Cup18-99/SEP18-47
Public Services (3)

#### B7 ENGINEERING

PO Box 487 Sunnyside, WA 98944 (509) 837-8600

Jacob Clay- Project Planner Yakima Country Public Services 128 North 2<sup>nd</sup> Street Yakima WA 98901 OCT 31 2018

19 Oct 2018tt Don Lynn 18071Harold Lisa Carmen

Subject: Sage Brush Ranch CAFO

Reference: (a) Notice of Incompleteness, File CUP2018-00099/SEP2018-00047, 16 Oct 2018

Dear Mr. Clay:

Reference (a) identified 5 items that needed clarification to continue the review of the subject application. This letter will provide these clarifications. They will be addressed in the order found in Reference (a).

Item 1 (parking spaces) the site plan shows 32 parking spaces. 18 are located west of the parlor at the east end of the truck loop. The 14 remaining parking places are found immediately north of the commodity shed, in the feed preparation area. The specific number and location of parking spaces is subject to change as the details of the dairy evolve. It is well understood that all parking must be on-site. There is also much opportunity, on the site, for impromptu parking.

Item 2 (Waste Treatment Parcel) Parcel 220813-11001 is part of the application. The General Application Form has three places to put parcel numbers. This letter clarifies this matter. Please advise regarding how to add this parcel number to the General Application Form.

Item 3 (DeJong & Den Boer Parcels) The principle parcels associated with the obsolete dairy operations are: DeJong, 230936-23011, and Den Boer, 230918-24001. There are also adjoining associated parcels. Land-use permits for these operations were not found. The beginning of these operations likely pre-dates the CUP requirements of the YCC Title 19. This proposed project remedies these non-permitted operations.

Item 4 (structure plans) The size of specific structures is subject to change until building permit application are submitted. The best summary of structure line up is the SEPA checklist item 11 which totals 67,800 SF, and which can be rounded to 70,000 SF. The larger buildings, parlor and commodity shed, are located near where they are expected to be placed, They are labeled Feed and Parlor. The 1800 SF waste separation building is on the drawing at the east side of the waste treatment area, but its size is dwarfed by the scale of the drawing. The eight 5,000SF animal shelters (40,000SF) will be in the resident corrals and will likely be cloth shades, not subject to permit.

Item 5 (Off-Street Parking) see item 1 above.

If you need any further assistance in this matter please call.

Timothy W. Bardell PE

Distribution: File.

Sincerely

00 A +7018



# CONDITIONAL USE PERMIT

FINAL Revised 10/1/15

#### **FORM**

Yakima County Public Services
128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

Please Answer the Following Questions (Please attach a separate sheet if needed):
1. Are you applying for a: Type 1 🔀 Type 2 Type 3 Type 4
2. What is the proposed use, as listed in YCC Table 19.14-1? Dairy
3. What is the size of the subject property? (Amount of acreage or square feet): 94 Arces
4. What is the size and use of structures <u>currently</u> located on the property?
5. What is the size, height and use of structures proposed to be placed or constructed? Apr. 70,000 Saft
6. List other permits and approvals that will be required.  Bully Gally permis
7. Will the project be conducted entirely within a structure?   Yes No
If no, explain what outdoor activities would occur: Typical dainy Activities
8. Total number of employees? 35-40
9. How many parking spaces are you proposing? Existing: O Proposed: 40 Surface Type: packed start
10. Will you have a sign?   Yes (if yes, please answer the following questions.)   No
a. How many signs are proposed?
b. What is the square footage of the sign?
c. What is the height of the sign?
d. Will the sign be illuminated?  Yes  No
e. If the sign is illuminated, how will it be illuminated?   Internally  Externally
f. Where will it be located?
11. What is the name of the road that the proposed/existing access is located on?
a. Is the road a: No County Road   State Highway   Private Road
If the road is a private road, is there an existing Road Maintenance Agreement?   Yes   No
(If yes, please provide a copy)
b. Is the road constructed out of: N Pavement Gravel Dirt
c. How wide is the Right-of-Way/Easement? 25ft
d. How wide is the surface of the road?
12. How will you manage storm water runoff? Shopy Suche ses to bold in pools

13. Fencing (If applicable check both)? New
a. Fence Material: proe Cable
b. Will the fence be view obscuring fence? Tyes X No
c. Will you be placing barbed wire on the top of the fence? Yes No
d. What is the total height of the fence (including the barbed wire if proposed)? 4.5 ?-
14. Are you proposing any site screening or landscaping?   Yes  No
If yes, what type and what is the location?
15. What is the proposed source of irrigation water? None
16. What are the days & hours of operation? Days: Hours: Hours:
17. Will the operation be seasonal? If so list months of operation:
18. Is any outdoor lighting proposed?  Yes  No
If yes, what is the proposed location(s)? Lights Aroud pens and buildings
19. What is the proposed source of domestic water?
a. Public Water: Name of provider:
b. Community Well: What is the well number:
i. Where is the well located?
ii. Is there an existing Well Maintenance Agreement?   Yes   No
(If yes, please provide a copy)
c. Nindividual Well
20. What is the proposed method of sewage disposal?
a.   Public Sewer: Name of provider:
b.   Community Septic System: Where is the septic system located?
c. 1 Individual Septic System
d. Other explain:



# ANIMAL FEEDING OPERATION

FINAL Revised: 10/1/15

#### **FORM**

Yakima County Public Services
128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

Ple	ase Answer the Following Questions:
1.	Are you proposing an:  ☐ Animal Feeding Operation (AFO) ☐ Concentrated Animal Feeding Operation (CAFO) ☐ Dairy
2.	When was your Dairy Nutrient Management Plan last updated and approved? LAST Yeak
3.	How many employees: Full Time: 35-40 Part Time:
4.	Describe the type of deliveries to and from the property: Feed de lower, milk pickups
5.	What type of vehicles will be visiting the site? <u>Semi-frucles</u> . personally ears
6.	How many vehicle trips will be made to the property per day? 50-60
7.	What sign(s) are planned to be installed on the site? None
8.	Where will the sign(s) be located?
9.	Are you proposing any off-site sign(s) $\square$ Yes $\square$ No If yes, describe their location:
10.	How many parking spaces are: Existing: O Proposed: 40
11.	What is the existing/proposed surface type for the parking spaces?   Paved A Gravel
12.	Where will the loading zone be located? In front of the milky barn
	How will storm water runoff be managed? Sloping the pond to holding ponds
	What type of fencing, screening or landscaping is proposed? pipe   Cable
	Is any outdoor lighting proposed? Yes \(\sigma\) No
	If yes, describe the type and location: Around the pens and buildings
16	Indicate the source of irrigation:

17.	What is t	he proposed source of domesti	c water?				
	☐ Public Water System (City, Nob Hill Water, County)						
	☑ On-s	ite individual well					
	□ On-s	ite shared or community well	Name:				
			ID#:				
			Location:				
	□ Othe	r:					
18.	What is t	the proposed method of domest	tic sewage disposal?				
	□ Publ	ic Sewer System (City, County	)				
	M On-s	ite individual septic system					
	□ On-s	site shared or community septic	system Location:				
	☐ Othe	r:					
19.	How ma	ny gallons of water are expecte	ed to be used per day?				
	Please pro	ovide the following information	n in your attached narrative:				
	델	Proposed methods of waste n	nanagement				
	₫	Odor Control					
	函	Vector Control					
	Ø	Silage Management					
	<b>5</b> 0	Track-Out Control					
	ı <b>X</b>	Howe the waste water system	s/lagoons are lined				

Revised 07/26/18

# VAKIMA.

# **CONDITIONAL USE PERMIT**

#### **FORM**

Yakima County Public Services
128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

Please answer all the following questions with narrative when required (If a question is not applicable, write N/A.) Your narrative should be described in detail which will expedite the review process. You may refer to Yakima County Title 19 to show how your proposal meets the legal requirements in the code. <a href="http://codepublishing.com/wa/yakimacounty/">http://codepublishing.com/wa/yakimacounty/</a>

			Annotation by Planner
1.	What are you proposing	? NEW DADRY FACILITY	
2.	Have you had an Early A	ssistance Meeting? 🗌 Yes, Case no 🔀 No	
з.	Are you:		
	a. Proposing a <b>new</b> stru	ucture(s). 🔀 Yes 🔲 No	
	b. Changing the Use of	an <b>existing</b> structure? 🗌 Yes 🏻 🗵 No	
	used for? Provide	yes to either a. and/or b. above, what is the structure e details (such as: type of business, estimated s, will the new structures be pertinent to any existing	
	Milking Parlor,	Feed Comodity Shed,	
			·
	••••		
	II. What are the din	nensions (length, width, height) of new structure(s)?	
	16K5F	Parter approx 60 x 260	;
	10 KSF	Parlor approx 60 x 260  Connodity Shad approx 60x 165	
4.	Check other permits that		
	Building	Fire & Life Safety	
	Grading	☐ Manufactured Home Placement	
	<b>∑</b> SEPA	☐ Critical Areas	
	☑ Weil Approval	▼ Septic Approval	
	Other		

