



## *Livestock and Water Quality Site Visit*

<b>Site Visit Information</b>	<input checked="" type="checkbox"/> First Visit	<input type="checkbox"/> Follow-up Visit
Prepared by: Jessica Kirkpatrick	Arrival Time: 2:45 pm	Departure Time: 3:30 pm
Date: November 26, 2014	Current Weather Conditions: Raining	

<b>Owner/Operator Information</b>	
Name: Henry Weg	Street: 9222 Benson Road
City: Lynden	Zip Code:
Phone: 360-354-3328	Email:

<b>Site Information</b>	
County: Whatcom	Watershed: Lower Nooksack (Bertrand)
<p>Mr. Weg operates a dairy heifer rearing operation on an old dairy facility. This site visit was prompted by a referral (ERTS 652967) from the Washington Department of Agriculture regarding solid manure that was spread by this operation onto a field covered by a Dairy Nutrient Management Plan.</p>	

### Site Evaluation

<b>Stream Corridor and Areas Near Surface Water</b>	<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 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:		

<b>Confinement Areas</b>	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (20 ft)	<input type="checkbox"/> Polluted run-off reaching surface water	
<input type="checkbox"/> Presence of mud and manure	<input type="checkbox"/> Roof runoff water flows to confinement areas	
<input type="checkbox"/> Signs of previous runoff reaching surface water	<input checked="" type="checkbox"/> Adjacent land slopes toward surface water	
<p>Comments: A confinement area is separated from a drainage ditch by a road. Mr. Weg explained that runoff from this confinement area flows into the field southeast of the lagoon. Observations strongly indicate that at least some of this runoff likely flows from this field into the head of the blind-end ditch that separates the field southeast of the lagoon from the field southwest of the lagoon. Runoff that flows out into the field flows directly south, and discharges to the ditch on the west side of the field.</p>		

Mr. Weg explained that cattle are removed from this confinement area before it became too wet. I observed that the confinement area was mostly denuded of vegetation and had accumulations of manure. Runoff from this area would be contaminated with fecal coliform bacteria from manure.

<b>Stock Water</b>	<input type="checkbox"/> Evaluated	<input checked="" type="checkbox"/> Not Evaluated
<input 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: Cattle are watered at stock tanks located near the barn.		

<b>Upland Pasture Areas</b>	<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 (>500 ft)	<input type="checkbox"/> Signs of overgrazing and erosion <input type="checkbox"/> Manure accumulations and bare ground	
Comments: This operation does not pasture animals.		

<b>Manure Management</b>	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
Current manure management plan? no Manure collected and stored? yes Manure storage properly sized? Unknown Manure storage covered? No - lagoon Manure being collected often? unknown	Manure stored on covered, impervious surface? n/a Applied during growing season? yes Manure applied during non-growing season? yes Vegetated buffer when manure is applied? Manure applied or stored off site? Yes	
Comments: <u>1) Manure application to field southeast of lagoon</u> Mr. Weg explained that manure had been applied to the field southeast of the lagoon in mid October. This field is currently covered by a dairy's nutrient management plan. Manure was observed in the north part of this field in areas with standing water.  Drainage from the northwest part of this field and the confinement area adjoining the lagoon flows south and then discharges into the drainage ditch along the western border of this field, and into the Benson road roadside ditch. Drainage from the eastern part of this field flows south and then discharges into the ditch along the southern border of the field. Both these drainage ditches flow to the Benson Road roadside ditch, a tributary of Fishtrap Creek.  <u>2) Manure application to field southwest of lagoon</u> A manure application was visible on the field southwest of the lagoon. Mr. Weg explained that he had made that application two weeks ago and had used good setbacks from the ditch. This application was noted by WDOA Inspector Isensee on November 19 <sup>th</sup> . On November 26 <sup>th</sup> , Inspector Isensee took a photo showing areas of saturation in this field between the manure application and the ditch, and noted that runoff from the field		

was discharging into the drainage ditch.

#### Other Areas of Concern

Comments:

#### Corrective Actions

1. Install a compacted dirt berm between the road and the cattle confinement area that will prevent any runoff from the confinement area from flowing across the road.
2. Use all necessary best management practices, including evaluating field saturation conditions and weather forecasts, and applying manure at the proper rates with adequate setbacks, to prevent discharges of manure to local ditches. Do not apply manure to fields covered by a Dairy Nutrient Management Plan without the knowledge of the managing dairy.

Photos Taken: ☒ Yes

☐ No

Sample Taken: ☐ Yes

☒ No

#### Additional Comments

Inspector Isensee of the Washington State Department of Agriculture collected water quality samples on November 26<sup>th</sup>, 2014 from the drainage ditch bordering the west side of the field that Mr. Weg applied manure to. This drainage ditch conveys runoff from the field into the Benson Road roadside ditch, a tributary of Fishtrap Creek.

Laboratory analysis of these samples confirmed that water flowing off of the field and into this drainage ditch was contaminated with 6,637 fecal coliform units (FCU) per 100 mL of water. This concentration exceeds the water quality standard for this ditch, which is set at 200 FCU per 100 mL of water.

Further investigation by Inspector Isensee revealed that Edaleen Dairy, whose Dairy Nutrient Management Plan covers that field, had not applied manure there since May of this year.

It is likely that the manure spread by Mr. Weg, and potentially the runoff that flows into the field, was the source of the fecal coliform contamination discharging into the drainage ditch documented by Inspector Isensee.

I highly recommend that Mr. Weg contact the Whatcom Conservation District and work with them to develop a manure management plan that will assist him in preventing discharges of manure to local surface waters. The Whatcom Conservation District can be contacted at 360-354-2035 extension 3.

#### Ecology Contact Information

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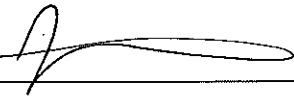
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Inspector Signature:  \_\_\_\_\_

Date: 12/11/2014