

**DATE:** July 8, 2021**FILE:** 5600-20/AGRI**TO:** Chair and Directors  
Electoral Areas Services Committee**FROM:** Russell Dyson  
Chief Administrative OfficerSupported by Russell Dyson  
Chief Administrative Officer**R. Dyson****RE: Tsolum River Agricultural Watershed Plan – Phase Two Results and Recommendations****Purpose**

To present the Phase Two results of the Tsolum River Agricultural Watershed Plan, and proposed next steps for the Electoral Areas Services Committee's consideration.

**Recommendations from the Chief Administrative Officer:**

1. THAT the Comox Valley Regional District continue to work with K'ómoks First Nation in developing a collaborative approach to water management for the Tsolum River watershed and advocating with the Province for the use of water management tools under the *Water Sustainability Act*.
2. THAT staff be directed to proceed with a watershed stewardship service scoping study to investigate options for improved service delivery by the Comox Valley Regional District.
3. THAT a review of land use planning and policy to protect watershed health and support agriculture be addressed in stakeholder consultation and drafting of the Comox Valley Agricultural Plan update.
4. THAT the Comox Valley Regional District collaborate with the provincial Ministry of Agriculture on efforts to assist existing users in licensing their wells, and supporting producers in developing on-farm water storage options.

**Executive Summary**

In response to the high level of community interest in better understanding issues related to water quantity and quality in the Tsolum River watershed, the Comox Valley Regional District (CVRD) in 2017 initiated work on an Agricultural Watershed Plan, with funding support provided by the Investment Agriculture Foundation of BC (IAFBC). Phase Two of the Plan was recently completed, and presented to the CVRD Board at its June 29, 2021 meeting.

*Next Steps*

This staff report builds on the information provided in the CVRD Board staff report dated June 24, 2021, and titled "Tsolum River Agricultural Watershed Plan – Phase Two Results" ([link](#)), and presents options to implement Phase Two recommendations for the committee's consideration. The implementation section of the Phase Two report identifies several next steps to advance the recommended actions. A full list of recommended Phase Two actions with timelines and relative costs is provided in Schedule A of the June 24 staff report ([link](#)). Of those actions labeled as "now" priorities, staff have selected several for immediate implementation in 2021 using existing resources as identified in Table No.1 below. Other actions requiring additional resources will be reviewed during the 2022-2026 financial planning process.

Table No.1: Recommended Actions for Immediate Implementation

Recommended Actions for Implementation in 2021	Resources
<p>1A. Establish a local government service to provide resources and capacity to support watershed stewardship</p> <ul style="list-style-type: none"> <li>Resources additional to those currently provided within existing CVRD budgets will be required to advance Phase Two recommendations, particularly those around water quality and quantity monitoring, agricultural land stewardship and collaboration in water management.</li> <li>Watershed challenges are not unique to the Tsolum River, and are experienced in other Comox Valley watersheds such as Comox Lake, Oyster River, Langley Lake and Brooklyn Creek.</li> <li>The 2021 budget for the feasibility studies services includes funding to hire a consultant to complete a watershed stewardship service scoping study.</li> <li>Options to be assessed are anticipated to include a new watershed service for CVRD electoral areas, an amendment to the existing Liquid Waste Management service, function 340, to include broader watershed stewardship activities with the scope of the service, and regional service delivery options such as service delivery under the Regional Growth Strategy (RGS) service, function 512, or a new regional watershed stewardship service.</li> </ul>	<p>Included in 2021 budget for Electoral Area Feasibility Studies, functions 151, 152 and 153</p>
<p>3A. Advocate for use of provincial water management tools</p> <ul style="list-style-type: none"> <li>Tools include Water Sustainability Plan, agricultural water reserve, water objectives.</li> <li>In areas experiencing water challenges, these provincial tools are available for protecting watershed health under the <i>Water Sustainability Act</i>. Where there is alignment of interest between local government and First Nations, there can be better provincial support for the use of these tools.</li> </ul>	<p>In collaboration with K'ómoks First Nation, supported by staff from Liquid Waste Planning</p>
<p>4D. Assist existing users in licensing their wells</p> <ul style="list-style-type: none"> <li>Licensing allows groundwater users to secure water access based on their existing use.</li> <li>In advance of the March 1, 2022 provincial deadline, a workshop is proposed to assist non-domestic users with the licensing process.</li> <li>Ministry of Agriculture staff have offered to lead a workshop for local producers. CVRD staff will follow up in late summer to assist with coordinating a fall workshop.</li> </ul>	<p>In collaboration with Ministry of Agriculture, supported by staff from Liquid Waste Planning</p>
<p>2A. Align planning and development policy with watershed stewardship and watershed vision</p> <ul style="list-style-type: none"> <li>To support the update of the Comox Valley Agricultural Plan, the CVRD applied for funding support from IAFBC's Local Government Partnership Program.</li> <li>A review of land use planning and policy to protect watershed health and support agriculture can be addressed in stakeholder consultation and drafting of the Agricultural Plan update.</li> </ul>	<p>To be led by Planning and Development Services staff in collaboration with Liquid Waste Planning staff</p>

Collaboration with K'ómoks First Nation (KFN) has played a key role in development of the Phase Two report and will continue to play an important role moving forward. The CVRD and the KFN are eager to work together on future watershed stewardship efforts and recognize that supporting watershed health can be best achieved through a respectful, collaborative relationship. CVRD staff and KFN representatives have discussed a shared vision for water management in the Tsolum River watershed involving co-governance, co-management and co-development of policy to protect groundwater and surface water health. While the Province of BC and KFN are currently in the late stages of treaty negotiations, involved in government-to-government discussions regarding land and water management in the Tsolum watershed, there are many ways in which the KFN and CVRD can collaborate to support watershed health. It is recommended that further discussion take place at the Council, board, staff and provincial level to investigate and develop this collaborative approach.