	. If No, des park):	ribe the outdo	or activit	ies (E.g., o	utdoor eau	ng, piayg	rouna, <sub> </sub>	
	Calfl	correls,	Fe	eding	-		<del></del>	
b.	outdoor u	ne approximate se area(s)?				apacity o	— f your —	
с.	machinery	e of noises w , vehicles)						
	V 03, 01.	<del>9, 200</del>	11/6					
	<u>EES</u> ber of Full-tin	ne <u>40</u> Pa	rt-time _	S	easonal			
Numl Maxii	EES ber of Full-ti mum numbe	ne <u>40</u> Pa	rt-time _	s	easonal			
Numl Maxii What	EES ber of Full-ti mum numbe t are the day	ne <u>40</u> Pa	rt-time	s	easonal			
Numl Maxii What	EES ber of Full-ti mum numbe t are the day	ne <u>40</u> Par at any given sh	rt-time nift eration? ( 4 - 7	s	easonal			
Numl Maxii What	EES ber of Full-tin mum numbe t are the day Monday	ne <u>40</u> Par at any given shall & hours of ope	ert-time _ hift/_ eration? ( 4 ~ 7	s	easonal			
Numl Maxii What  Numl Vhat	EES ber of Full-tin mum number t are the day Monday Tuesday	ne <u>40</u> Par at any given shall & hours of ope Hours <u>2</u>	ert-time _ hift/_ eration? ( 4 ~ 7	s	easonal			
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Numl Maxii What  Numl T T S S S	EES ber of Full-tin mum number t are the day fuesday Vednesday hursday riday aturday unday	ne 40 Par at any given shall be hours 2. Hours	eration? (	S	easonal			

PARKING & LOADING (YCC 19.22)
10. How many existing parking spaces do you have?
a. Surface type (E.g., paved, gravel, dirt)?
11. How many <b>new</b> parking spaces are you proposing?
a. Surface type (E.g., paved, gravel, dirt)?
12. Does the use require loading or unloading from trucks or other large vehicles?
▼Yes □ No (If yes, designate areas on your site plan.)
Note: Depending on the proposed use, Americans with Disabilities Act (ADA) facilities may be required. Please contact the Building Division on the 4 <sup>th</sup> floor.
SIGNS (YCC 19.20)
13. Will you have signage? 🗌 Yes 🔀 No (if yes, please use the separate sign form.)
PRIVATE ROAD OR SHARED DRIVEWAY (YCC 19.23)
14. If you are on a Private Road or Shared Driveway, is there an existing Road Maintenance Agreement?
Yes No (if yes, please attach a copy to your application)
15. What is the name of the private road? Un assigned
16. Is the road paved, gravel, dirt? Surface as needed
17. What is the width of the road?
19. Have you been told you may need to do Road Improvements? Yes No
a) If yes, have you met with the Transportation Division? Tyes X No
Please explain
STORMWATER
20. How are you proposing to manage your stormwater runoff?  Contain on Site
21. Will the proposal disturb more than one acre of ground? 🔀 Yes 🗌 No

FENCES (YCC 19.10.040(9))	
22. Is there an existing fence? 🛛 Yes 🗌 No (If yes, answer the following)	
a. Fence Material Rubed wire,	
b. Is the fence a view obscuring fence? ☐ Yes 🔂 No	
c. Is there barbed wire on the top of the fence? 🔀 Yes 🗌 No	
d. What is the total height of the fence (including the barbed wire)?	
23. Are you proposing a <b>new</b> fence? 🛛 Yes 🔲 No (If yes, answer the following)	
a. Fence Material Pipe, Coble, Sucker Red	
b. Will the fence be a view obscuring fence?  Yes  No	
c. Will you be placing barbed wire on the top of the fence? 🗌 Yes 🕱 No	
d. What is the total height of the fence (including the barbed wire if proposed)?	
24. Are you proposing, or do you have a retaining wall and/or recreational screen?    Yes No (If yes, please describe)	
SITESCREENING AND/OR LANDSCAPING (YCC 19.21)	
25. Does your proposed use require?	
Sitescreening? Tyes XNo (E.g., fences, walls)	
Landscaping? Tyes X No (E.g., trees/shrubs/groundcover)	
If yes, what type (E.g., trees/shrubs/groundcover/view obscuring)?	
Indicate the locations on your site plan, E.g. parking areas, along street frontages, perimeters.	
What is the proposed source of irrigation water?	

OUTDOOR LIGHTING (YCC 19.10)	
26. Is any outdoor lighting proposed? 🔀 Yes 🗌 No	
Buildings of Corrols	
If yes, indicate type and the locations on your site plan.	
<u>WATER</u>	
27. Does this project require potable water? 🔀 Yes 🔲 No	
28. What is the proposed source of potable water?	
a. 🔲 Public Water: Name of provider:	
b. Community Well: What is the well ID number?	
i. Parcel # where the well is located?	
ii. Is there an existing Well Maintenance Agreement? 🗌 Yes 🔲 No	
(If yes, please attach a copy with this application)	
c. 🔲 Shared Well	
i. Parcel # where the well is located?	
ii. Is there an existing Well Maintenance Agreement?  Yes No	
(If yes, please attach a copy with this application)	
d. 🔀 Individual Well	
e. Other, explain:	
SANITARY DISPOSAL	
29. Does this project require sanitary disposal? 🔀 Yes 🔲 No	
30. What is the proposed method of sanitary disposal?	
a.	
b.  Community Septic System:  Parcel where the septic system is located	
c. 🔀 Individual Septic System	
d.   Other, explain:	

	T
COMPLETION OF PROPOSAL	
31. What is your proposed timeline for completing your proposal? If phases are	
proposed, please describe in detail.	
Start building whom parmits obtained	
•	
	•
	•
,	

All answers to the above questions must be on this form.

However, if additional space is needed, you may attach additional narrative.



FINAL Revised 10/01/15



Yakima County Public Services

128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
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The Narrative Form is designed to help you, the application review, interested agencies, and adjacent property owners to the proposal understand the scope of your project and how your project meets the legal requirements in the Yakima County Codes. You should refer to the appropriate sections of the ordinance when describing your proposal if applicable. You can obtain a copy of the ordinance in our office or access it on the internet at:

#### http://codepublishing.com/wa/yakimacounty/

<u>Narrative Content:</u> Please tell us the "who", "what", "where", and "why" of your proposal. A list of typical content is provided below. Please do not limit your project's description to just these items. In order for us to conduct a timely review of your project please <u>be as detailed as possible</u>. Any missing/confusing information could result in the delay of our review.

Note: Not all content listed below will be pertinent to your proposal. These items are suggestions in order to help you draft your narrative.

#### Suggested Content:

- Describe the current use of the site including all existing structures with their dimensions, square footage and usage.
- Describe the proposed use in detail (including but not limited to the type of business and/or use, hours and days of operation, number of employees, number of people living on-site, maximum number of customers and/or guests, changes or additions to the driveways or other access points, the type of mitigation or adjustment requested).
- Describe which standards are proposed to be adjusted and justify why the standard needs to be adjusted.
- Describe any new or existing structures to be used as part of this proposal.
- Describe how the proposed use will be pertinent to the proposed/existing structures.
- Describe any parking facilities (number of spaces and surface type), landscaping, signage, and lighting that will be associated with your proposal.
- Describe your access to the property and the route of travel to the site.
- For commercial operations describe the travel ways that will be located onsite.
- Describe the timelines for completion of your proposal.

Please remember that your narrative must explain in detail the specifics of your proposal and any missing information may result in the need for future reviews. Your narrative can be typed and printed on a separate sheet of paper with "See Attached" written below, or you may print out legibly your narrative on the lines provided.

### SEE ATTACHED

# Sage Brush Dairy Descriptive Narrative

Prepared by: B7 Engineering

PO Box 487

1614 Eastway Drive Sunnyside WA 98944

509-837-8600

# Sage Brush Dairy

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- (1) Letter, Department of Archeology & Historic Preservation to Laurie Crowe, Jake Veldhuis/Windmill Estates New Feed Lot Project, Dated December 21 2015, 1 page.
- (2) Letter, Department of Fish and Wildlife, to Byron Gumz, Yakima County, WDFW Shrub-Steppe habitat Survey and potential Mitigation Options on Proposed CAFO, Dated January 26, 2016, 3 pages.
- (3) BaramS, et al, Infiltration Mechanism Controls Nitrification and Denitrification Processes Under dairy Waste Lagoons, Journal of Environmental Quality, Sept-Oct 2012, 1 page.
- (4) Davis Pumps & Electric Motors, INC. Well Draw Down Report, 12-31-20115, 2 pages.

#### Attention

Dairies and Feedlots are subject to the following RCW regarding sharing of information. If you are providing information to a member of the public make sure you are in compliance.

#### RCW42.56.610

Certain information from dairies and feedlots limited-rules.

The following information plans, records, and reports obtained by state and local agencies from dairies, animal feeding operations, and concentrated animal feeding operations, not required to apply for a national pollutant discharge elimination system permit is disclosable only in ranges that provide meaningful information to the public while ensuring confidentiality of business information regarding: (1) Number of animals; (2) volume of livestock nutrients generated; (3) number of acres covered by the plan or used for land application of livestock nutrients; (4) livestock nutrients transferred to other persons; (5) crop yields. The department of agriculture shall adopt rules to implement this section in consultation with affected state and local agencies.

[2005 c 510 § 5. Formerly REC 42.17.31923.]

# Sage Brush Dairy

#### Introduction

The FRH Enterprises LLC acquired two dairies, Den Boer, and DeYoung located in the Grandview vicinity. These dairles need capital improvements, but also need sustained operations for the sake of the cattle. This application proposes to build a new dairy on unimproved agricultural land south of Mabton, (Sage Brush Ranch, SBR). When complete, operations at these older dairies will be moved to SBR and the dairy facilities at Den Boer and DeYoung will be demolished and the farm land returned to farm land. This narrative will describe the operation and specific details that are not otherwise presented in the SEPA Checklist and the Conditional Use Permit Application. It will also present arguments supporting the position that this project should be approved.

In 2014 FRH Enterprises purchased 1456.94 acres on 13 parcels in the area east of Glade Road and south of the Sunnyside Irrigation District canal. 1130.69 acres of these parcels are adjoining. On two adjoining parcels 2301817-21001 (160.07 A), and 230808-33001 (35.1 A), After many delays, Fryslan Ranch gained approval (SEP2016-0007, CUP 2016-0019) to build a calf yard covering about 30 acres. Construction has started.

