

Livestock and Water Quality Site Visit



Site Visit Information	<input checked="" type="checkbox"/> First Visit	<input type="checkbox"/> Follow-up Visit
Prepared by: Mak Kaufman	Arrival Time: 2:45pm	Departure Time: 3:40 pm
Date: 11/1/2012	Current Weather Conditions: Lightly raining and about 50 degrees F	

Owner/Operator Information	
Name: Tom Crabtree	Street: 9331 Hammer Road
City: Lynden, WA	Zip Code: 98264
Phone: (360) 722-2604	Email: thomcrabt@aol.com

Site Information	
County: Whatcom	Watershed: Squaw Creek, tributary of Johnson Creek which flows into the Sumas River
<p>General site description (include information about nearby waterbodies and description of farm conditions): In response to a citizens water pollution complaint (ERTS # 634355) water quality inspectors Jessica Kirkpatrick and Chris Luerkens and I conducted a complainece inspection of Mr. Tom Crabtree's property to evaluate complainece with Washington State's Water Pollution Control Law (RCW 90.48). Mr. Crabtree's property is approximately a 10 acre parcel that is bisected from northwest to southeast by Squaw Creek. When we arrived to investigate this livestock/manure-related complaint, we observed Mr. Crabtree on his excavator clearing and grubbing in a wetland associated with Squaw Creek with no Best Management Practices (BMPs) installed to protect water quality. Mr. Crabtree had also excavated a low-lying area on the northeast portion of the property in an attempt to create a decoratve pond on the property. There was engine oil on the ground from a recent spill as well.</p> <p>We contacted Mr. Crabtree and properly identified ourselves and explained that we had come to investigate a citizens complaint concerning livestock access to Squaw Creek and lack of BMPs. We asked if he had the appropriate permits to conduct these excavation operations in wetlands and he stated that he did not have any permits and inquired about what permits would be necessary. We explained that he should contact Whatcom County Planning and Development Services (WPDS) concerning what permits would be required, but that he would likely be required to get a fill and grade permit and that he would likely be cited for conducting excavation in a wetland . We explained that WPDS would likey require him to have the wetlands and the associated buffers delineated and provide for mitigation for the work he has already conducted. We asked him to agree to halt any further excavation activity until he had the proper permits in place. He agreed and we began an assessment of both the excavation activity and his livestock management.</p> <p>As a temporary measure, we instructed him to install a silt fence between several soil piles and the wetlands to reduce the sediment runoff during rain events. He agreed to install the silt fence. Adjacent to these soil piles, we also observed an area with manure-contaminated soils near a feeding hoop. As a temporary measure to quickly halt all contaminated discharges to state waters during rain events, we also instructed him to excavate these manure-contaminated soils with a front-end loader and move them to an upland area and cover them to prevent any contaminated runoff during rain events.</p> <p>We then proceeded to the west side of Squaw Creek where he had another manure contaminated area and evidenc eof previous livestock access to the creek with a smaller manure contaminated area where the livestock actually crossed the creek. Again as a temporary measure, we instructed him to excavate these manure contaminated areas and to place those soils in an upland area and cover them with a tarp that did not slope towards state waters to prevent any further discharges during rain events.</p>	

Site Evaluation

Stream Corridor and Areas Near Surface Water	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Bare, exposed, eroding soils <input checked="" type="checkbox"/> Contaminated run-off (active or potential) <input type="checkbox"/> Slumping stream banks and erosion <input type="checkbox"/> Overgrazing of grasses	<input checked="" type="checkbox"/> Absence of woody vegetation <input checked="" type="checkbox"/> Manure accumulations <input checked="" type="checkbox"/> Animal access to surface water <input checked="" type="checkbox"/> Livestock paths and trails along riparian areas	
Comments: Mr. Crabtree was in the process of clearing trees along Squaw Creek and the associated wetlands. There was Skunk Cabbage observed in the wetland areas adjacent to the stream. Additionally, there were manure-contaminated muddy areas adjacent to a feeding hoop located next to the wetlands and within 20-30 feet of Squaw Creek.		