There are also some Phase Two recommendations that are partially in progress, including the following:

- 5B. Monitor surface water levels. Work completed for Phase Two has helped inform provincial priorities for flow monitoring during low flow periods of the year in the Tsolum River watershed. Based partially on the findings of the Phase Two report, the Province, working together with KFN, has installed water level loggers in key reaches of Portuguese Creek and the lower Tsolum River. The Phase Two report provided in-depth analysis of water supply and demand which allowed for flow monitoring to focus on those most concerning reaches. The water level readings collected in these areas will be calibrated to stream discharge, with the objective of determining greater precision of flows during the summer. There has never been a flow and temperature monitoring station at Portuguese Creek so this would be the first attempt at collecting flow data for this area. The flow and temperature data collected will be used to better understand both the environmental needs as well as the patterns of agricultural water use.
- 4B. Support producers in developing on-farm water storage options. Through the CVRD's participation in the BC Agriculture & Climate Change Regional Adaptation Strategies Initiative, implementation of actions to facilitate the development of farm water supply and storage infrastructure are anticipated to include knowledge transfer activities. The Ministry of Agriculture has also recently updated their guidance document on farm water storage ([link](#)). Further collaboration with Ministry of Agriculture staff is recommended to support on-farm water storage.
- 4E. Support home and business practices that protect watershed health. The CVRD has several initiatives planned or underway to help advance this recommendation. Septic education workshops have been delivered to approximately 350 residents. A webpage is in development to provide information to electoral area residents on rainwater management practices such as low impact development, and the importance of these practices in enhancing and protecting watershed health. The Comox Strathcona Waste Management service offers a free household hazardous waste drop-off service at the Comox Valley Waste Management Centre in Cumberland.

There may be opportunity to implement other Phase Two recommendations under the Liquid Waste Management service, function 340, or the RGS service, function 512, as they currently exist. Considerations in the use of these services for watershed stewardship will be further explored in the watershed stewardship service scoping study. One benefit in implementing actions under an existing service is the ability to move forward more quickly. However, a potential drawback may be in maintaining momentum as community priorities shift over time, thus drawing attention to other service priorities at the expense of watershed stewardship activities.

Advantages of a dedicated watershed stewardship service include a better ability to maintain momentum on watershed stewardship activities, and to keep stakeholders and other levels of government engaged. Watershed stewardship activities will play out over a long time frame, and the funding support that a dedicated service would provide would help ensure consistent resourcing is available. A dedicated service would also serve as a signal to senior government and other funding agencies of the priority placed on watershed stewardship by the community, thus increasing the likelihood of obtaining additional funding support for implementation.

#### *BC Climate Preparedness and Adaptation Strategy*

Subsequent to the completion of the Phase Two report, staff have noted the Province's release of a draft Climate Preparedness and Adaptation Strategy ([link](#)). There are several proposed actions in this strategy that directly relate to the findings of the Phase Two report, including the following:

- Explore additional opportunities for Indigenous Nations, municipalities, regional districts and organizations to understand, monitor, manage and reduce climate risks.
- Expand Provincial, Indigenous and local monitoring networks for stream flow, groundwater, snow, glaciated areas, agricultural areas, climate ocean conditions, ocean acidification and ecosystems.
- Create a Watershed Security Strategy and begin development of an associated fund to help improve the health of BC's watersheds.
- Work with partners to pilot the development of water supply and demand management plans for priority watersheds where climate change is likely to result in greater water scarcity.
- Continue to work with farmers and the agricultural sector to strengthen resilience to climate risks. This includes assessing climate-related risks to food supply security and promoting innovative solutions, such as supporting water infrastructure and on-farm adaptation.

The draft strategy is open for engagement until August 12, and responses from groups including local governments and Indigenous communities are encouraged. As part of the recommendation to work collaboratively with KFN, partnering on a response to this strategy in support of these proposed actions and advocating for enhanced provincial support in watershed stewardship is suggested.

#### *Options*

To advance the recommendations in the Phase Two report, staff have identified the following options for consideration:

1. Continue to work with K'ómoks First Nation in developing a collaborative approach to water management, and advocating with the Province for the use of water management tools available under the *Water Sustainability Act*. This includes writing a letter to the Province in response to their draft Climate Preparedness and Adaptation Strategy.
2. Proceed with a watershed stewardship service scoping study to investigate options for service delivery by the CVRD, including a new electoral areas service, revisions to the liquid waste management planning service, or a CVRD-wide regional service.
3. Address the review of land use planning and policy to protect watershed health and support agriculture during stakeholder consultation being completed as part of the Comox Valley Agricultural Plan update.
4. Collaborate with provincial Ministry of Agriculture on efforts to assist existing users in licensing their wells and supporting producers in developing on-farm water storage options.

In order to better manage water in the Tsolum River watershed to help ensure adequate supply of clean water will be available in the future, all four options are recommended.

Prepared by:

Concurrence:

Concurrence:

*D. Monteith**M. Rutten*

---

Vince Van Tongeren, B.Sc.  
Environmental Analyst

---

Darry Monteith  
Manager of Liquid Waste  
Planning

---

Marc Rutten, P.Eng.  
General Manager of  
Engineering Services**Government Partners and Stakeholder Distribution (Upon Agenda Publication)**

Agricultural Watershed Planning Advisory Committee	✓
K'ómoks First Nation	✓