The above mentioned acquisitions has identified for consideration a need to build a new highefficient dairy facility on this otherwise unimproved agricultural land. This facility does not increase the dairy herd size in Yakima County but consolidates operations to gain efficiency using economy of size. There are also gains in efficiency by co-location of facilities.

The two facilities to be consolidated both have about which qualifies them as a Concentrated Animal Feeding Operation (CAFO). This new facility will be built with an ability to add cows as future opportunities to acquire other smaller dairies and milk production base becomes available. Due to its potential size, this facility will be a CAFO, which triggers a SEPA Check List (environmental review) and Conditional Use Permit.

This facility will have corrals, cow shelters, a milking parlor, feed storage, mixing, and distribution facilities, and waste handling facilities. The site is chosen for several compelling reasons:

- 1. The land is owned by and in control of FRH Enterprises.
- 2. The land has the proper zoning for a Dairy.
- 3. The location is relatively remote from general population, reducing public disfavor.
- 4. The area has 4 other CAFO size operations within 1-1/2 miles, thus making this not a

- new nuisance to the area.
- 5. The depth of the water table is deep enough to claim no threat of contamination, by liquid and solid wastes.
- 6. The natural ground contours are close those necessary thus reducing ground preparation costs.
- 7. The adjacent dry-land parcels can be used for waste dispersion.
- 8. The operation has two associated facilities within 1-1/2 miles, thus improving logistics.
- 9. Climatic conditions reduce annual waste water inventories.

#### **Operations**

This section discusses envisioned operations for the Sage Brush Dairy.

#### **Water Source**

The Sage Brush Dairy will draw water from one of two wells under the exempt water use of stock watering purposes from the deep Grande Ronde Aquifer. The agglomerate of adjacent parcels have 4 wells, and two wells will be drilled to pull water from the Grand Ronde Aquifer, estimated depth 1200 feet. These new wells will be the primary source of water. The other wells could be used as a backup supply in the unlikely event of multiple equipment failures. The water will be used for stock watering and related accessory uses. For a herd of milking cows water usage will be near

One accessory use will be parlor cleaning.

Yakima County Code YCC12.08.050 requires applicants for a building permit provide evidence of adequate water supply. YCC12.08.010 defines the Yakima County Water Resource System for the domestic water uses and does not address exempt agricultural uses such as stock watering. It is the position of the Sage Brush Ranch that this project is exempt from the requirements of YCC12.08.050.

The four existing wells for this operation are listed in the following table

Year	Well Tag #	Well log #	Size	Depth	Test Capacity	<u>Name</u>
1996	ACE-511	121501	6"	122'	100 gpm	Alberto Molina
1997	ACL-582	122057	6"	157'	23 gpm	Cindy Crawford
2015	BIF-429	1050530	8"	765'	200+ gpm	Fransisca V
2015	BIF-430	1035873	8"	370 <b>′</b>	150+ gpm	FRH Enterprises

These four wells draw from three different aquifers, Local shallow, Saddle Mountain and Wanapum. Ultimately there will be six wells from four different aquafers that will provide reliability. One concern of the 2015 Feed Lot Environmental Review was potential drawdown of the deeper Wanapum aquifer. Although the BIF-429 will remain available, its use would only be for extreme conditions, or as directed by water resource authorities. Policy would be to draw from the saddle mountain source before considering the Wanapum source. But with two wells from the Grande Ronde Aquifer use of the Saddle Mountain or the Wanapum aquifers is unlikely.

Another concern of the 2015 review was an increase in water usage and a concurrent reduction of in-stream flows to Yakima River. Ground-water draws in the Yakima Valley are not increased by this new facility because this facility does not increase the cattle populations in Yakima Valley. One can justify claiming that ground-water draws are less due to greater facility efficiency gained by the scale. The point of withdrawal will shift from the wells at the current operations to one the deeper Grand Ronde Aquifer. The water draws from wells at the previous cattle operations will see reductions at least equal to the draws at this new facility.

Whereas the wells at the current operations draw from the Saddle Mountain and Wanapum aquifers, this facility will draw from the deeper Grand Ronde aquifer which has relatively few users. This exempt water usage is not to impact higher seniority water right users. Drawing from the deeper Grand Ronde Aquifer is the least likely to impact other water users. If needed to satisfy water resource officials, ground water withdrawals can follow a protocol dictated by water resource conditions.

For the 2015 review, draw down tests were performed to observe the effect of a heavy draw on the wells. Well ACE-511 was observed to drawdown 18 feet when 61 gpm was pumped. The drawdown came to equilibrium in 90 minutes, the test duration was 28 hours.

Well BIF-429 was also tested. The volume was initially 110 gpm, and equilibrium drawdown of 6 feet was achieved in 90 minutes. The flow was increased to 200 gpm, and drawdown equilibrium was achieved in less than an hour measured at 10 feet. When the test was completed, the well recovered in 10 seconds. The duration of the test was 28 hours.

Both of these test indicate good water transmittance within the water bearing strata. This good water transmittance indicates water withdrawals for this dairy are not going to impact local residential wells.

#### Nutrient Management Plan

The parent company to SBD has six dairies, each with an updated and approved Dairy Nutrient Management Plan (DNMP). All of these DNMPs share a common plan for dispersion of liquid and solid waste. This global dispersion plan includes solid waste streams from all its cattle operations in the Yakima Valley.

The contents of these DNMPs is confidential, protected from general public dissemination by RCW42.56.610, Certain Information from Dairies and Feedlots Limited-rules.

These DNMPs are based on the number of animal units and accounts for meteorology, soil conditions, and farming practices at the time the DNMP was prepared. Language in the DNMP required that it be amended if the total animal units exceed 110% of the animal units when the CNMP was prepared.

These DNMP describe manure quantities, waste water storage requirements, and field application methods at agronomic rates. Total waste quantities are calculated based on the following factors: herd size, waste water volume, and storm water runoff including runoff from a 24-hour, 25- year storm event.

These DNMPs address three principle nutrients: nitrogen, phosphorus, and potassium. Generally, phosphorus and potassium will precipitate in the soil and become relatively immobile. Potassium is generally not considered a pollutant. Phosphorus pollution is controlled by preventing soil erosion.

Nitrogen sourced from the dairy nutrients is primarily in the form of organic matter. Organic nitrogen is a natural slow release material. The second form of nitrogen is Ammonia in the ion form (NH4+) which can bond with multiple soil components rendering it immobile. The third form of nitrogen and the minority component is Nitrate ion (NO3-) which is water soluble. It does not bond readily with soil components and with excessive soil moisture will migrate with the moisture below the root capture zone.

Nitrate Nitrogen is the nutrient of most concern, due to its ability to migrate while dissolved in surface waters to ground water aquifers. Relatively recent studies indicate that nitrate migration is halted by a non-saturated vadose zone about 2 feet thick between the nitrate source and the water table. At this proposed site, well logs indicate the vadose zone is about 50 feet thick. One can claim this site is one of the best sites in Yakima County for locating an environmentally friendly dairy.

As a matter of policy and good practice, all three macronutrients are tested at the application fields and these records are inspected by WSDA along with the entire facility on an annual basis. Applications of nutrients are timed to match crop growth and rates to match plant needs, at agronomic rates. Many dairy fields are double cropped in a system with winter triticale as the fall/winter crop, and silage corn or Sudan grass as the spring/summer crop to maximize feed production, nutrient efficiency and nutrient removal.

Specific nutrient tests required include: nitrate-N, ammonia-N, phosphorus (P2O2), and potassium (K2O). Soil testing is conducted bi-annually on all fields, generally in the spring and fall.

The total nitrogen available in the liquid waste depends upon feed mixtures, cleaning water used, and the weather. Testing of the nitrogen concentration in the pond will be addressed in the DNMP. Liquid waste is applied to application fields via irrigation or by tanker at agronomic rates. Solid wastes will be hauled to various agricultural fields listed in the DNMPs and dispersed at agronomic rates or composted and sold as a co-product.

The use of solid animal manure as a nutrient source, generally, benefits the soil better than inorganic salt fertilizers. Manure ads organic matter to the soil, which improves

soil structure, air and water infiltration, and general tilth. Soil erosion is reduced and the moisture holding capacity is increased. Another benefit is that nitrogen and phosphorus are released slowly by action of microorganisms. This benefit conserves these elements and makes them available throughout the year as they are needed for plant growth.

The DNMP will includes a listing of land areas designated for application of solid and liquid manure at agronomic rates.

#### Wastewater Management

Waste water at a dairy comes from three sources: Parlor clearing, cow urine, and storm water event that exceeds the capacity for soil absorption.

The waste water from parlor cleaning is piped directly to the storage pond. The inflow is estimated to be about the storage pond of this waste stream. The pond is sized to provide a great degree of evaporative dispersion of this waste stream. The waste stream will be relatively High BOD due to manure and urine from the wash down of parlor floors. It will also have sanitation chemicals, usually sodium hypo-chlorite based. A pH balancing acid may be also be added according the management protocol of the sanitation product chosen for use.

Usually waste stream from cow urine is negligible due the soil capacity to absorb it and the high evaporation rate for the area. Climatic conditions can inhibit these dispersion mechanisms to where waste water from cow urine will accumulate and need disposal.

The pond will be sized to collect storm water for the 25 year storm event. Storm water collected from the residential corrals will be contaminated with manure, and will be handled according to the DNMP nutrients. When storm water is collected, the inflow may exceed the evaporative out-flow capacity and contents may need further dispersion by pumping or trucking to dispersion fields.

The waste water pond will be have a geo synthetic liner. The design will conform with standards set by the USDA NRCS. The design will likely use a 60 mil liner made from an acceptable material like high density polyethylene.

