

22 September 2017

To: Douglas Hill, A/ Executive Director, Ministry of Environment and Climate Change (ENV)

From: Meaghan Murphy, Community Resource Technologist, Ministry of Environment and Climate Change (ENV)

**Re: Hullcar Situation – Stakeholder Interviews and Public Comments**

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### **Background and purpose**

The Hullcar Situation Review (the Review) was announced on August 2, 2017 by the Minister of Environment and Climate Change, the Honourable George Heyman. The Review is meant to provide advice and support government to inform future decisions undertaken by Statutory Decision Makers (SDMs), agricultural operators, health authorities, and provincial agencies. Moreover, this Review is being led by an independent review team, POLIS. As part of the Review, the Factual Report, also known as the “Hullcar Situation Summary” was undertaken, and comprises several components, including the Stakeholder Interviews, which is summarized here. The stakeholder comments provide insight on the Agricultural Nutrient Management Practices and key government actions taken to respond to the Hullcar issue to date. The interviews were undertaken by Meaghan Murphy (ENV) and Lee Hesketh (ARDCorp). This memo summarizes the approach taken and important findings from the stakeholder interviews that were conducted between August 24 - September 22, 2017. The stakeholder comments will provide insight for the foundation of the review of current Agricultural Nutrient Management Practices report and the POLIS report.

### **Methodology**

Perspectives shared by stakeholders provide insight into their understanding of the current status of the situation, and stakeholders’ recommendations moving forward. The stakeholder interviews were conducted to analyze three themes: 1) How we got here, 2) gather perspectives on what has been done, and 3) what we can do moving forward. A set of ten standard questions were developed with input from POLIS.

The stakeholder interviews were collected three ways: in-person, phone/Lync, or via email. In-person interviews were preferred, but accommodations were made (teleconference, phone, or email) if stakeholders were not available in person. The option to review interviews was requested by some individuals to incorporate additional input and clarification. Respondents had 48 hours after the interview to provide additional materials.

The stakeholder responses were organized by question. Individual responses were analyzed and coded for various themes to help identify the common answers for each question. All questions were analyzed, with exception of Question 10, which was removed due to the nature of the question (see Appendix A). It was not relevant to the analysis, because it was merely to identify additional interviewees. Interviews that were conducted between August 24-September 13<sup>th</sup> were included in the Analysis of Responses summary. The document is available on the SharePoint site.

The Hullcar Situation Summary also included a public feedback form to gather public perspectives on the Hullcar situation (see Appendix B). An online forum was opened on the Hullcar Aquifer Information website from August 31 – September 8, 2017. The responses gathered through the website were provided to POLIS as additional information to support their recommendations, but not included in the Analysis of Responses summary document. The document is available on the SharePoint site.

## **Discussion**

The answers provided by each respondent showed key findings for each question. In summary, the responses were collected in a timely manner with 56% from private sector and 44% from public sector (government). However, due to timing constraints, some of the questions require further analysis to accurately determine each coded answer. With the primary analysis conducted, it has shown a variety of common recommendations and additional works.

Generally speaking, there are several common responses thematically coded from each question. Stakeholders identified impact of agricultural operations, the vulnerability of the aquifer, and primacy of public health as major factors affecting the Hullcar Aquifer situation. Approximately 61% of responses were negative when asked if the Government has contributed to addressing the Hullcar Aquifer Situation, and 55% responded negatively when asked if the IAWG has been effective in coordinating the management of the situation. Questions 1-6 have been examined and have provided various recommendations for legislative review and changes for agricultural practices. Questions 7-9 will require further examination by POLIS of the coded data to make any further recommendations at this time.

## **Next steps**

All raw data and information gathered by from the interview process had oversight from POLIS. The draft analysis was provided to POLIS on September 15<sup>th</sup>, 2017 for their review. The coded thematic information has been provided to POLIS for further consideration and identification on the common themes and findings of the Hullcar Situation Summary. This preliminary analysis has been thematically coded for POLIS to help determine a final list of recommendations for Minister George Heyman.

Douglas Hill, A/ Executive Director, Ministry of Environment and Climate Change (ENV)

Sincerely,

Meaghan Murphy  
Community Resource Technologist | Environmental Protection Division  
BC Ministry of Environment and Climate Change Strategy

Attachment(s): Interview Protocol and Questions (Appendix A), Online Feedback Form  
(Appendix B)

## APPENDIX A: INTERVIEW PROTOCOL AND QUESTIONS

### **Hullcar Situation Review**

#### Introduction

The Province is conducting a review of how the recent contamination of Hullcar Aquifer was managed. This review and your feedback will help inform the development of new approaches and inform future decisions around nutrient management practices and agricultural waste management, while prioritizing source water protection and improving water quality in the Hullcar Valley, as well as in other areas of British Columbia.

