

## 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: Chris Luerkens	Arrival Time: 11:55 am	Departure Time: 12:10 pm	
Date: 4/22/2014	Current Weather Conditions: Overcast and dry		

<b>Owner/Operator Information</b>	
Name: Gary DeBruin (D & M Calves)	Street: 716 E. Front St.
City: Lynden	Zip Code: 98264
Phone: 360-220-4341	Email:

<b>Site Information</b>	
County: Whatcom	Watershed: Lower Nooksack (Bertrand)
<p><b>General site description:</b> On this day Gary DeBruin showed me two of the sites where he keeps cattle associated with his business. <u>This inspection report is for Gary's facility located at 1324 Hampton Road.</u> Gary raises calves at this site. The cattle are confined to an area that has a cement floor and has a roof that covers much of the facility.</p> <p>Manure is collected and stored in a dry stack. There is also a standing manure tank that collects liquid manure.</p> <p>Other cattle that are not associated with Gary's operation are kept on this site by another owner. While inspecting Gary's operation I noticed that manure associated with the other operation may be discharging to the ditch.</p> <p>A ditch is located near the manure storage structure that drains to Kamm Creek, which is several hundred feet north of the facility. Based on the conditions observed and Gary's described management, there appears to be a very low likelihood that Gary's operation discharges pollution to surface waters.</p> <p>We did not inspect the barn.</p>	

### Site Evaluation

<b>Stream Corridor and Areas Near Surface Water</b>	<input type="checkbox"/> Evaluated	<input checked="" type="checkbox"/> Not Evaluated
<input type="checkbox"/> Bare, exposed, eroding soils	<input type="checkbox"/> Absence of woody vegetation	
<input type="checkbox"/> Contaminated run-off (active or potential)	<input type="checkbox"/> Manure accumulations	
<input type="checkbox"/> Slumping stream banks and erosion	<input type="checkbox"/> Animal access to surface water	
<input type="checkbox"/> Overgrazing of grasses	<input type="checkbox"/> Livestock paths and trails along riparian areas	
Comments: Animals do not have access to surface water or areas near to surface water.		

<b>Confinement Areas</b>	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (125 ft) <input 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: Animals are confined in the barn. Because the facility slopes slightly toward the ditch, continued careful manure management is important to ensure discharges do not occur.		

<b>Stock Water</b>	<input type="checkbox"/> Evaluated	<input checked="" type="checkbox"/> Not Evaluated
<input type="checkbox"/> Distance to surface water (___ ft) <input type="checkbox"/> Overflow from tanks on to the ground	<input type="checkbox"/> Mud and standing water at tanks <input type="checkbox"/> Animals accesses stream for stock water	
Comments: Not an issue.		

<b>Upland Pasture Areas</b>	<input type="checkbox"/> Evaluated	<input checked="" 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: Cows are confined and not pastured.		

<b>Manure Management</b>	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
Current manure management plan? NO Manure collected and stored? YES Manure storage properly sized? Unknown Manure storage covered? NO Manure being collected often?	Manure stored on covered, impervious surface? NO Applied during growing season? Manure applied during non-growing season? Vegetated buffer when manure is applied? Manure applied or stored off site?	
Comments: Manure from confinement area is collected and stored in a large dry stack on the north side of Gary's operation. The storage has cement walls and cement floors, but is uncovered. Solids are primarily taken from site by a composting operation. Some are spread during the dry season.  Surface water drains to an above ground cement liquid manure tank. Liquids are spread during the dry season.  You explained that the lagoon does not have to be pumped most years, and it has been several years since the lagoon was last pumped. If damaged or in disrepair, lagoons may pollute surface water or groundwater.  You also explained that solid manure is applied to other sites or taken by composting facility.		

**Other Areas of Concern**

Comments:

**Corrective Actions**

- ☐ Install livestock exclusion fencing to keep animals at least                      ft from surface waters (35ft minimum)
- ☐ Install off-stream stock water watering facilities and locate them at least                      ft from surface to prevent risk of water quality impacts (minimum of 75ft)
- ☐ Collect manure frequently and store it in a dry, covered area with an impervious floor or deck. The manure stacks should be covered to minimize the amount of clean water that comes into contact with manure.
- ☒ 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:
- 1) I strongly recommend that you cover the manure pile and soiled bedding. A permanent roof would help reduce maintenance and minimize the amount of clean water that comes into contact with manure. Covering the solid manure piles would reduce the volume of rain water that is contaminated and directed to the manure tank.

Photos Taken: ☒ Yes☐ NoSample Taken: ☐ Yes☒ No**Additional Comments**

Comments: I strongly suggest that the operator contact the Whatcom Conservation District (WCD) for technical assistance in assessing your manure lagoon and assisting you with covering the manure pile. WCD can provide you with additional assistance in addressing manure management on all three properties where you keep livestock.

**Ecology Contact Information**

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Inspector Signature: Chris Luckman

Date: May 7, 2014