Waste water due to human sanitation facilities will be processed by an on-site sewer approved by Yakima County Public Health District.

#### Storm Water Management

The residential corrals will be sited to be higher elevation than waste water facilities so as to enable natural collection and flow to the waste water pond. Before corrals are built, a building platform will be established provide good drainage and surface water collection.

For most storm events the precipitation will be absorbed like a sponge by the bare soil. The soil will later release this moisture by evaporation. The fine particulates in cattle manure has been shown to plug pores between soil particles effectively reducing the effective thickness of the soil to absorb the storm water. Consequently, during colder and wetter conditions surface soil will become saturated and standing water can occur in the corrals before unaffected native soils become saturated. For this reason, the individual corrals will be contoured to easily collect this water and rout it to the collection pond. Paved areas for feed handling, will also be graded to catch basins to collect potential leachate and storm water to be routed to the pond.

Most of the year the evaporative dispersion of water offered by the pond will be keep up the volume the waste streams. In the event of the pond evaporation not keeping up with inflows due to colder or wetter weather, the pond water will be dispersed according to the DNMPs. Most of the storm water falling on the dairy is absorbed by the soil and evaporated.

Sources of off-site storm water are not likely to overwhelming the on-site facilities. The dairy will be located on a high point adjacent to a ravine with a Type 5 stream designation which provides natural drainage for the area. The ravine for this Type 5 stream will be unaffected by this project and continue to be a Type 5 stream. The stream bed will be about 10 feet below the elevations of the residential corrals.

#### Open Corrals

The Sage Brush Ranch Dairy will be equipped with residence corrals where cows wander freely within the corrals. Each residential corral will be equipped with watering toughs, feeding lockups, cow shades. Manure and urine is distributed throughout the corrals, but there are always areas where manure will accumulated. These accumulations of animal waste usually occur at the feeding alley/lockouts or near watering toughs. Tractors equipped with rubber blades will be used to pull these accumulations to the center of the corrals or to the designated manure drying yards.

Most of the year, manure and urine deposited in the corrals will dry without additional intervention. Accumulated dried manure is scrapped into piles and removed with loaders and trucks, composted on site. Trucks shipping this manure will use private roads on site. There will be no shipping of manure on public roads.

#### **Employee Training**

Employees receive training appropriate to their assigned tasks. Employees involved in manure and wastewater management are trained in the relevant procedures and requirements of the Dairy Nutrient Management Plans.

All employees are trained to correct or notify management if they observe conditions requiring corrective action. Areas emphasized in training include storm water management controls, manure and wastewater management controls, fly control, noise control, vehicle track-out prevention, work place safety, and spill prevention control and countermeasures plan.

#### **Nuisance Mitigations**

This section addresses perceived nuisances and methods used to mitigate these nuisances.

#### **Water Quality**

Water quality as related to this proposal is summarized as two concerns:

- 1. Prevent contaminated waste water from contaminating ground water.
- 2. Prevent leachates from solid wastes and feed stocks from contaminating ground and surface waters.

These two concerns are essentially the same but become distinct when viewing the dairy operation; waste water will be handled using methods different than manure (solid waste).

The concern focuses on one contaminate, Nitrate. Phosphate can be a concern for storm water runoff. A discussion of the nutrient mobility is found in the Nutrient Management Plan section. What is often ignored in the discussion is that nitrate is not a noble ion and mechanisms have been identified that decompose nitrate in the vadose zone.

The proposed site has a deep vadose composed of fine textured soils. Well logs indicate the vadose is about 50 (+) feet. The brown clay and brown sand layer varies in depth but there is at least 50 feet before entering a more porous water-bearing sand or gravel layer.

Although more studies are needed, there is evidence that 90-100 percent of the nitrogen compounds can be oxidized and then reduced in the first 2 feet of unsaturated soil. See Attachment (3). At least one soil profile under a decommissioned lagoon in Yakima County has been performed where nitrates were sampled at one foot intervals to 40 feet. This profile indicated a similar claim, that the nitrates are not penetrating the soil.

This deep vadose will prevent nitrate contamination of ground water due to manure handling and waste water storage. Capturing all accumulated storm water from corrals and manure handling areas; and then dispersing it according to the Nutrient Management Plan will prevent contamination of surface waters.

#### Odor Management

Some odor is a natural part of any cattle feeding operation. Manure production and land application involves manure handling at the storage site, hauling to the application site, and land application. These processes can lead to potential sources of odor.

The prevailing wind is from the west. The first facility directly east of the proposed SBD is a comparable sized dairy. This proposed dairy will be one of eight CAFO operations within 3 miles. This facility will be comparable in size to the others. Four of these CAFO facilities are west of the SBD. This proposed dairy will not add a new nuisance to the area.

The following practices are used to minimize odors:

- 1. Corrals are kept as dry as possible to provide the least favorable environment for odors and fly pupae (eggs).
- 2. The disposition of dead animals is accomplished in a sanitary manner and in accordance with all state and local laws.
- 3. Feed spillage around feed bunkers is kept to a minimum, especially under moist conditions.
- 4. All animal holding areas are kept clean of excess manure. This provides a less desirable environment for disease organisms to thrive and proliferate.
- 5. Manure is only applied on days when the wind is relatively calm so that the aerosols and odors are minimized from drifting onto neighboring areas

Since the SBD will not use flushing water, it is a relatively dry operation. The volume of odiferous waste water inventory will be significantly lower that the neighboring dairy to the east.

Storage pond odor is mitigated by stand-off distance from potentially offended people. This stand-off distance reduces concentrations of odorants in the air by dilution and mixing as the air migrates away from the source at the waste storage ponds.

#### Vector Control

The SBD will use four methods for fly management.

The first method reduces the potential for larvae nurseries in the waste handling area. Weeds along the edge of the lagoons can create pockets ideal for fly larvae. The pond will be lined and this liner will prevent growth of weeds.

The second method targets manure solids to be as dry as possible to reduce the suitability of manure as growth medium for larval development. This also promotes good habitat for fly predator reproduction.

A third point of vector mitigation is distance from potentially offended people. It is also noteworthy that there are six other CAFOs which are comparable in size to his proposed facility within 2-1/2 miles. This facility does not add a new nulsance to the area.

The fourth method is use of feed insecticide feed additives which rendering the manure unsuitable for fly larvae.

#### **Dust Control**

The most frequently traveled roadways and cattle walks on the property are covered with gravel or paved.

Fields not in active agriculture will maintain natural vegetation of sage brush, and grasses as ground cover to prevent wind erosion.

Active agricultural fields will have crops as ground cover. Agricultural practices will be chosen to minimize vulnerabilities to wind erosion such as leaving stubble after harvest.

#### Vehicle Parking

Due to the remote location, vehicle parking must be provided on-site for all employees and visitors. Gravel covered areas will be provided around the buildings used for operations. Trucks delivering commodities or receiving milk, will park adjacent to the delivery site until they are loaded or unloaded.

#### Vehicle Track-out

Access to SBD will from Glade Road (about 1.0 miles west) or the south end of Christensen Road (about 0.5 miles east). SBD operations will be supported by an on-site system of gravel or paved surfaced roadways. Use of these internal roadways substantially reduces the frequency of operation vehicles entering onto the public roads from the calf yard. The most frequently used internal roadways will be paved. Vehicles leaving SBD will transit at lease 1/2 miles on gravel road before access to the paved Glade Road or Christensen Road. This long transit effectively cleans tires to minimize mud from being carried onto public roads.

All conceivable transportation of manure will be done on the internal private gravel roads. Fields intended for spread of manure will not require transit on public roads. In the event of conditions requiring transit on public roads best management practices to prevent or reduce vehicle track out will be observed. The long ½ mile plus transits to public roads provide good tire cleaning.

#### **Noise Control**

Commodities delivered by truck are intended to be completed between the hours of 5:00 a.m. to 5:00 p.m., Monday through Saturday. No deliveries will be made on Sunday.

Dairy vehicle equipment will be well maintained, including repair and replacement of exhaust systems and mufflers as necessary.

The will not have a public address system or other source of load outside noise. Employees communicate by radio or cell phone as necessary.

Mitigating noise trespass is good stand-off distance between vehicle and bovine noise sources, and potentially offended local residences. Noise energy emitted and received by potentially offended recipients will be at or near ambient levels.

#### Glare

The SBD will be equipped with limited lighting for security and after dark operations. Luminaires will be selected with features to stop direct light trespass.

The proposed SBD will not have hard-roof cow shelters like most dairies in the valley. Cloth cow shades will be provided for summer shade.

Reflective glare will be minimized by choosing non reflective surface coatings and selecting roof colors that bend into the environment.

#### Communications and Complaint Resolution

The Veldhuis family is responsible for communications with neighbors and regulatory agencies, and for responding to any inquiries or complaints.

#### **Other Potential Concerns**

The 2015 review of the calf yard project identified two concerns dealing with Yakima Nation cultural resources, and wild life habitat and migration. This section will address these concerns:

#### **Cultural Resources**

The Yakima Nation to address their concerns on 6 Nov 2015 in a telephone call and e-mail. No response from the Yakima Nation was been received. Mr Robert Whitlan of the Washington State Department of Archeology and Historic Preservations was also contacted. He indicated that structures on these parcels would not affect known cultural properties. He did add that if something is found, that may have cultural significance to the tribe, that work at the site be suspended, and both the tribe and his office be contacted.

A copy of the letter of response from Mr Whitlam is provided as Attachment (1).

#### Wild Life Habitat

Comments from the Washington State Department of Fish and Wild Life (WDFW) in the previous application were motivated by not have access to the site to make observations and limited understanding of the scope of the project. An inspection of the site was conducted on 6 January 2016 by Mr. Scott Downes, a biologist with the department. During his site visit and subsequent historical studies of the area, he identified the area as part of a larger intact habitat important to shrub-steppe wildlife species.

