

Livestock and Water Quality Site Visit

Site Visit Information	<input checked="" type="checkbox"/> First Visit	<input type="checkbox"/> Follow-up Visit
Prepared by: Jessica Kirkpatrick	Arrival Time: 12:00 p.m.	Departure Time: 12:30 p.m.
Date:	Current Weather Conditions:	

Owner/Operator Information	
Name: Ernie & Kimberly Tjoelker	Street: 8132 Bob Hall Road
City: Lynden	Zip Code: 98264
Phone: 360-815-8844	Email:

Site Information	
County: Whatcom	Watershed: Lower Nooksack (Bertrand)
General site description: Ernie and Kimberly Tjoelker keep two horses at their property that borders Bertrand Creek. Kimberly Tjoelker met me on site. Due to sandy soils, the large buffer, and flat grade, it appears unlikely that water from this property drains into Bertrand Creek.	

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"/> 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 type="checkbox"/> Manure accumulations <input type="checkbox"/> Animal access to surface water <input type="checkbox"/> Livestock paths and trails along riparian areas	
Comments: Livestock are kept over 50' away from Bertrand Creek with exclusion fencing. The riparian area has been revegetated and is in good condition.		

Confinement Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (>75 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: The horses are allowed to use the entire pasture. The area near the barns is used heavily but does not appear to drain towards Bertrand Creek.		

Stock Water	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
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<input checked="" type="checkbox"/> Distance to surface water (>100 ft)	<input type="checkbox"/> Mud and standing water at tanks
<input type="checkbox"/> Overflow from tanks on to the ground	<input type="checkbox"/> Animals accesses stream for stock water
Comments:	

Upland Pasture Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input type="checkbox"/> Animal access to stream corridors	<input checked="" type="checkbox"/> Signs of overgrazing and erosion	
<input checked="" type="checkbox"/> Distance to surface water (>50 ft)	<input checked="" type="checkbox"/> Manure accumulations and bare ground	
Comments: The pasture is heavily grazed and there are bare spots and accumulations of manure. However, the soils are sandy in this area, the grade is flat, and it does not appear that surface water drains from the pasture towards Bertrand Creek.		

Manure Management	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
Current manure management plan?	Manure stored on covered, impervious surface? no	
Manure collected and stored? Yes.	Applied during growing season? yes	
Manure storage properly sized? See below.	Manure applied during non-growing season? no	
Manure storage covered? no	Vegetated buffer when manure is applied? Yes.	
Manure being collected often? Yes.	Manure applied or stored off site?	
Comments: Kimberly explained that manure is collected weekly from the pastures, stored, and spread on the pastures during the summer.		

Other Areas of Concern
Comments:

Corrective Actions
<input type="checkbox"/> Install livestock exclusion fencing to keep animals at least _____ ft from surface waters (35ft minimum)
<input type="checkbox"/> 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)
<input type="checkbox"/> 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:

Photos Taken: Yes No

Sample Taken: Yes No

Additional Comments

Comments: No recommendations were given during this site inspection.

Ecology Contact Information

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Inspector Signature: _____

Date: September 5, 2013