

October 7, 2016

Hullcar Aquifer Inter-Ministry Working Group Updates

Core Ministry Team Members:

Director Lead:
Christa Zacharias-Homer
Ministry of Environment
Deputy Director, Regional
Operations Branch

Technical Team Lead:
Orlando Schmidt
Ministry of Agriculture
Regional Manager, Coast
and Interior

Goals of the Inter- Ministry Working Group:

- * To ensure safe drinking water for the residents of Hullcar Aquifer and Steele Springs Water District
- * To build public trust and demonstrate collaboration among Ministries
- * To determine possible sources of nitrate in the Hullcar Aquifer
- * To foster sustainable economic development for the local agrifood sector

Environmental Impact Assessments

Ministry of Environment, Director for Waste Management approved the environmental impact assessment terms of reference and work plan for Ken and Brenda Regehr. The environmental impact assessment must be completed by November 7, and the results/report must be submitted to the Director by December 16.



Post -Harvest Nitrate Study

The Ministry of Agriculture is transitioning from planning to execution of a project with the short title, "Post-Harvest Nitrate Study." The main objectives of this project are twofold: 1) to describe the distribution of 40 fields over the Hullcar Aquifer with respect to post-harvest nitrate levels, a measure of the soil nitrogen not used by the recently harvested crop, and 2) to better understand whether nitrate moves down within the 0-90 cm depth from the post-harvest period to May 2017. The approach is adapted from previous soil nutrient studies with similar objectives. Currently, fields are being selected to address each of the 2 objectives, and an agreement is being finalized with a contractor to conduct field sampling and have the soils tested, starting as soon as the last week in September. The Ministry will provide oversight with the contractor's activities and plans to report findings in December 2016 and July 2017. For further information about previous soil nutrient studies, check out:

<http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-land-and-environment/soil-nutrients/nutrient-management/technical-reports/soil-nutrient-studies>

Manure Spreading Advisories

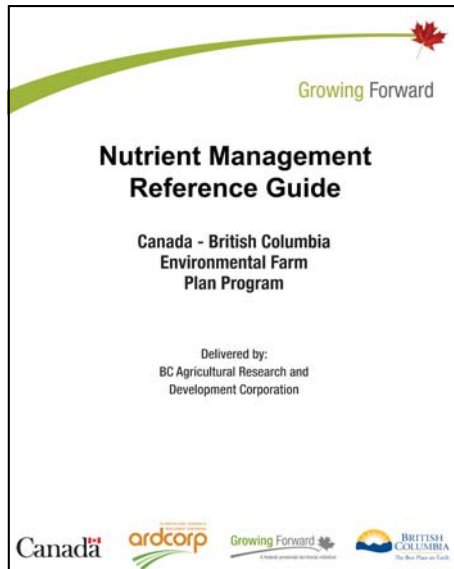
Spreading manure during the months of November to February may result in extreme risk of contaminating surface and drinking water.

The BC Environmental Farm Plan supports farm operations to complete agri-environmental risk assessments. For producers, manure spreading advisories provide guidance about the ‘right time’ and the ‘right place’ for responsible manure spreading. Monthly guidelines for manure spreading are provided that reflect seasonal changes in climate. Producers are responsible for decisions regarding manure spreading and interpretations of these guidelines for their individual circumstances. The table below is a summary of manure spreading practices in the Interior Region.

Excerpted from the BC Environmental Farm Plan: Reference Guide, Table 6.12

Monthly Manure Spreading Practices in the Interior Region				
September and October	November to February	March to May	June to August	
Environmental Risks of Contaminating Surface and Drinking Water				
Low rainfall hence low risk.	Extreme risk of runoff at snow-melt hence high risk.	Moderate to high risk of runoff hence moderate to high risk.	Moderate to high peak rainfall events hence moderate risk.	
Spreading Practices	NO SPREAD PERIOD	Spreading Practices	Spreading Practices	
Spreading on crops is acceptable if soil is not frozen, as most of the manure nutrients will be available for the crop next spring.	Spreading on any land is not recommended due to the extreme risk of snowmelt runoff and surface water contamination.	Not acceptable to apply manure: to fields that are subject to flooding or runoff; or to soils that are frozen, saturated or snow covered; or to bare land in March.	According to crop and soil conditions, apply manure throughout the growing season to meet crop nutrient uptake.	
Not acceptable to spread on bare land (harvested corn, vegetables, berries, etc.) or cover crops that emerged after September 1st.		If field access is possible, avoid wet soils which could compact and lead to poor nutrient utilization or poor crop growth.	Avoid spreading on wet fields, saturated soils or fields prone to flooding.	
Avoid wet areas.		Meet crop nutrient needs for this time of year is if conditions are acceptable to spread. (See Table 6.10, page 6-19)	Manure applications should be planned to ensure that storage facilities will be as close to empty as possible by October.	
Manure not to be spread within 8 m or more of ditches or water-courses (suggested) – increase buffer width to avoid any contaminated runoff based on soil, soil cover conditions, slopes greater than 5%, and sensitivity of area being protected.		Manure not to be spread within 8 m or more of ditches or water-courses (suggested) – increase buffer width to avoid any contaminated runoff based on soil, soil cover conditions, slopes greater than 5%, and sensitivity of area being protected.	To avoid food safety concerns, do not spread manure on berry fields between flowering and harvest or on vegetable fields after planting.	Manure not to be spread within 5 m or more of wet ditches or wet watercourses, or 3 m or more from dry ditches or dry water-courses (suggested) – increase buffer width to avoid any contaminated runoff based on soil, soil cover conditions, slopes greater than 5%, and sensitivity of area being protected.

Did you know?



The Ministry of Agriculture has developed many resources pertaining to the management of nutrients in the Agricultural sector.

Check out the guide at:

http://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/soil-nutrients/nutrient-management/nutrient-management-reference-guide/nutrientmgmt_refguide.pdf



Upcoming dates of interest:

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|------------|---|
| October 17 | Next Steele Springs water sample |
| October 31 | DRAFT Environmental Impact Assessment Reports due for Grace-Mar and H.S. Jensen and Sons. |
| November 2 | Technical Communications Working Group Meeting |

More info can be found at:

<http://www2.gov.bc.ca/gov/content/environment/air-land-water/site-permitting-compliance/hullcar-aquifer>