As a mitigating compensation for this development, SBR LLC can offer reasonable concessions of land designated a conservation easement.

A copy of his report is provided as Attachment (2).

#### Compatibility with Neighboring Land Uses and Critical Areas

This proposal transfers what many people perceive as a nuisance land use to a more remote location. This proposed new dairy will be less visible to those offended by these operations than the current operations.

The location is undeveloped farm land without water rights. Adjacent land uses east, west, north, and south are compatible with this proposed dairy, all zoned AG. There are no track housing developments within 2 miles. The nearest urban center is the City of Mabton, about 1-3/4 miles northwest with several hundred residences within a square mile. There are 5 residences not associated with SBD within ½ mile. There are about 30 residences within 1 mile. All of these residences appear to be hobby farms. Within 3 miles are seven other CAFOs. The closest is the Van Boven Calf Yard adjacent and north. The Mensonides Dairy is located about 2 miles east. Veldhuis Dairy located about 2 miles north east. The Sunny Dene North Dairy is located about 2 miles west and the Hidden Valley Dairy and Sunny Dene South Dairy located about 2-1/2 miles west.

The Yakima Critical Area Map (Yakima County GIS Mapping) identifies no wet lands or critical areas on the SBD site. There is one Class 5 streams on the south end of one of the affected parcels, and two Class 5 streams on adjacent parcels to the east and west. These streams path ways will remain. There is no identified reason to alter these Class 5 streams.

Relevant sections of the zoning ordinance are quoted below, with notations as to the proposal's consistency.

The parcels that compose the dairy are zoned "Agricultural, (AG)":

15.11.010 Purpose. The Agriculture (AG) Zoning District is intended to preserve and maintain areas for the continued practice of agriculture by limiting the creation of small lots, permitting only those new uses that are compatible with agricultural activities, protection of agricultural lands of long-term commercial significance, and providing measures to notify and separate especially sensitive land uses from customary and innovative agricultural land management practices. (The proposal expands the facilities of an existing agricultural operation, helping to ensure the continued practice of agriculture through improving viability of the operation. The remote nature of this farm provides the intended separation of an especially sensitive land use (CAFO) from the customary use of residential. It would not introduce any new use incompatible with other agricultural activities). The specific intent of this zoning it to:

- (1) Implement the comprehensive plan which calls for the preservation of agricultural lands; (This parcel of AG land without water has very few practical uses in agriculture. This proposal puts to use otherwise non-productive agricultural parcel.).
- (2) Provide a zoning district to protect, stabilize and enhance the land base devoted to, or important for, the long-term commercial production of agricultural goods in Yakima County and to protect the best agricultural areas from conflicting uses and influences; (*This proposal will*

effectively increase the land base devoted to agriculture production, and will release previously used land for higher agricultural uses/production.)

(The remaining intent provisions of the zoning ordinance do not pertain to the proposal.)

The only Policy of the Comprehensive Plan that is relevant to the proposal is LU-ER-AG 1. "Encourage conservation of the County's high quality agricultural lands for productive agricultural use and protect the opportunity for these lands to support the widest variety of agricultural crops."

The proposal is consistent with this provision and other policies of Comprehensive Plan 2015 last amended 2007. The existing dairies are a productive agricultural land use, has many employees, and a multimillion dollar operating budget, thereby contributing significantly to the local economy. The proposed dairy will help the entire operation enhance efficiency with economic and environmental resources consistent with the County's goals of preserving productive agricultural lands and protecting farmers from nuisance complaints and lawsuits.



Allyson Brooks Ph.D., Director State Historic Preservation Officer

December 21, 2015

Ms. Laurie Crowe South Yakima Conservation District 200 Cheyne Road PO Box 1766 Zillah, Washington 98953

> Re: Jake Veldhuis/Windmill Estates New Feedlet Project Log No.: 122115-18-WSCC

Dear Ms. Crowe:

Thank you for contacting our department. We have reviewed the information you provided for the proposed Jake Veldhuis/Windmill Estates New Feedlot Project, Mabton, Yakima County, Washington.

We concur with the determination the proposed project will have no effect upon cultural properties.

We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive.

In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and the concerned tribe's cultural staff and cultural committee and this department notified.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in compliance with Executive Order 05-05. Should additional information become available, our assessment may be revised, including information regarding historic properties that have not yet been identified. Thank you for the opportunity to comment and a copy of these comments should be included in subsequent environmental

Sincerely,

Robert G. Whitlam, Ph.D. State Archaeologist

(360) 890-2615

email: rob.whitlam@dahp.wa.gov



1/3

### State of Washington

## DEPARTMENT OF FISH AND WILDLIFE

South Central Region • Region 3 • 1701 South 24th Avenue, Yakima, WA 98902-5720 Telephone: (509) 575-2740 • Fax: (509) 575-2474

January 26, 2016

Byron J. Gumz
Yakima County Public Services, Planning Division
Senior Project Planner, Environmental and Natural Resources Section
128 North Second Street
Fourth Floor Courthouse
Yakima, Washington 98901

Subject: WDFW Shrub-steppe habitat survey and potential mitigation options on Proposed

Concentrated Animal Feeding Operation (CAFO) for Wind Mill Estates

Dear Mr. Gumz:

Below is a summary of the habitat assessment that I made of the proposed site in January 2016. This letter summarizes the steps that WDPW requests of the applicant going forward to meet for our shrub-steppe habitat concerns over the site.

#### Background

Washington Department of Fish and Wildlife (WDFW) originally commented on an EIS scoping in August 2015 for the proposed Wind Mill Estates Concentrated Animal Feeding Operation (CAFO) that we had habitat conversion concerns over the proposed project. Following those initial comments, WDFW has learned that the applicant has scaled back the proposal and has located all planned facilities to the northern edge of the site, reducing the sprawl of the footprint to the south towards existing unconverted shrub-steppe habitat.

The application has stated to WDFW that the current revised footprint of the proposed project is 40 acres. These 40 acres sits south of the Mabton West Lateral Canal and lies at the base of the Horse Heaven Hills southeast of Mabton. The entire 40 acres would be converted into developed area and result in loss of shrub-steppe habitat. The parcel is parted on mapped priority shrub-steppe habitat shown on the WDFW Priority Habitats and Species (PHS) page: <a href="http://wdfw.wa.gov/conservation/phs/">http://wdfw.wa.gov/conservation/phs/</a>. A brief map showing the landscape and its mapping under PHS is included as an attachment to this letter. The landscape on which the site sits qualifies under the Yakima County Critical Areas Ordinance of:

"Upland Wildlife Habitat Conservation Areas (YCC Title 16C.11)

Upland Wildlife Habitat Conservation Areas (UWHCA) are areas within the county where state or federally designated endangered, threatened, or sensitive species have a primary association. Developments proposed within UWHCA may require a habitat assessment if it is determined that the development proposal could impact the UWHCA. The County relies on existing large lot

zoning districts to protect existing blocks of upland habitat and keep human pressure on animals low. The County also relies on existing State and Federal wildlife habitat programs."

Though the department makes an attempt to map areas of important habitat and species associations through the WDFW PHS system, not all upland habitat areas of importance for connectivity or association with sensitive species are mapped. The county relies on WDFW habitat biologists to determine the value of the land in question and to make assessments of the habitat's worth.

I made a habitat assessment of the site in January 2016 through a site visit on January 15, 2016 and review of additional office resources including soil maps and historical aerial imagery of the site. This habitat assessment outlined below allowed WDFW to clarify our position regarding habitat concerns and potential steps for habitat mitigation.

Habitat Assessment of the Proposed Site

I toured the site on the afternoon of January 15<sup>th</sup> with the applicant and found that the sagebrush of the site had been mowed recently, either in 2014 or 2015. The habitat assessment was limited to the proposed footprint of the proposed development and a small (perhaps 100 yards) buffer around the west and south side of the proposed footprint. Thus, habitat quality had been reduced but the ground has not been plowed or converted. A few sagebrush plants were still growing though even these plants no longer had structural habitat value due to being mowed to near ground level.

Wildlife evidence was limited to fresh deer scat which was frequently noted on the parcel indicating that the land was still being used by mule deer. A few isolated burrows of small mammals were noted, but none appeared to be of the quality that Townsend's ground squirrel would likely use if they were present within the footprint of the site. Horned lark, a bird of the grassland and shrub-steppe environment was also noted on the site. This was not the time period (January) when most wildlife is active but did allow me to determine habitat potential of the site.

In conjunction with the site visit, landscape maps showing aerial imagery and soil maps were consulted. Soils listed in the USDA NRCS Soil Survey for the site are a series of silt loams that are well drained and listed as at least 80 inches to restrictive bedrock. During the site visit, some scattered rocks were found on the surface indicating that the soil depth may not be consistent across the entire site, but most of the site is deep soil shrub-steppe habitat. Aerial imagery from May of 2015 indicated that while the current site may be mowed, the area is still part of a larger intact habitat that is important to shrub-steppe wildlife species, and if left unconverted and without continued mowing the site has the potential to return to habitat that a suite of State Candidate wildlife species may use including but not limited to Black-tailed Jackrabbit, Townsend's Ground Squirrel, Burrowing Owl and Loggerhead Shrike. As referenced above, the habitat continues to be used by mule deer.

WDFW Requested Steps to Achieve Habitat Mitigation for the Site

While the site has been mowed, it has not been converted to developed ground and further development of the site would lead to a reduction of shrub-steppe habitat, in particular deep soil shrub-steppe habitat that is critical for many shrub-steppe wildlife species that currently are

candidates for listing due to declines in this habitat in the Columbia Basin. Thus to compensate for these habitat losses, WDFW typically requires habitat mitigation to ensure that the net amount of shrub-steppe is not lost in the area. Our agency standard for shrub-steppe has been a 2:1 ratio where the applicant is responsible for mitigating losses at 2 acres of comparable habitat for every 1 acre that is converted from shrub-steppe habitat.

