

## Livestock and Water Quality Site Visit



<b>Site Visit Information</b>	<input checked="" type="checkbox"/> First Visit	<input type="checkbox"/> Follow-up Visit
Prepared by: Mak Kaufman	Arrival Time: 1:45 pm	Departure Time: 2:20 pm
Date: 11/1/2012	Current Weather Conditions: Lightly raining and about 50 degrees F	

<b>Owner/Operator Information</b>	
Name: Bill Vanderlaan	Street: 7878 Goodwin Road
City: Everson, WA	Zip Code: 98247
Phone: (360) 966-57	Email: None

<b>Site Information</b>	
County: Whatcom	Watershed: Ditches that flow to Breckenridge Creek which is tributary to the Sumas River

General site description (include information about nearby waterbodies and description of farm conditions): On November 1, 2012 Ecology inspectors Chris Luerkens and Jesica Kirtkpatrick and I conducted a citizens' complaint driven compliance inspection (ERTS #637224) at Mr. Bill Vanderlaan's farm located at 7878 Goodwin Road, Everson Wa, 98247. Upon arrival we contacted Mr. Bill Vanderlaan and properly identified ourselves and explained that Ecology had received a water pollution complaint and that we were there to conduct a compliance inspection. Mr. Vanderlaan was completely cooperative and had already recognized that his management of his cattle was causing a water quality problem. In response, he had hired someone to build a fence on pasture land immediately east of the manure-contaminated corral. The fence had just been completed when we arrived and the fence builder was just leaving.

The complaint was generated by Re Sources for Sustainable Communities and stated that Mr. Vanderlaan's manure-contaminated muddy area in the corral constituted the potential to pollute because it is located directly adjacent to the east roadside ditch along Goodwin Road with only 5-10 foot vegetated buffer separating the contaminated area from state waters. See photos 1-4.

Mr. Vanderlaan stated that he was going to move the cattle to the newly fenced pasture the next day. I also explained that the size of the newly built corral was approximately the same size as the corral near the road that had already become a muddy, manure-contaminated mess. I explained that he had too many cows for this amount of land (approximately 20-30 cows on approximately 5 acres). I explained that this number of cows exceeded the land "carrying capacity of the land" and that the evidence/proof of that is that the manure contaminated muddy areas are generated.

I explained that he would also need to take steps to immediately stabilize the manure-contaminated area to prevent any future discharges of manure-related contaminants from flowing into state waters. I explained that he may be able to get winter wheat or winter rye to germinate and that he would need to apply seed at 150 - 200 lbs per acre to be able to provide enough grass growth to function as a soil stabilizing BMP. I also explained that: 1) he would need to create a dirt berm along his fenceline adjacent to the road to prevent the manure-related contaminants from flowing into state waters and 2) he should provide about a 25 foot apron of wood chips or gravel as Heavy Use Area Protection (HUAP) around the watering tank and feed hoops. I also explained that this would need to be underlain by geotextile and that it needs to be at least one foot thick. Mr. Vanderlaan also has some horses pastured adjacent to a spring that flows into the east Goodwin Road ditch that constitute violation of RCW 90.48. He agreed to provide a 35 foot buffer from that spring as well.

He agreed to implement the HUAP as well.

I explained to Mr. Vanderlaan that Ecology would be sending him a Warning Letter documenting the conditions on his farm that constitute violations of Washington State's Water pollution Control Act (RCW 90.48) and that to avoid formal enforcement that could include penalties, he would need to maintain the pasture from becoming a manure-contaminated muddy area like the corral near the road. He agreed. I explained that he could also seek technical assistance from Whatcom Conservation District and he declined and stated that he would take care of managing his livestock himself. Mr. Vanderlaan also stated that he rents pasture further south on Goodwin Road and on Stickney Island Road and pasture from Mr. Unrue in Ferndale.

### **Site Evaluation**

Stream Corridor and Areas Near Surface Water	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Bare, exposed, eroding soils <input checked="" type="checkbox"/> Contaminated run-off (active or potential) <input type="checkbox"/> Slumping stream banks and erosion <input type="checkbox"/> Overgrazing of grasses	<input type="checkbox"/> Absence of woody vegetation <input checked="" type="checkbox"/> Manure accumulations <input type="checkbox"/> Animal access to surface water <input type="checkbox"/> Livestock paths and trails along riparian areas	
Comments: There is no stream nearby, but Mr. Vandelaan's confinement area has the substantial potential to have contaminated runoff flow into state waters during rain events as it is located within 5-10 feet from the east Goodwin Road ditch.		