Confinement Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water <input checked="" type="checkbox"/> Presence of mud and manure <input checked="" 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 checked="" type="checkbox"/> Adjacent land slopes toward surface water	
Comments: Animals have now been restricted from areas that flow toward Squaw Creek or other surface waters.		

Stock Water	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Distance to surface water (0 ft) <input type="checkbox"/> Overflow from tanks on to the ground	<input type="checkbox"/> Mud and standing water at tanks <input checked="" type="checkbox"/> Animals accesses stream for stock water	
Comments: Mr. Crabtree's cattle previously had direct access to surface water, but have now been restricted to another field that does not connect with Squaw Creek or other surface water bodies.		

Upland Pasture Areas	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
<input checked="" type="checkbox"/> Animal access to stream corridors <input checked="" type="checkbox"/> Distance to surface water (50-100 feet on land that slopes toward surface waters. ft)	<input checked="" type="checkbox"/> Signs of overgrazing and erosion <input checked="" type="checkbox"/> Manure accumulations and bare ground	
Comments: Mr. Crabtree has excluded his livestock from these areas.		

Manure Management	<input checked="" type="checkbox"/> Evaluated	<input type="checkbox"/> Not Evaluated
Current manure management plan? No	Manure stored on covered, impervious surface? N/A year-round pasturing	
Manure collected and stored? No	Applied during growing season? Yes, year-round pasturing	
Manure storage properly sized? N/A year-round pasturing	Manure applied during non-growing season? Yes, year-round pasturing	
Manure storage covered? N/A year-round pasturing	Vegetated buffer when manure is applied? No	
Manure being collected often? No	Manure applied or stored off site? No	
Comments:		

Other Areas of Concern
Comments:

Corrective Actions
<input checked="" type="checkbox"/> Install livestock exclusion fencing to keep animals at least 35 feet from wetland on east side of creek and more than 100 feet on west-side of creek past crest of hill shown in Photo 5 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.
<input checked="" type="checkbox"/> Install off-stream stock water watering facilities and locate them at least 75 ft from surface to prevent risk of water quality impacts (minimum of 75ft)
<input checked="" type="checkbox"/> Collect manure frequently and store it in a dry, covered area with an impervious floor or deck
<input checked="" type="checkbox"/> 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)
<input checked="" type="checkbox"/> Site and design confinement and manure storage areas to prevent pollution of surface and ground water
<input checked="" type="checkbox"/> Provide heavy use protection in confinement areas and at stock tanks to prevent run-off
<input checked="" type="checkbox"/> Construct stream-crossings and emergency water locations in ways that protect the stream
<input checked="" type="checkbox"/> Other Actions: Mr. Crabtree has agreed to: 1) halt excavation in the wetlands area, and 2) scrape up the manure-contaminated soils and store them in an upland area 3) continue to exclude his livestock at least 35 feet from surface waters to make some temporary corrections. Mr. Crabtree has also agreed to continue to work cooperatively with Ecology and Whatcom County PDS to: 1) delineate the wetlands, 2) to obtain the necessary permits and 3) to conduct the required mitigation for the wetland violations. Beyond the temporary corrections that need to be implemented, Ecology will aid Mr. Crabtree in designing structures and some basic management

plans to prevent pollution from flowing into state waters from his farming operation.