WDFW is requesting this 2:1 ratio for habitat mitigation concerns for the proposed Windmill Estates project. Thus, under the proposed 40 acre footprint the habitat mitigation would be 80 acres of comparable deep soil shrub-steppe habitat. This ratio is deemed appropriate based upon the site potential if no further conversion or mowing of the habitat is conducted. Habitat mitigation can be accomplished in a number of ways including working with WDFW to purchase habitat of comparable or better value in the general area or if an appropriate option for conservation easement exists on the applicant's land that can also be a possibility. Typically habitat purchases or conversation easements are most desired adjoining to tracts of intact habitat and in particular public lands that are secured from habitat conversion where they can be used by wildlife in the greater landscape context. Conservation easements would likely require some habitat restoration if the targeted lands were also mowed and would likely include stipulations to manage the land against weeds and keep cattle grazing off of the habitat. There are parcels of Department of Natural Resource (DNR) land in the immediate area and joining habitat mitigation options directly adjacent to those lands would be a sound strategy.

The 2:1 ratio is a general guideline, and comes with some flexibility. If a conservation easement could be arranged along with habitat restoration, it is possible that a slightly lower ratio of 1.5:1 might be possible. Details will need to be worked out with WDFW staff if habitat mitigation is pursued for this project. WDFW does not believe there is a high likelihood of sensitive wildlife occupying the site in its current mowed condition and is not requiring a wildlife survey as requested in the original scoping comments dated August 2015. Provided that the applicant keeps the converted habitat to the currently proposed 40 acres, does not plan to convert additional habitat to further reduce the shrub-steppe habitat to the south and works with WDFW on habitat mitigation at the suggested ratios listed above, WDFW will not oppose the building of this project over habitat conversion issues.

These are the steps that will satisfy WDFW habitat concerns if the applicant and Yakima County planning division decide to proceed with development of the project. We look forward to working with the applicant on habitat mitigation for this project. If you have questions regarding any of the above comments, please contact me at 509-457-9307.

Sincerely,

Scott Downes

Area Habitat Biologist

Cc:

Brent Renfrow, WDFW Perry Harvester, WDFW

PubMed ▼	
1 45.4104	Section and including the control of
	ATTACHMENT (3)

Commonwealth controls numification and denitrification processes under dairy waste lagoon. - PubMed - NCBI

Abstract

J Environ Qual. 2012 Sep-Oct;41(5):1623-32. doi: 10.2134/jeq2012.0015.

# Infiltration mechanism controls nitrification and denitrification processes under dairy waste lagoon.

Baram S<sup>1</sup>, Arnon S, Ronen Z, Kurtzman D, Dahan O.

#### **Author information**

#### **Abstract**

Earthen waste lagoons are commonly used to store liquid wastes from concentrated animal feeding operations. The fate of ammonium (NH) and nitrate (NO) was studied in the vadose zone below earthen-clay dairy farm waste lagoons using three independent vadose zone monitoring systems. The vadose zone was monitored from 0.5 to 30 m below land surface through direct sampling of the sediment porewater and continuous measurement of the sediment profile's water content variations. Four years of monitoring revealed that wastewater infiltration from the lagoon is controlled by two mechanisms: slow (mm d), constant infiltration from the lagoon bed; and rapid (m h) infiltration of wastewater and rainwater via preferential flow in desiccation cracks formed in the unsaturated clay sediment surrounding the lagoon banks. The preferential flow mechanism is active mainly during wastewater-level fluctuations and intensive rain events. The vadose zone below the waste sources remained unsaturated throughout the monitoring period, and all infiltrating NH was oxidized in the upper 0.5 m. The NH oxidation (nitrification) was coupled with NO reduction (denitrification) and depended on the sediment water content, which was controlled by the infiltration mechanism. Coupled nitrification-denitrification (CND) resulted in 90 to 100% reduction in the total nitrogen mass in the vadose zone, with higher removal under high water content (~0.55 m m). Mass balance of nitrogen and isotopic composition of NO indicated that CND, rather than cation exchange capacity, is the key factor regulating nitrogen's fate in the vadose zone underlying earthen waste lagoons.

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WELL LOCATION:
Open Land west of
620 Christenson Rd
Mabton, wa.

LAND PARCELL # 23080833001

CASING SIZE: /o "

Fund flow weter Sone Desti Finder
STATIC WATER LEVEL: 220'
DEPTH OF WELL. 2 2/2 /

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DATE 12-30-	HOUR	PUMPING LEVEL(ft.)	DRAW DOWN (ft.)	VOLUME. GPM	REMARKS: WATER CONDITION, TEMPERATURE, HARDNESS, DIRTY, CLEAN, DISCOLORED, ETC.
2015	Start	220'	0	0	New well-water
<del></del> -	8:15	220'	0	110	Started out murky
	8:45	226'	6	110'	and Grey. Cleared
	9;15	226'	6'	110	up in 20 minutes.
	9:45	227'	2'	150	Opened Cate Value up
	10:45	230'	10'	200	to see if well would
	11:45	230'	10'	200	draw down. Very little
	4:45	226'	6'	110	Level Change from 100GPM
2.31	8:15	226'	6'		to 200 GPM. Well recovere
.	12:15	226'	6'	440	in under 10 seconds

# DAVIS PUMPS & ELECTRIC MOTORS, INC.

2500 Mabton-Sunnyside Hwy. P.O. Box 566 Sunnyside, Wa. 98944 509-837-5303 (FAX 836-2000)

WELL	LOCA	TION:
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620 Christenson Rd. Mabbon, Wa.

LAND PARCELL # 2308 0843001

CASING SIZE: 6".

EQUIPMENT USED: Exsting Ship well flung, flow moter, Sonic Depth

STATIC WATER LEVEL: 56'

DEPTH OF WELL: NA

•			<del></del>	<del></del>	
<b>DATE</b> 12.30		PUMPING LEVEL(ft.)	DRAW DOWN (ft.)	VOLUME GPM	REMARKS: WATER CONDITION, TEMPERATURE, HARDNESS, DIRTY, CLEAN, DISCOLORED, ETC.
2015	Start	58'	-0	0	Test was done
	8:30	56'	0	63"	at 40 psi.
	9:00	72'	14'	61	Water was Clean.
	9:30	75'	17'	61	No Sand.
	10:00	76'	18'	61	NO Suite.
•	11:00	76'	18'	61	
·	12:00	76'	18'	61	
	5:00	76'	18'	61	
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	12:30	76'	18'	61	
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#### SEPA ENVIRONMENTAL REVIEW

Form # PLN HNR 003-SC-A Revised 4/1/10

(State Environmental Policy Act)

#### Submittal Checklist

Yakima County Public Services
128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

i e	(For staff use only)
APPLICANT: FRH Enterprises LLC	PHROMICIES:
PHONE: 504 - 637 - 3275	CASTAR OF A SECRETARIO
PROJECT DESCRIPTION (from application form):	ARC/SEC;
DAILY	DXV03SX0BV

**NOTE:** Your application is not considered complete for processing until <u>all applicable items</u> have been submitted.

**NOTE:** It is recommended that construction plans not be submitted until after Planning permits are obtained since your permit may be denied or changes may be require to the construction plans, resulting in wasted or additional consultant and permit fee costs.

SEE INSTRUCTIONS ON PAGE 2

RequireOfferrs (*) (supplifeithyzgypill <u>emi</u> )	ANIENTES ILAUTOONERALES (Generality Strin)	Verlierion
1. Complete SEPA Application Form  * Did the property owner of record sign?  * Is there a contact phone number listed?  YES NO	List other related applications (zoning, subdivision; etc.):	<b>₽</b>
2. Completed Environmental Checklist  • Are all questions answered?  • Did the property owner of record sign?  • NO	The second secon	
3. Complete written description of the project.		4
4. Site Plan  • Are all Site Plan Requirements met?  • Are all structures shown? (see air photos)  • Are all Critical Areas present shown?  • Have reproducible copies been provided?  VES NO  YES NO  YES NO		
5. Appropriate fees paid		<b>X</b>

By signing this form you are certifying t	hat the ab	ove ifformation	is attached and accurate.
		Juhn	
	// Y		9 111 10
Landowner/Representative Signature:	Kun	wh	Date: <u>9-14-1</u> 8
1	7	•	

NOTE: Representatives must be listed on the Application Form, with their signature.



## SEPA ENVIRONMENTAL CHECKLIST

Form # PLN ENR 003-SS1-A Revised: 8/12/14

SUBMITTAL SUPPLEMENTAL

Yakima County Public Services

128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901
(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

#### WAC 197-11-960 Environmental checklist.

#### Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter <u>43.21C</u> RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse

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(Ror Staff Use Only)
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DATE 9/18/2018
REVIEWED BY AHL:
PROJECT#
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CASE# SE 22018 - 000-12
RELATED EILES:
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CLR2018-00099
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impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

#### *Instructions for applicants:*

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

#### Use of checklist for nonproject proposals:

For nonproject proposals complete this checklist and the supplemental sheet for nonproject actions (Part D). The lead agency may exclude any question for the environmental elements (Part B) which they determine do not contribute meaningfully to the analysis of the proposal.