Confinement Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (10 ft) <input checked="" type="checkbox"/> Presence of mud and manure <input type="checkbox"/> Signs of previous runoff reaching surface water	<input type="checkbox"/> Polluted run-off reaching surface water <input type="checkbox"/> Roof runoff water flows to confinement areas <input checked="" type="checkbox"/> Adjacent land slopes toward surface water	
Comments: Extremely contaminated muddy area where Mr. Vanderlaan confines his cattle is located within 5-10 feet of the eastside Goodwin Road ditch.		

Stock Water	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (50-75 ft) <input checked="" type="checkbox"/> Overflow from tanks on to the ground	<input checked="" type="checkbox"/> Mud and standing water at tanks <input type="checkbox"/> Animals accesses stream for stock water	
Comments: I explained to Mr. Vanderlaan that to prevent the generation of the manure-contaminated muddy area in his newly fenced in area that he would need to implement Heavy Use Area Protections (HUAP) adjacent to his feed hoops. The best way to construct those is to provide an apron of approximately 25 feet in a semicircle if he placed his feed hoops and watering tanks adjacent to his fenceline. These need to be made of compacted layers of 1) railroad ballast, 2) then a layer of 3/4" minus gravel 3) then a layer of sand all compacted and underlain by geotextile.		

Upland Pasture Areas		<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input type="checkbox"/> Animal access to stream corridors <input type="checkbox"/> Distance to surface water (        ft)	<input type="checkbox"/> Signs of overgrazing and erosion <input type="checkbox"/> Manure accumulations and bare ground		
Comments: Mr. Vanderlaan has created a new pasture by fencing in a grass pasture east of his current manure-contaminated corral. To prevent the newly created pasture from becoming contaminated Mr. Vanderlaan will need to collect and store his cattle's manure in a covered, impervious manure storage. I explained that Ecology has cost-share available to aid him in implementing these structures.			

Manure Management		<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
Current manure management plan? No  Manure collected and stored? No, year-round pasturing  Manure storage properly sized? No storage  Manure storage covered? No storage  Manure being collected often? No, year-round pasturing	Manure stored on covered, impervious surface? No storage  Applied during growing season? Yes, year-round pasturing  Manure applied during non-growing season? Yes, year-round pasturing  Vegetated buffer when manure is applied? N/A  Manure applied or stored off site? No		
Comments:			

Other Areas of Concern
Comments:

Corrective Actions
<input checked="" type="checkbox"/> Install livestock exclusion fencing to keep animals at least 35 ft from surface waters (35ft minimum) Permanent buffers function most effectively to protect water quality and prevent invasion by weeds when planted and maintained with native shrubs and trees suited to the soils and hydrology of the site.  <input checked="" type="checkbox"/> Install off-stream stock water watering facilities and locate them at least 75 or more ft from surface to prevent risk of water quality impacts (minimum of 75ft)  <input checked="" type="checkbox"/> Collect manure frequently and store it in a dry, covered area with an impervious floor or deck  <input checked="" type="checkbox"/> Apply manure during the growing season at proper rates and times (minimum of 100ft setback from surface water, or the use of a 35ft vegetative buffer)

- ☒ Site and design confinement and manure storage areas to prevent pollution of surface and ground water
- ☒ Provide heavy use protection in confinement areas and at stock tanks to prevent run-off
- ☐ Construct stream-crossings and emergency water locations in ways that protect the stream
- ☐ Other Actions:

Photos Taken: ☒ Yes ☐ No

Sample Taken: ☐ Yes ☐ No

#### Additional Comments

Comments:

#### Ecology Contact Information

Name: Mak Kaufman

Regional Office: Bellingham Field Office

Phone:

Email: mak.kaufman

Physical Address:

1440 - 10th Street, Suite 102, Bellingham, WA 9822

Mailing Address:

1440 - 10th Street, Suite 102, Bellingham, WA 9822

Conservation District Referral: ☐ Yes ☒ No

Whatcom Conservation District  
6975 Hannegan Road  
Lynden, WA 98264  
(360) 354-2035  
ccheever@whatcomcd.org

A copy of this inspection form will be provided to your local conservation district.

Inspector Signature:



Date: November 10, 2012