

Livestock and Water Quality Site Visit



Site Visit Information	<input type="checkbox"/> First Visit	<input checked="" type="checkbox"/> Follow-up Visit
Prepared by: Mak Kaufman	Arrival Time: 9:00 am	Departure Time: 10:45 am
Date: 11/09/2012	Current Weather Conditions: Sunny and about 45 degrees F	

Owner/Operator Information	
Name: Gary Knaus	Street: 1190 Valley Highway
City: Acme, WA	Zip Code: 98220
Phone: (360) 391-7290	Email:

Site Information	
County: Whatcom	Watershed: Headwaters of Samish River
<p>General site description (include information about nearby waterbodies and description of farm conditions): Mr. Knaus has been issued a Warning Notice and Opportunity to Correct letter for a contaminated discharge into the southside Saxon Road ditch (state waters) on January 4, 2012. Mr. Knaus has been working cooperatively with both Skagit and Whatcom Conservation District's and NRCS to develop a farm plan that is protective of surface and groundwater quality. Mr. Knaus has not gotten final approval to install several structural BMPs that will provide permanent solutions that are protective of water quality. This inspection was conducted to provide Mr. Knaus with some temporary solutions that he could implement to get his property through the upcoming rainy season without causing contaminated discharges into state waters, especially during rain events.</p> <p>Mr. Knaus has a contaminated area adjacent to one of his driveays the leads out onto Saxon Road near his silage bunker that he is using for hay storage this winter. I have advised Mr. Knaus to scoop up all of the gravel on this area that is underlain by an existing concrete pad. After cleaning the gravel off of the concrete pad I recommended that he then pressure wash the pad as a source control measure. I also explained to Mr. Knaus that the pressure wash water is contaminated and cannot be discharged to surface waters. Then to prevent any further run-on water from the rest of the parking lot and feeding area from flowing through this area, I have advised Mr. Knaus to install a speed-bump type curb to direct all other water in the area to a vegetated swale and/or a sump to collect the contaminated water. See attached photo.</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"/> Animal access to surface water	
<input type="checkbox"/> Overgrazing of grasses		<input type="checkbox"/> Livestock paths and trails along riparian areas	
Comments: See comments above concerning runoff into the Saxon Road ditch.			

Confinement Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (50 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 type="checkbox"/> Adjacent land slopes toward surface water	
Comments:		

Stock Water	<input type="checkbox"/> Evaluated	<input checked="" type="checkbox"/> Not Evaluated
<input checked="" 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:		

Upland Pasture Areas	<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:		

Manure Management	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
Current manure management plan? Yes, plan approved, but not yet implemented Manure collected and stored? Yes Manure storage properly sized? No, additional storage is planned Manure storage covered? No Manure being collected often? Yes	Manure stored on covered, impervious surface? Impervious, but not covered Applied during growing season? yes Manure applied during non-growing season? no Vegetated buffer when manure is applied? yes Manure applied or stored off site? Unknown	
Comments:		

Other Areas of Concern
Comments:

Corrective Actions

- ☐ Install livestock exclusion fencing to keep animals at least 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.
- ☐ 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)
- ☐ 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: Clean concrete slab and pressure wash and install concrete "speedbump" type curb to direct contaminated water away from "clean" area in front of hay bunker.

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

Comments:

Ecology Contact Information

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Physical Address:

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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: 11/26/2012



Photo 1: Photo shows manure contaminated muddy area adjacent to Mr. Knaus' hay bunker that was part of the source of contamination that was detected in a sample that was collected on January 4, 2012. As a short-term temporary solution to get Mr. Knaus through the upcoming winter rainy months without contaminated discharges flowing into state waters, I have strongly recommended and Mr. Knaus has agreed to scoop up all of the mud and gravel from the area which is underlain by concrete and then pressure wash this area to remove any remaining contaminants. Additionally, I have advised Mr. Knaus to install a "speed-bump" type curb (shown as yellow lines) that would direct all contaminated run-on flows into a vegetated swale and a sump that he can then pump out to his grass fields. It is the combination of these two practices that should allow storm water to contact the clean concrete surfaces and then flow into the south Saxon Road ditch as uncontaminated storm water.