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

## A. BACKGROUND

1. Name of proposed project, if applicable:

Sage Brush Ranch

2. Name of applicant:

Sage Brush Ranch LLC

3. Address and phone number of applicant and contact person:

650 Hornby Road Grandview WA 98930

Ruurd Veldhuis

4. Date checklist prepared:

6 June 2018

5. Agency requesting checklist:

Yakima County Planning

6. Proposed timing or schedule (including phasing, if applicable):

Construction to start when permits are secured.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

None at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Type II Land Use permits, CAFO

SEPA.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Similar application for a calf yard was approved as CUP 20016-019, SEP 2016-007

10. List any government approvals or permits that will be needed for your proposal, if known.

Building Permits, Conditional Use Permit, Grading Permits, Road Approach permit.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

## **Build New Bovine Dairy:**

Project affects about 112 acres on four parcels totaling 819.79A Build about 65 A of cattle corrals

Cover about 10 acres with gravel for truck maneuvering.

Cover about 10 acres with asphalt concrete for feed lay down and feeding alleys.

Move about 120,000 yards of soil for corral grading

Build at least one building for waste management, about 1800 SF

Build one parlor/office building, about 16,000SF,

Build at least two structures for feed storage and processing, 10.000SF.

Build about 8 animal shelters, about 5,000 SF each

Build approx. 15 million gallons of waste water storage.

about 3A.

Grade for storm water collection and capture.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Address: Glade Road and Christensen Road, (address not assigned) Sections 08, 17 and 18, Township 23 East, Range 08 North Located about 2 miles South from Mabton WA.

## B, ENVIRONMENTAL ELEMENTS

STAFF USE ONLY

#### 1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.....

Generally flat with slopes down to North about 2 percent.

b. What is the steepest slope on the site (approximate percent slope)?

Localized slopes about 6 percent upward to the south.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Silt-Loams, specifically: Warden Silt Loam #177 & 179 (about 84%), Esquatzel Silt loam #33 (about 15%), per Soil Survey of Yakima County Area, Washington, published by the US Dept. of Ag. Soil Conservation Service.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

## None Identified

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Minor cuts and fills to establish desired Corral grading. Estimated volume over about 60 acres 120,000 Cu Yd. Excavate pond for waste water, about 75,000 Cu Yd.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Νo

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Affecting 4 parcels, totaling 819.79 acres, actual affected area about 112 acres.

Building Roofs

66,000 SF (112acres/43560sf/acre = 1.4 %

Paving about

218,000 SF estimate for transit and feed alleys

= 4.5%

Total Impervious Surface

= 5.9 %

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The ground us flat enough to neglect water erosion, wind erosion will be managed by vegetation or sprinkling with water as needed with tank truck/trailer.

#### 2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

During construction equipment motor exhaust, limited fugitive soil dust. During normal operations, some fugitive feed and soil dust, equipment motor exhaust, and flatulent emissions associated with bovine cattle. Estimated quantities: motor exhaust about 41 tons/year CO2, fugitive dust about 100 lbs/year, animal flatulence: CH4 about 160 tons/year, NH3 about 54 tons/year, H2S about 9 tons/year, VOC about 3 tons/year. (Derived from data obtained from ProCon.Org)

b. Are there any offsite sources of emissions or odor that may affect your proposal? If so, generally describe.

## None

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Apply best management practices for minimizing animal smells as much as practical: including animal diet, maintaining dry corrals, stacking manure solids to reduce exposed surfaces. Keep equipment motors in good repair. The remote location of the feed lot will contribute toward minimizing offense to public members.

#### 3. Water

#### a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Mabton West Lateral Irrigation Canal, about 1/2 mile distance.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No

5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No

b. Ground:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well? Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Yes – Water for stock watering, and cleaning, Parlor cleaning, and domestic purposes. Drawn from one of six wells. Approximately

Well Tag ACE-511 ACL-582 BIF-429 BIF-430 New well 1	Well Log 121501 122057 1050530 1035873 TBD	Depth 122' 157' 765' 370' 1200 approx	Test capacity 100 gpm 23 gpm 200+ gpm 150+gpm	Aquifer Local Shallow Local Shallow Wanapum Saddle Mt. Grand Ronde
New well 1	TBD	1200 approx		Grand Ronde
New Well 2	TBD	1200 approx		Grand Ronde

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Human waste processed by an on-site sewer systems approved by Yakima County Public Health.

Animal waste is collected and processed in according to an approved Dairy Nutrient Management Plan.

- c. Water runoff (including storm water):
- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water is the only conceivable source of run off. Most storm events will be absorbed by the dry corral surface soil and evaporated. For more severe storm events, corrals and paved surfaces will be graded to facilitate collection and routing to the waste water pond designed to contain at least the 25 year event. Most of the waste water will evaporate in the pond. Excessive waste water due to unusual wet years will be dispersed according to an approved Dairy Nutrient Management Plan. Water from high ground to the south will by the natural contours be diverted around the operation.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No. The waste water storage pond will be an engineered structure considering the soil permeability, climate, and other relevant factors. It will also be lined with minimum 60 mil synthetic liner or clay. The vadose is deep providing good protection and treatment in the event of a liner leak.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

d. Proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any:

The waste water ponds are located at a lower elevation than the residential corrals thus providing a natural gravity flow of waste water to treatment and storage facilities.

#### 4. Plants

- a. Check the types of vegetation found on the site:
- Deciduous tree: Alder, maple, aspen, other
- Evergreen tree: Fir, cedar, pine, other
- x- Shrubs
- X- Grass
- --Pasture
- --Crop or grain
- Orchards, vineyards or other permanent crops.
- Wet soil plants: Cattail, buttercup, bullrush, skunk cabbage, other
- -- Water plants: Water lily, eelgrass, milfoil, other
- Other types of vegetation
- b. What kind and amount of vegetation will be removed or altered?

All the natural vegetation located on the affected area will be removed about 115 acres. The balance of the site will be held in reserve until a business opportunity or need for the property is identified.

c. List threatened and endangered species known to be on or near the site.

## None identified

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

e. List all noxious weeds and invasive species known to be on or near the site.

Typical for Yakima Valley, including Kosha, Tumble weed, and others..

#### 5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

Birds: Hawk, heron, eagle, songbirds, other:

Mammals Deer, bear, elk, beaver, other:

Fish: Bass, salmon, trout, herring, shellfish, other:

b. List any threatened and endangered species known to be on or near the site.

None Identified

c. Is the site part of a migration route? If so, explain.

Yes, the parcel is designated on mapped priority shrub-steppe habitat shown on the WDFW Priority Habitat and Species. This designation qualifies this area as a critical area.

d. Proposed measures to preserve or enhance wildlife, if any:

Up to 95 acres can be designated a conservation easement to mitigate the loss of shrub-steppe habitat.

e. List any invasive animal species known to be on or near the site.

None identified

## 6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electric power for motors, lighting, and control. Conventional petroleum fueled internal combustion engines for equipment and vehicles.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

High efficiency lighting, and use of High efficiency motors.

#### 7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

Yes, Water contaminated with animal waste material is natural but a potentially serious contaminant to surface and ground water. It has high BOD, High e-coli counts, and high levels of phosphorous and nitrates. For this reason potential contaminated waste water will be captured and treated in accordance with an approved Dairy Nutrient Management Plan.

1) Describe any known or possible contamination at the site from present or past uses.

## None known

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

#### None known

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Storm water contaminated with bovine manure. The design will provide for collection and processing in accordance with an approved Dairy Nutrient Management Plan.

4) Describe special emergency services that might be required.

No new services required.

5) Proposed measures to reduce or control environmental health hazards, if any:

Provide berms, curbs, contours, and other features to collect and transfer manure contaminated storm water to a storage pond for dispersion as dairy waste. Solid wastes shall be treated and dispersed according the approved Dairy Nutrient Management Plan.

#### b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

#### None

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Bovine Animal noise. Equipment operation and motor noise. Traffic noise from deliveries, pickups and employee commutes.

3) Proposed measures to reduce or control noise impacts, if any:

Keep equipment and vehicle exhaust systems in good repair. Minimize operations during non-typical working hours.

## 8. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site is undeveloped AG resource without irrigation water rights. Adjacent north is an unassociated calf yard. Other properties to north are irrigated crop land and hobby farms. There are 5 residents within ½ mile of the proposed dairy. Adjacent properties south are undeveloped dry lands, some engaged in wheat production. Adjacent east, is an associated calf yard. Parcels west are undeveloped agriculture Land.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No, this property is undeveloped Ag resource. The property has been used for cattle grazing. This development will improved the property for cattle production.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No

c. Describe any structures on the site.

None

d. Will any structures be demolished? If so, what?

No

e. What is the current zoning classification of the site?

AG

f. What is the current comprehensive plan designation of the site?

Agriculture resource

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified critical area by the city or county? If so, specify.

Type 5 streams as illustrated on Site Plan. Where the road crosses this stream bed, a ford will be provided.

The area qualifies for designation as Upland Wildlife Habitat Conservation Area. The developer is willing to designate 1 acres as a conservation easement to mitigate each acre developed as a dairy.

i. Approximately how many people would reside or work in the completed project?

35-40 full time employees.

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

I. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

None

## 9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

c. Proposed measures to reduce or control housing impacts, if any:

None

## 10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

About 30 feet, structural rolled metal siding.

b. What views in the immediate vicinity would be altered or obstructed?

None Identified

c. Proposed measures to reduce or control aesthetic impacts, if any:

## 11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Night feed handling and corral lighting.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

c. What existing offsite sources of light or glare may affect your proposal?

None

d. Proposed measures to reduce or control light and glare impacts, if any:

Select low-trespass, high-efficiency luminaires. For night lighting.

#### 12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

None Identified

b. Would the proposed project displace any existing recreational uses? If so, describe.

No

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

## 13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation. This may include human burials or old cemeteries. Is there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None Identified, but the project planners are aware that artifacts of interest to the Yakima Nation may be found.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Washington State Department of Archeology (WADA) was consulted regarding the area as a Native American cultural resource. WADA instructed that if artifacts are found, the project will be halted until their significance is determined.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None

## 14. Transportation

a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.

