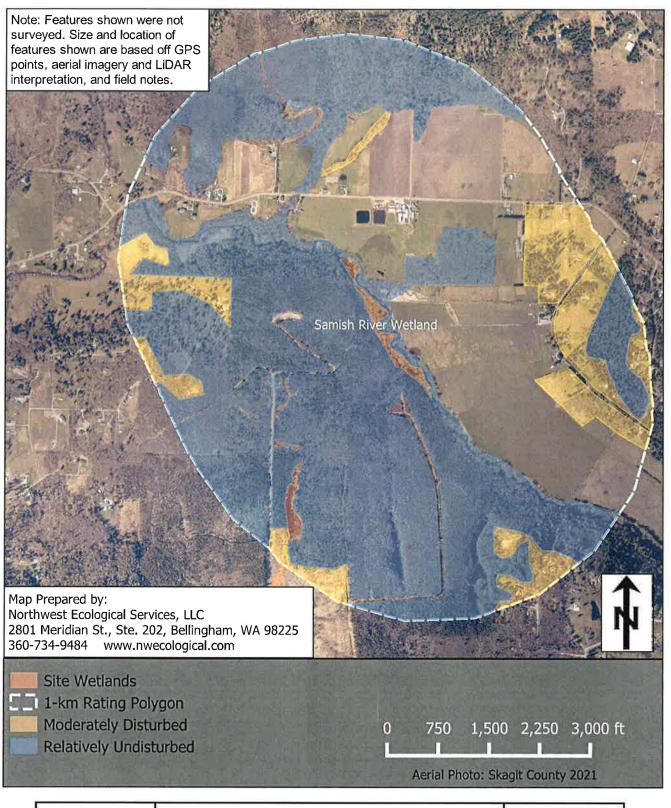
Grip Road Gravel Mine Project Critical Areas Assessment Attachment B1





Wetland Rating Map (Hydrology)

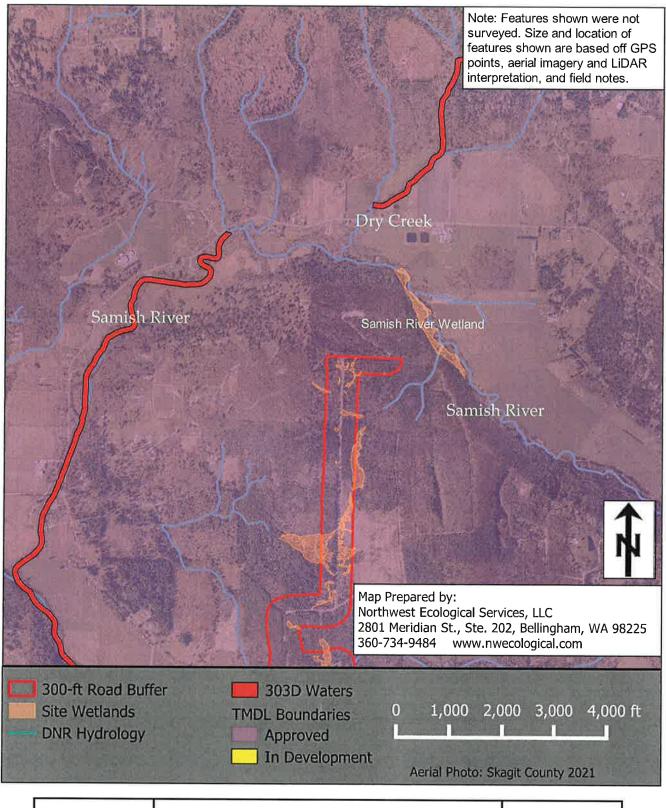
Grip Road Gravel Mine Project Critical Areas Assessment **Attachment B2** 





Wetland Rating Map (Land Use)

Grip Road Gravel Mine Project Critical Areas Assessment Attachment C





Wetland Rating Map (Land Use)

Grip Road Gravel Mine Project Critical Areas Assessment Attachment D