

Livestock and Water Quality Site Visit



Site Visit Information	<input checked="" type="checkbox"/> First Visit	<input type="checkbox"/> Follow-up Visit
Prepared by: Chris Luerkens	Arrival Time: 3:00 pm	Departure Time: 3:45 pm
Date: May 28, 2014	Current Weather Conditions: Partly sunny, dry	

Owner/Operator Information	
Name: Courtney Imhof (CB Acres LLC)	Street: 2242 Timon Road
City: Everson, WA	Zip Code: 98247
Phone: 360-306-5547	Email: courtney@farmbeacres.com

Site Information	
County: Whatcom	Watershed: Lower Nooksack (Kamm Creek)
<p>General site description: On May 28, 2014, Ecology inspectors, Jessica Kirkpatrick and I conducted a site visit with Courtney Imhof and Ty Gibson. This inspection was requested to review progress since our 3/17/2014 meeting and any immediate steps that can help reduce ongoing pollution discharges from the farm.</p> <p>We discussed several steps you have taken since our 3/17/2014 meeting. Since then you have contacted the Whatcom Conservation District (WCD) and have met with the farm planner and CREP program lead. You are working to designate areas of your pastures into CREP. WCD is also working with you to develop a farm plan. These actions should help you greatly in the future to manage your farm so that you do not pollute state waters.</p> <p>It appears that the majority of the pollution from your farm is coming from drainage of the area perched above the seasonal drainage contaminated by manure. Since our last meeting your have made significant progress in addressing this area by applying manure to fields and relocating manure pile. A significant amount of the manure pile remains which you plan to spread when the fields are dry enough for equipment.</p> <p>However, as we discussed, recently collected water samples show your farm continues to discharge high concentration of fecal coliform pollution. During our meeting we discussed some immediate actions that can be completed to help reduce the likelihood pollution will discharge this spring. The "Corrective Actions" section below list these recommended immediate actions.</p> <p>One item discussed during the previous site visit, but not last week, was that the south-west portion of the farm should be managed so that contaminated field runoff does not discharge into the road ditch. You may want to ensure that your farm plan provides appropriate pasture management guidance.</p> <p>Below is a summary of the conditions I observed on your site.</p>	

Site Evaluation

Stream Corridor and Areas Near Surface Water	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input type="checkbox"/> Bare, exposed, eroding soils	<input type="checkbox"/> Absence of woody vegetation	
<input checked="" type="checkbox"/> Contaminated run-off (active or potential)	<input type="checkbox"/> Manure accumulations	

<input type="checkbox"/> Slumping stream banks and erosion <input type="checkbox"/> Overgrazing of grasses	<input type="checkbox"/> Animal access to surface water <input type="checkbox"/> Livestock paths and trails along riparian areas
Comments: Livestock have access to seasonal streams.	

Confinement Areas	<input type="checkbox"/> Evaluated	<input checked="" type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (<50 ft) <input checked="" type="checkbox"/> Presence of mud and manure <input checked="" type="checkbox"/> Signs of previous runoff reaching surface water	<input checked="" 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: Cows are currently confined near the barns above the stream. Cows also currently have unobstructed access to the path out to pasture. Although this area is covered with wood chips (or hog fuel), it is evident that contaminated runoff drained off of a portion of this path down into the seasonal stream. If animals are going to have access to these areas, then you will need to make improvements to redirect surface water away from draining to the stream. Keeping manure (animals) out of these areas would be the simplest way to manage these areas in respect to protecting water quality.		

Stock Water	<input type="checkbox"/> Evaluated	<input checked="" type="checkbox"/> Not Evaluated
<input type="checkbox"/> Distance to surface water (500 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 evaluated.		

Upland Pasture Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Animal access to stream corridors <input checked="" type="checkbox"/> Distance to surface water (0 ft)	<input type="checkbox"/> Signs of overgrazing and erosion <input type="checkbox"/> Manure accumulations and bare ground	
Comments: During visit, sheep were being kept on pastures that had direct access to season streams. Other livestock may also have access to these areas. If manure is present near these drainages during rain events that produce field runoff, then it is likely that manure contaminated surface water will flow from the farm. You have indicated that you intend to install significant CREP buffers around in these areas. These buffers combined with good pasture management should help significantly in keeping pollutions from discharging from pastures in the future.		

Manure Management	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
Current manure management plan? No Manure collected and stored? Yes. From cement	Manure stored on covered, impervious surface? No. Applied during growing season?	

pad. Manure is left on areas covered with wood chips that drain to surface water.	Manure applied during non-growing season?
Manure storage properly sized? Not evaluated.	Vegetated buffer when manure is applied?
Manure storage covered? No.	Manure applied or stored off site?
Manure being collected often?	
Comments: A significant portion of the solid manure pile has been removed from its location above the stream. However, a significant amount of manure remains. The solid manure pile that has been a primary source of pollution is being addressed but part of the pile remains and discharges during rain events. Because of its location, this manure will continue to discharge and should be addressed immediately. The farm plan being developed by WCD for your farm. Please ensure that the plan addresses appropriate storage of liquid and solid manure. Additionally, it is recommended that the plan provide specific guidance on where and how manure should be applied. Immediate action is needed to stop manure contamination from discharging into surface water. The manure lagoon was not evaluated during the visit.	

Other Areas of Concern
Comments:

Corrective Actions

- ☒ Install livestock exclusion fencing to keep animals at least 35 ft from surface waters (35ft minimum). Areas on slopes likely require larger fencing setbacks.
- ☐ 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.
- ☒ 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). **Develop a farm plan that addresses application rates and identifies appropriate areas for application.**
- ☒ 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:
- a) **At least one of the roof gutters is damaged, resulting in “clean” roof runoff draining onto the cement slab that is covered in manure. This significantly increases the amount of water that drains into your lagoon. Gutters and downspouts should be repaired immediately to avoid this.**
 - b) **Immediate steps are needed help stop discharges from the old manure storage area. Some options include:**
 - 1) Relocate the remaining manure to the cement slab so that runoff drains to your manure storage.
 - 2) If the pile cannot be relocated now, then you should install temporary controls to prevent surface water contamination. I suggest monitoring the area during events to ensure any steps you have taken are effective. There are likely other options or variations that would also be effective. Some steps that could be taken include:
 - a) Cover the manure with a tarp. If you do this, you will need to be careful to direct rainwater away from the manure.
 - b) Place structures where surface water is draining from the manure pile to encourage runoff to infiltrate. We discussed one option of placing hay bales in areas where water appears to flow.
 - 3) Plant the area heavily with grass to establish a vigorous growth of grass. Additional grass should be planted as needed once the manure pile is removed.

Photos Taken: ☒ Yes ☐ No Sample Taken: ☐ Yes ☒ No

Additional Comments

Comments:

Please also realize that a generous **financial assistance program** is available to help pay for the installation of some farm upgrades such as fencing and manure storage. Please contact me if you would like additional

information about this resource. Other financial assistance may also be available from Whatcom Conservation District.

Ecology Contact Information

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Inspector Signature: _____

Date: 6/4/2014