Road access to the Dairy is provided from Glade Road (Mabton – Bickleton Road) and Christensen Road. Glade Road is a paved county road. From Glade Road access to county arterials, state and federal highways can be made. Christensen Road is gravel and provides similar access to other public roads. See Site Plan

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

c. How many additional parking spaces would the completed project or nonproject proposal have? How many would the project or proposal eliminate?

Employee parking is provided on site at the parlor and the feed commodity shed. As a practical matter all parking must be on-site. Other parking locations will develop at need is identified.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

About 70 vehicle trips per day including employee commutes, pickups and deliveries. About one half of these trips will be passenger carsthe other half will be trucks of various sizes.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

h. Proposed measures to reduce or control transportation impacts, if any:

#### 15. Public services

a. Would the project result in an increased need for public services (for example: Fire protection, police protection, public transit health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

None

## 16. Utilities

- a. Circle utilities currently available at the site <u>Flectricity</u>, natural gas, water, refuse service, <u>felephone</u> sanitary sewer, septic system, other.
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

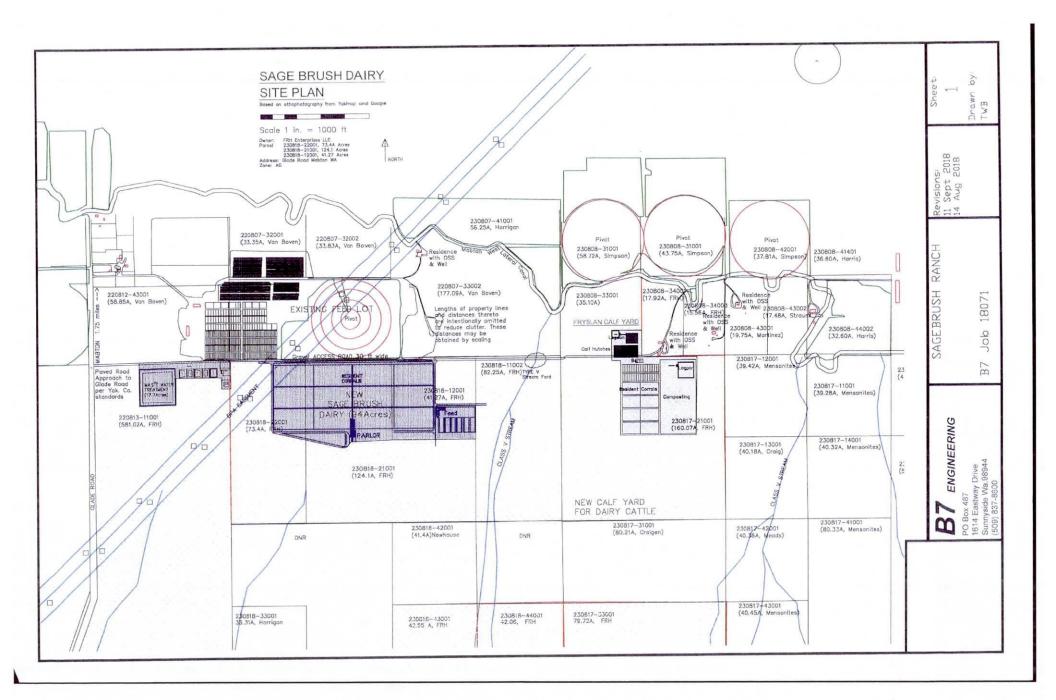
Electricity from Benton Rural Electric Association (BREA)

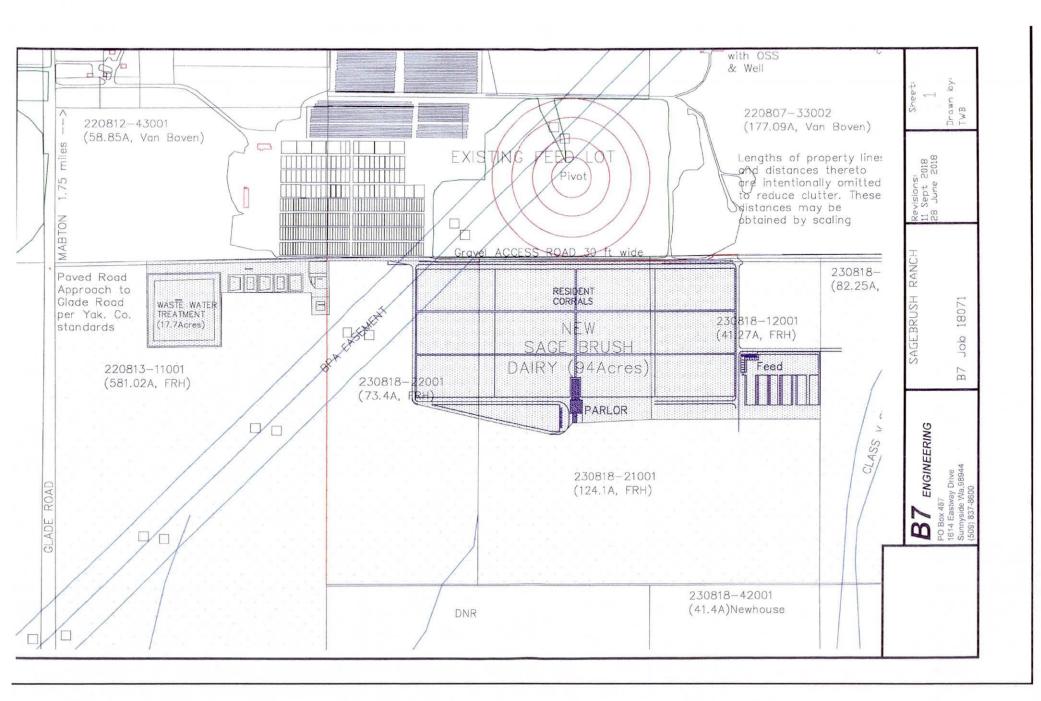
## **C. SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: \_\_\_\_\_

Date Submitted: 9-14-16







# MINIMUM REQUIREMENTS SITE PLAN SUBMITTAL CHECKLIST

FINAL Revised10/01/15

## Land Use Actions

Yakima County Public Services

128 North Second Street · Fourth Floor Courthouse · Yakima, Washington 98901

(509) 574-2300 · 1-800 572-7354 · FAX (509) 574-2301 · www.co.yakima.wa.us

This informational brochure will assist in the preparation of your site plan for project submittal. The minimum site plan information on this page is required. Check the box beside those items that you have included on your site plan. A sample site plan is also included for your assistance. If you need information or assistance please contact the Public Services at (509) 574-2300.

assista.	108. 1	f you need information of assistance please contact the Fuolic Services at (505) 577-2500.			
		Required Site Plan Information:			
		Paner size shall be 8.5 x 11 or 11 x 17. If multiple pages, provide an index sheet showing the entire sice.			
1	<b>₽</b>	Grid paper or picture backgrounds are <u>not</u> acceptable, the map must be reproducible			
2	双	Blue or Black Ink, in order that they may be photocopied.			
3	129	North Arrow (north should be pointing to the top of the page)			
4	120	Legend to include:			
<b></b>	SĮ.	Owner/Applicant Name			
	N	Date the Site Plan was drawn.			
	Z	Name, address and telephone number of the person preparing the site plan			
		Tax Parcel Number			
	×	Standard engineering scale of the drawing (at least: 1" = 200 ft.)			
5	母	Property line dimensions of all lot(s) involved in the project.			
6	6 5	The location, width and purpose of all easements (utility, access and/or irrigation) on the site and adjacent			
0 179	to the site.				
7	133	Location of new and/or expanded public and private utility infrastructure.			
8 🕸	FETS	Streets and access easements, with the name, dimensions, type (public or private) and road surface (paved,			
	rfbr	gravel or dirt)			
9	ŚĐ)	Location, dimension and design of off-street parking facilities and points of ingress (to) and egress (from).			
10	껳	Location of pedestrian and vehicular circulation patterns, sidewalks, trails and bicycle paths.			
	150	Location, shape, size, gross floor area, height and types of all existing and proposed structures, minimum			
11 5	ואמ	building setbacks from the property lines and other structures, and the total lot coverage.			
12	ÚZ	Togetion and dimensions of all proposed exterior land uses.			
10	regi .	The distance from existing and proposed structures to the centerline of state, county, or private access			
13	₫	roads.			
14	00	Location of structures on the adjoining lots, which may cause compatibility issues.			
		All major man-made and natural physical features such as railroads, canals, streams, creeks, drainage			
15	Non	ditches hills depressions steen slopes lakes shorelines, floodplains*, floodways, the 100-year base 1000			
	X	elevations etc. on-site or adjacent to the site. (*Boundaries of the 10 and 25-year moodplain using the			
		flood risk mans as provided by Yakima County as part of a mandatory pre-application meeting.)			
16	CXQ	Description of the extent to which any watercourse will be altered or relocated as a result of the proposal.			
17	口	Proposed location and dimensions of community and other open space.			
18	X	Existing and proposed landscaping, site screening, street trees and stormwater drainage facilities.			
19 🙀	[	Location of well or water systems within 100 feet of the subject property or within a 100 foot well control			
	林	zone and the distance from any structures within the well control zone.			
20	130	Proposed contours and grading as they affect lot layout, streets, and drainage ways.			
l	-m	Location of proposed or existing drain field area, extension area, and tank area as well as replacement areas			
21   5	EQ.	and distances to structures and property lines			
22		Location of adjacent public water, sewer main, fire protection systems and other underground facilities			
	80	within or adjacent to the development.			
		Within a UGA, Master Planned Resort or Rural Settlement show the existing topographic contours at			
23	EXI	intervals of not more than 5' when the ground slopes exceed 10%. Extend 100' beyond the boundaries of			
		the site.			
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