Photos Taken: ☒ Yes

☐ No

Sample Taken: ☐ Yes

☒ No

Additional Comments

Comments:

Ecology Contact Information

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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: 11/5/2012

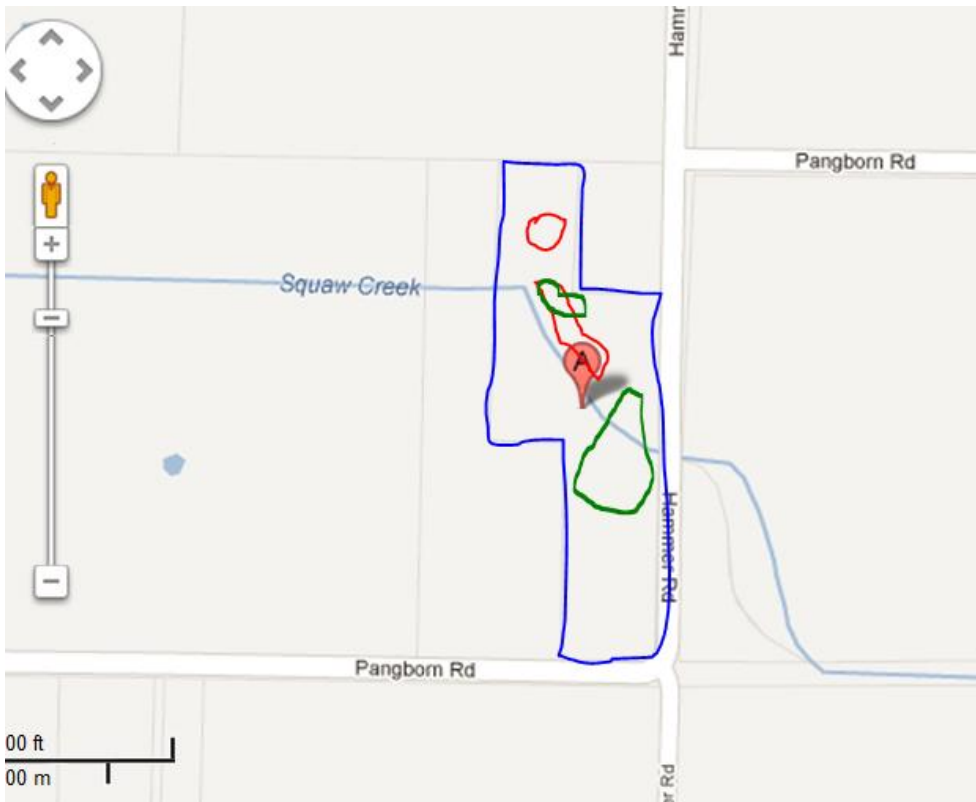


Photo 1: Google map showing Tom Crabtree's property at 9331 Hammer Road in relation to Squaw Creek. The blue line shows approximate property boundaries. Red line shows approximate area that has been excavated. Green lines show area of manure contaminated soils.



Photo 2: Low lying area east side of Squaw Creek at the north portion of Mr. Crabtree's property that he had excavated further in an attempt to create a decorative pond on the property. Constitutes violation of RCW 90.48. Mr. Crabtree has agreed to halt excavation until a wetland delineation is completed and he has the proper permits from Whatcom County Planning and Development Services.



Photo 3: Manure contaminated muddy area directly adjacent to excavated area in wetland soils on east side of Squaw Creek on Tom Crabtree's property. Constitutes violation of RCW 90.48. Mr. Crabtree has agreed to excavate these manure-contaminated soils and store them on an upland area on the west side of Squaw Creek on his property.



Photo 4: Piles of excavated soils placed in wetlands on east side of Squaw Creek. Constitutes violation of RCW 90.48. Mr. Crabtree has agreed to halt all excavation work and install a silt fence between these soil piles and the wetlands to reduce the risk of sediment entering the wetlands and Squaw Creek.



Photo 5: Photo shows manure contaminated soils on both sides of Squaw Creek. Constitutes violation of RCW 90.48. Mr. Crabtree has agreed to excavate these manure contaminated soils and store them in an upland area that does not have the potential to cause runoff during rain events.



Photo 6: Oil contaminated soils located on east side of Squaw Creek on Tom Crabtree's property. Constitutes violation of RCW 90.48. Mr. Crabtree has agreed to excavate these soils and properly dispose of them.