

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: 6:00 p.m.	Departure Time: 6:30 p.m.
Date: 10/28/2013	Current Weather Conditions:	

Owner/Operator Information	
Name: Lee Mobley	Street: 1731 N. Tara Court
City: Lynden	Zip Code: 98264
Phone: 360-303-1434	Email: MobleyLee@ymail.com

Site Information	
County: Whatcom	Watershed: Lower Nooksack (Bertrand)
<p>This inspection is a follow-up to an inspection conducted on 8/2/2013. Since the last inspection, Ms. Mobley has moved most, but not all, of the manure pile on the concrete slab on the north side of the barn. Significant practices need to be implemented to prevent pollution from discharging into state waters before the upcoming rainy season. Inspector Kirkpatrick strongly urged Ms. Mobley to seek the assistance of the Whatcom Conservation District. At the close of the inspection, MS. Mobley stated that she would implement BMPs on the south side of the barn within 10 days and agreed to allow Inspector Kirkpatrick to verify that that had been done.</p> <p>Site Description: Ms. Mobley operates a small farm with 3-4 cattle and 2 horses on property she owns at 9191 Weidkamp Road in Lynden. The farm has a barn, a concrete slab, and approximately 2 acres of pasture. Because Ms. Mobley's property has only two grazable acres to support her livestock, her farm is a high impact operation. This means she will likely need to institute several complementary best management practices and manage her farm much more intensely to prevent discharges or potential discharges to state waters.</p> <p>An unnamed tributary to McClellan Creek runs along the north side of the north pasture and through the property east of the barn. A field drainage ditch that receives flow only from the Mobley property runs through the middle of the property from west to east and flows into the tributary to McClellan Creek before it discharges from the property. A small pond that is filled by groundwater flows and a drainage ditch to the south of the property is located in the southeast pasture. This pond periodically discharges to the tributary of McClellan Creek during significant rain events in the winter.</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 checked="" type="checkbox"/> Absence of woody vegetation <input checked="" type="checkbox"/> Manure accumulations <input type="checkbox"/> Animal access to surface water <input checked="" type="checkbox"/> Livestock paths and trails along riparian areas		
<input checked="" type="checkbox"/> Contaminated run-off (active or potential)			
<input checked="" type="checkbox"/> Slumping stream banks and erosion			
<input type="checkbox"/> Overgrazing of grasses			
Comments: 1. An unnamed tributary to McClellan Creek runs along the north edge of northwest pasture, and the concrete			

slab on the north side of the barn before turning south and running along the eastern edge of the barnyard and the southeast pasture. There are no buffers implemented to prevent manure-contaminated water from discharging from either the northwest pasture or the southeast pasture.

2. A field drainage ditch runs between the northwest and southwest pastures, past the confinement area south of the barn, and discharges into the tributary to McClellan Creek immediately north of the round horse corral. The unimproved, manure contaminated confinement area south of the barn extends to the top of the bank of this ditch.

3. A pond located in the southeast pasture is fed by groundwater and a drainage ditch to the south of the property. The pond discharges via a drainage ditch along the south east corner of the property into the tributary of McClellan Creek. Livestock have full access to this pond when they are in the southeast pasture.

It is evident that operations on this farm have and continue to contribute pollution to all surface waters on and adjacent to the property.

Confinement Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (0 ft)	<input checked="" type="checkbox"/> Polluted run-off reaching surface water	
<input checked="" type="checkbox"/> Presence of mud and manure	<input type="checkbox"/> Roof runoff water flows to confinement areas	
<input checked="" type="checkbox"/> Signs of previous runoff reaching surface water	<input checked="" type="checkbox"/> Adjacent land slopes toward surface water	
Comments: 1. A concrete slab on the north side of the barn extends to within 3 feet of the tributary to McClellan Creek. Ms. Mobley stated during the inspection that she would no longer allow livestock access to this concrete slab. 2. A winter confinement area used for horses is located on the south side of the barn, between the barn and the field drainage ditch. The confinement area is dirt-surfaced and contaminated with manure. It extends to the top of the bank of the ditch. This condition poses a substantial risk for discharging manure contaminated water into this ditch during rain events. Ms. Mobley stated during the inspection that she would install a culvert to convey the ditch past this confinement area to prevent pollution within 10 days.		

Stock Water	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (30 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: 1. One stock tank is located between the round horse corral and the winter horse confinement area, directly above a culvert that conveys the field drainage ditch. The drainage ditch outlets less than 20 feet from the stock tank.		

Upland Pasture Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input type="checkbox"/> Animal access to stream corridors	<input type="checkbox"/> Signs of overgrazing and erosion	
<input checked="" type="checkbox"/> Distance to surface water (3 ft)	<input type="checkbox"/> Manure accumulations and bare ground	
Comments: The pastures are in better condition and have more vegetation than noted during the last inspection. Animals have been pastured to within 0 feet of surface water in multiple locations. The southwest		

and northwest pastures are sloped towards the field drainage ditch.
This condition poses a risk of discharging manure contaminated water into state waters during rain events.

Manure Management	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
Current manure management plan? no	Manure stored on covered, impervious surface? no	
Manure collected and stored? Some of it.	Applied during growing season? Yes.	
Manure storage properly sized? No manure storage.	Manure applied during non-growing season? No.	
Manure storage covered? yes	Vegetated buffer when manure is applied? No.	
Manure being collected often? Not often enough.	Manure applied or stored off site? No.	
Comments: 1. Ms. Mobley collects manure from the barn during the winter and scrapes it into a pile located under the west awning of the barn. The pile is covered but not located on an impervious surface and is uncontained on three sides. The side of the barn provides containment for one side. 2. Manure is not collected often from the horse confinement area on the south side of the barn. This condition poses a substantial risk for discharging manure contaminated water into this ditch during rain events.		

Other Areas of Concern
Comments: The barn only has roof gutters on one side, and this gutter is in disrepair. This is contributing runoff water to manure-contaminated areas around the barn.

Corrective Actions
<p><u>Below are both immediate actions I recommend you take to reduce the ongoing threat of discharges and long term recommendations to ensure your farm does not discharge manure-contaminated water to state waters during the coming rainy season.</u></p> <p><u>IMMEDIATE RECOMMENDED ACTIONS: To remove the immediate threat of contaminated runoff discharging from your operation, Ecology strongly recommends that you take the following actions immediately:</u></p> <ol style="list-style-type: none">1. Finish moving the manure pile to under the barn awning. This includes whatever is left over on or near the concrete slab.2. Remove all manure and manure residues from the concrete slab north of the barn. Do not allow any wash-water used in cleaning this slab to discharge into the stream or other surface waters. Appropriate BMPs should be implemented to prevent all water used in cleaning this slab from discharging into the stream adjacent to it.3. Continue to exclude animals, manure, and all potential sources of manure from the concrete slab on the north side of the barn until permanent measures have been taken to prevent discharge of any water off of the

slab.

4. Implement practices that will completely prevent manure-contaminated storm water runoff and sediment from discharging from the confinement area south of the barn into the field drainage ditch.

To ensure that your farm is able to operate throughout the winter rainy season without discharging manure-contaminated water, Ecology strongly recommends that you take the following actions before the fall rainy season begins. (Fall rains present the risk of runoff. Western Washington's fall and winter rains generally commence in October):

5. Develop **and fully implement** a farm plan that addresses manure management, and nutrient management and meets at least the following minimum recommendations. **I strongly recommend that you immediately contact a technical service provider to develop this plan. The Whatcom Conservation District is a good source of this assistance.** If your technical service provider provides recommendations that do not meet the minimum recommendations below, Ecology will consider those BMPs as alternatives. If the minimum recommendations below are not adopted, Ecology will need to return to the property during a winter rain event to verify that they are effectively preventing discharges of pollutants to state waters. The recommended minimum practices are as follows:

6. Site and design confinement areas and manure storage to prevent pollution of surface and ground water. If these areas are less than 100 feet from surface waters, they should be built with a permanent, impervious curb or berm that will provide total containment of all manure and storm water that falls onto the confinement area.

7. If the concrete slab to the north of the barn will be used for animals or manure storage or transfer it should have an impervious, permanent containment wall or curb that prevents water from discharging into the stream. This will result in contaminated rainwater ponding on the concrete slab and so provisions should be made in the manure management or farm plan to remove this water and direct it to storage. *Alternatively*, reducing the size of the slab used for animals and their wastes and installing a roof over the slab would eliminate the need to deal with contaminated storm water runoff, but a permanent, impervious wall or curb would still be needed to prevent manure from flowing into the stream.

8. Install heavy use area protection for the confinement area to the south of the barn. If the field drainage ditch is not put into an impervious culvert, it should have concrete heavy use area protection and an impervious, permanent containment wall or curb that prevents water from discharging into that ditch.

9. Install heavy use area protection for the round corral used to work horses. Given the close proximity to surface water, manure should be collected from the corral after each use to ensure discharges do not occur.

10. Install a covered manure storage structure with an impervious floor or deck capable of containing all animal wastes and soiled bedding generated on the farm from October 1 to April 1 of each year (plus any contaminated storm water that will be allowed to fall on impervious confinement areas).

11. Collect manure frequently from animal confinement areas and store it in the manure storage structure.

12. Apply manure during the growing season at proper rates and times and use of a 35ft vegetative buffer.

13. This plan should demonstrate either that the amount of manure generated on the farm each winter can be spread at agronomic rates to pastures on-site (not including the minimum 35 ft vegetative buffer) during the

summer. If this is not possible, the plan should make provisions for exporting manure off-site.

14. Install livestock exclusion fencing to keep animals at least 35 ft from all surface waters where the adjacent pasture is flat or slopes toward the stream to prevent manure-contaminated runoff from discharging into streams and ditches.

Photos Taken: ☒ Yes ☐ No

Sample Taken: ☐ Yes ☒ No

Additional Comments

Comments: During the inspection, Ms. Mobley agreed to implement those actions necessary to prevent pollution from discharging from the areas surrounding the barn within 10 days. I will follow up on November 8th to verify that this has been done.

I strongly encourage Ms. Mobley to contact a qualified technical service provider as soon as possible to assist her in developing and implementing a plan that meets the recommendations above. The Whatcom Conservation District ((360) 354-2035, 6975 Hannegan Road) is a good source of technical assistance.

If the above recommendations are not fully implemented, Ecology cannot presume the Mobley farm to be in compliance with the Washington State Water Pollution Control Act (RCW 90.48) and will need to return to the property during a winter rain event to verify that any alternative practices are at least as effective as those recommended. I encourage Ms. Mobley to contact me to discuss this plan as it is developed to ensure that it is protective of water quality.

Financial assistance may be available to Ms. Mobley for installing these practices. Ms. Mobley should contact Dave Timmer at A Rocha at (360) 961-4061 as soon as possible if she wishes to take advantage of this program.

Ecology Contact Information

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Inspector Signature:  _____

Date: October 30, 2013