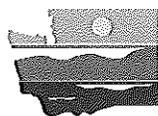


Livestock and Water Quality Site Visit



DEPARTMENT OF
ECOLOGY
State of Washington

Site Visit Information

First Visit

Follow-up Visit

Prepared by: Mark A. "Mak Kaufman Arrival Time: 2:00 pm Depart: 6:00pm

Date: 6/22/2012 Current Weather Conditions: Raining and about 50 degrees F.

Owner/Operator

Name: Gary Knaus Street: 1190 Valley Highway
Phone: (360) 724-3022 City: Acme, WA
E-mail: doranfarms@aol.com Zip: 98220

Site Details

County: Whatcom Watershed: Samish River

1) General Site description (include information on nearby water bodies and description of farm conditions): Mr. Knaus' property is a farmer dairy farm that has a manure lagoon that Mr. Knaus is working with both Whatcom and Skagit CDs and NRCS to have decommissioned. NRCS is designing additional liquid and dry-stack storage and Mr. Knaus is re-designing the layout of several portions of his farm after a barn collapsed from a high snow load last winter. Mr. Knaus' property borders the Samish River and an unnamed creek that flows through his property. There was active contaminated runoff flowing off Mr. Knaus' property during a rain event that was occurring at the time of inspection.

2) Site Evaluation

Stream Corridor and Other Areas Near Surface Water: Evaluated Not Evaluated

- | | |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <input type="checkbox"/> Bare, exposed, eroding soils | <input type="checkbox"/> Absence of woody vegetation |
| <input checked="" type="checkbox"/> Contaminated run-off (active) | <input checked="" 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 checked="" type="checkbox"/> Livestock paths and trails along riparian areas |

Comments: One area of concern on Mr. Knaus' farm include manure-contaminated runoff flowing into the Saxon Road ditch during a rain event that was occurring at the time of inspection. This contaminated runoff was created when storm water came into contact with manure that has been deposited in a silage bunker that Mr. Knaus currently has chicken manure stored in

3) Confinement Areas: Evaluated Not Evaluated

- | | |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Distance to surface water (25-35 ft) | <input checked="" type="checkbox"/> Polluted run-off reaching surface water |
| <input type="checkbox"/> Presence of mud and manure | <input checked="" type="checkbox"/> Roof runoff water flows to confinement areas |
| <input checked="" type="checkbox"/> Polluted runoff leaving the area | <input type="checkbox"/> Adjacent land slopes toward surface water |
| <input checked="" type="checkbox"/> Signs of polluted run-off leaving the area | |
| <input checked="" type="checkbox"/> Signs of runoff reaching surface water | |

Comments (Confinement Area): One of Mr. Knaus' barns collapsed last winter and Mr. Knaus is having the barn rebuilt this summer. He is making several design changes to his farm at the same time and is working with both Whatcom and Skagit Conservation Districts and NRCS to aid in making these decisions.

4) Stock water: Evaluated Not Evaluated

- Distance to surface water (5-10 ft)
- Overflow from tanks on to the ground
- Mud and standing water at tanks

Animals access stream for stock water

Comments: Mr. Knaus has off channel watering troughs for his cattle when they are pastured. He keeps his cows confined during the winter, rainy months.

5) Upland Pasture Areas: Evaluated Not Evaluated

- Animal access to stream corridors
- Distance to surface water (3-5 ft) in some areas
- Signs of overgrazing and erosion

Manure accumulations and bare ground

Comments: The field to the south of Mr. Knaus' barns has an unnamed creek that bisects the field and Mr. Knaus has some areas with as much as a 50 foot buffer and others that have no buffer at all with the fence built right on the very edge of the creek. In discussing this area, I let Mr. Knaus know that Ecology expects a minimum of a 35 foot buffer, but that buffer averaging might be an option as long as water quality is protected.

6) Manure Management: Evaluated Not Evaluated

- Current manure management plan? Yes No
- Manure collected and stored? Yes No
- Manure storage properly sized? Yes No
- Manure storage covered? Yes No
- Manure being collected often? Yes No

- Manure stored on an impervious surface? Yes No
- Applied during growing season? Yes No
- Manure applied during non-growing season? Yes No
- Vegetated buffer when manure is applied? Yes No
- Manure disposed off site? Yes No

Comments:

Other Areas of Concern/General Comments

7) Corrective Actions

Install livestock exclusion fencing to keep animals at least 35 feet from surface waters (35ft minimum) when pasturing cattle on during winter months or when soils are frozen or saturated. The exclusion area should be comprised of 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 35 feet from surface waters 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:

Photos Taken?: Yes No

Samples Taken?: Yes No

Referred to Skagit Conservation District?: Yes No (Previously referred)

Skagit Conservation District
2021 E. College Way
Mount Vernon, WA 98273
360-428-4313
skagitcd@skagitcd.org

General Comments: Mr. Knaus is also working with Whatcom Conservation District and NRCS to update his farm plan and to cost-share several BMPs that Mr. Knaus is going to implement to protect water quality and aid him in managing his farm.

Inspector Signature 

Date 6/25/12