#### Interview Protocol

The principles for conducting the interview will be the following:

1. Maintain a balance with the number of stakeholders from each group to ensure a broad range of individuals have been contacted for input.
2. Interviewees that have been contacted will not be a part of the Review Project Team(s), so as to minimize bias, ensure a fair interview structure, and uphold ethical practices.

The Interview Questions (pg. 2) will be given to the interviewees at the beginning of the formal interview for their independent review. A pad of paper and pen will be provided to them during the interview to write notes, as cues for discussion topics. Clarification on the wording of the questions will be provided within the first 10 minutes of the interview. After the 10 minute review period has expired, the formal interview will start. The interview process should take approximately 30 minutes time (minimum); however the duration of the interview is not limited. The intent of the interview is to gather as much information as the interviewee is willing to provide. Not all questions require an answer, but rather it is important to have the individual answer the questions they can to the best of the knowledge and ability.

**The main themes we want to address during the interview process are the following:**

- **How did we get here?**
- **Gather perspectives on what was done**
- **Obtain ideas for moving forward**

Participants will be allowed to correspond with the Ministry of Environment and Climate Change (MOECC) Interview Panel for 48 hours following the closure of the formal interview. This will provide the interviewee an opportunity to provide staff with additional materials, questions, or concerns that they were unable to ask or provide during the meeting.

## Interview Questions

1. In your opinion, what are the major issues facing the Hullcar aquifer?
2. Do you feel the Government contributed to addressing the situation of the Hullcar Aquifer? If so, how? If not, why not?
3. Do you believe the Inter-Agency Working Group (IAWG) has been effective in coordinating the management of the situation?
  - a. Can you think of any other alternatives for management?
  - b. What do you think needs to happen from each government agency?
4. Throughout the process, do you feel the Government has been transparent?
  - a. Has the Hullcar Aquifer Information website and/or staff been helpful with providing information to the public in a timely manner?
5. The 2016 Orders (Pollution Prevention Orders or Pollution Abatement Orders) were issued by the MOE to nine farmers in the Hullcar valley; do you feel these legislative tools (i.e. Orders) have been helpful in managing the situation since it started in 2014?
  - a. Is there a different course of action the MOE should have taken?
  - b. Are there any other legislative tools that could / should have been utilized?
6. Do you believe the agricultural operator's Environmental Farm Plan / Nutrient Management Plans (NMPs) are efficient in controlling and minimizing pollution to the environment?
  - a. What would be a better course of action to address agricultural concerns that impact the environment?
7. Are you aware of any of the monitoring studies for the Hullcar aquifer? If so, do you think the studies helped determine the sources of nitrates in the area and/or provide the necessary information for a solution?
8. Would you recommend changes to any of the current regulations regarding the protection of either water or agriculture, and if so, what would that be?
  - a. In your opinion, do you think a landscape level management plan would be helpful to prevent situations like the Hullcar aquifer in the future?
9. In order to move towards the most positive outcome, what are the next actions/steps the Provincial Government and/or communities should take?
  - a. Do you have any additional comments or ideas that could help better identify or manage a situation like this in the future?
10. Is there any other community member, organization, government, or agency you think we should interview?

APPENDIX B: ONLINE FEEDBACK FORM

The Province is conducting a review of how the recent contamination of Hullcar Aquifer was managed. This review and your feedback will help inform the development of new approaches and inform future decisions around how agricultural waste is managed in the Hullcar Valley as well as in other areas of British Columbia.

Thank you for providing your feedback and ideas

**Collection Notice:**

Personal information collected through this survey will inform the Review of the Hullcar Valley Aquifer under the authority of S.26 of the Freedom of Information and Protection of Privacy Act. If you have any questions about the collection, use and disclosure of your personal information, please contact:

Jennifer McGuire  
A/ADM Environmental Protection Division  
[Jennifer.Mcguire@gov.bc.ca](mailto:Jennifer.Mcguire@gov.bc.ca)

1. Please select you level of agreement with the following statements: (1=Strongly Disagree to 5=Strongly Agree)

	1=Strongly Disagree	2	3	4	5=Strongly Agree
I am satisfied with the level of communication I received from the Provincial Government around the nitrate contamination of water in the Hullcar Valley Aquifer.	<input type="radio"/>				
I am satisfied with the actions the Provincial Government has so far taken to correct the nitrate contamination in the Hullcar Valley Aquifer.	<input type="radio"/>				

2. What were the events that led to your responses above?

**3. In order to move towards the most positive outcome, what are the next actions the Provincial Government and communities should take?**

**4. Do you have any additional comments or ideas that could help better prevent or manage a situation like this in the future?**

Thank you for taking the time to complete this feedback form. Your feedback will help inform development of new approaches and inform the future decisions around how agricultural waste is managed in B.C.

If you would like to receive updates on the results of this work, please provide your email address below.

Email Address: