

MEMORANDUM



TO: Ben Van Nostrand
FROM: Veronica Bartlett,
Morrison Hershfield

COLUMBIA SHUSWAP REGIONAL DISTRICT
PROJECT No.: **220091300**

RE: Scope of Work and Objectives for a Full SWMP Review
DATE: November 11, 2022

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1 BACKGROUND

The Columbia Shuswap Regional District (CSRDP) adopted its first SWMP in 1993, followed by an updated Zero Waste SWMP in 2009. The 2009 SWMP (or Plan) was reviewed in 2014, and the associated update was adopted by the CSRDP Board of Directors in the spring of 2015. Three years later, in March 2018, the CSRDP submitted the CSRDP Solid Waste Management Plan Amendment: Salmon Arm Landfill Acquisition and Property Acquisition Guidelines, which was approved by the Ministry of the Environment and Climate Change Strategy (MoE) in 2019. The Amendment's main purpose was to facilitate a future Salmon Arm Landfill site expansion through the acquisition of the Mounce property adjacent to the Salmon Arm landfill. Until the SWMP is replaced by a full plan renewal, all three reports remain active and relevant SWMP documents.

The MoE does not consider the Plan Update as a full Plan renewal process since it did not identify significant changes to the 2009 SWMP. The Update simply revisited the 2009 strategies / initiatives and provided priorities for actions based on feedback from engagement with the public and other stakeholders. The CSRDP is required to submit a full plan renewal to the MoE before December 31, 2028 or earlier, as applicable.

Based on the five-year effectiveness review findings Morrison Hershfield (MH) has identified that a full plan renewal is needed before 2028 for the following reasons:

- The region seems to have successfully completed, or is currently undertaking, most SWMP initiatives, and it may be timely to initiate a SWMP renewal process, and
- The effectiveness review identified some issues that require urgent actions, which are not identified in the current SWMP. Most importantly, changes to the MoE Landfill Criteria have resulted in a design shift away from naturally attenuating landfills, such as the CSRDP's regional landfills¹, to fully engineered facilities. The regional landfills require significant capital investments to align with MoE requirements and such investments are not identified in the current SWMP or the CSRDP's Five-Year Financial Plan. Urgent action is needed to secure landfill capacity and address compliance issues.

Some of the identified issues may require substantial changes to the solid waste management system to solve and such changes would trigger a full Plan renewal process. MH proposes that the CSRDP initiate a full Plan renewal in 2023 with the goal to complete the process in 2-3 years.

¹ All four landfills operated by the CSRDP are natural attenuation landfills. Only Phases 2 and 3 of Salmon Arm Landfill are engineered with a liner and leachate collection system.

MH has developed this roadmap that shows how the CSRD can undertake a full Solid waste management plan (SWMP or Plan) review and update in an efficient, comprehensive and cost-effective manner that also satisfies MoE requirements for SWMP developments.

This Memorandum (Memo) presents a suggested approach for a full SWMP review based on the four steps outlined in the MoE Guide. Proposed timing of each step is included with a proposed high-level overall consultation and engagement strategy to ensure adequate consultation.

This memo presents a proposed list of issues and opportunities that should be considered in a SWMP renewal, which were identified in the five-year effectiveness review.

The proposed Plan Renewal process will be presented to the Plan Monitoring Advisory Committee (PMAC) for their review and input in October 2022, and then to the Board for approval once the process is finalized.

2 Key Topics to Cover in a SWMP Renewal

Based on the effectiveness review and communication with CSRD staff, we have identified some key topics that should be addressed during a full plan renewal.

Compliance and Landfill Capacity

The CSRD has experienced ongoing compliance issues at its landfills over recent years. One significant compliance issue that applies to all four landfills is exceedances of groundwater quality limits at or beyond the landfill property boundaries. This is not an uncommon issue for natural attenuation landfills. In the short term, the CSRD is working to improve monitoring through the use of additional offsite groundwater monitoring wells. In the long term, the CSRD will likely require major capital upgrades convert these sites to engineered landfills.

The CSRD is facing significant cost increases, either through large fines from the MoE or from costs to address compliance issues. As part of a SWMP renewal the CSRD will need to consider which landfills will continue operating and explore options for regional landfills that may be more sustainable (financially and environmentally). Options to assess in more detail include the upgrade to fully engineered landfills, or the closure of one or more landfills with waste hauling to engineered landfills within reasonable hauling distance. There is also an opportunity to discuss the role of waste-to-energy in managing residual waste. The fundamental model of having four waste sheds should be revisited.

For some landfills, there are more issues to consider when deciding on a landfill's future. Community concerns regarding ongoing operation of the Golden Landfill should be considered. With neighbouring developments, closure of Golden Landfill may be prudent, which would involve closure costs rather than the required Phase 2 expansion costs of \$1.8 Million.

The CSRD will need to assess which engineered landfills are accessible within reasonable hauling distance of a potentially closed landfill, and if any of its landfills can provide enough capacity to accept waste from closed facilities (e.g., Salmon Arm which will reach design capacity in 2095 after a series of engineered phases).

Funding of Waste Management Costs

The effectiveness review identified the need for an in-depth financial review of the solid waste financing system. As significant capital costs will be involved to bring all landfills into compliance, the CSRD will either need to lower its costs, increase the revenue, or a combination of the two methods, to fund the residual waste management system.

The closure of Phase 1 of the Golden Landfill is estimated to cost \$1.3 million and the engineered Phase 2 expansion an additional \$1.8 million. If these projects go ahead, it would result in a significant funding gap that cannot be filled by the current \$1 million in reserves. Given this funding gap and other associated landfill upgrade costs required over the next 5-10 years, it is imperative that the CSRD undertake an in-depth review of its solid waste system funding and assess cost and funding impacts of various options (including the upgrade to fully engineered landfills, or landfill closure with waste hauling to external engineered landfills within reasonable hauling distance).

A detailed financial review is often part of the SWMP update and renewal process. Regional districts use the planning process to provide a framework for increasing revenues to support the objectives of their specific SWMPs and to meet the regulatory obligations for the operation of solid waste management systems. The MoE expects a SWMP to outline financial and administrative implications from all planned strategies, initiatives, policies, and solid waste management facilities. For a plan renewal the CSRD needs to develop a ten-year financial plan that shows both current and proposed capital and operating expenditures, funding gaps, and any increases to taxes or tipping fees required to implement the plan. Tipping fees should also be designed to drive waste diversion.

In preparing ten-year financial plans, the CSRD may need to undertake detailed multi-scenario financial modelling for projecting comprehensive system costs and funding for various scenarios. This would provide the regional district with a clearer picture of how the overall program can be financed.

Access to Three-Stream Curbside Collection

Approximately 60% of the region's population have access to curbside collection. The service levels are different between the three member municipalities (Salmon Arm, Revelstoke, and Golden) and the curbside services are delivered using different service models. Key areas without curbside collection includes the District of Sicamous and Area C (including the community of Sorrento²), which is one of the higher density electoral areas. Area C residents showed low interest in a curbside program when consulted in 2018, but public interest may have changed and should be reviewed again. There may be an opportunity for the regional district to play a more central role in undertaking curbside collection.

Waste composition studies from Salmon Arm show that organics curbside collection is working and has helped to reduce the amount of food waste being landfilled. It will be important to continue expanding organics curbside collection across the region, and also look for opportunities to improve recycling collection. There may be an opportunity to offer recycling curbside collection with support from Recycle BC to communities where curbside garbage collection is not in place.

² In April 2022, a referendum determined that Area C will be split into two electoral areas, C and G. Electoral Area G will include the communities of Sorrento, Blind Bay, Balmoral and Notch Hill.

Transfer Station Review

There are several small transfer stations serving sometimes small population bases, but the CSRD has also seen significant growth in some areas. The regional district is anticipating some needed changes to its transfer station network. The following communities have communicated with the regional district about emerging needs:

- Area C and G have a growing population (e.g., White Lake) and there is a potential need for a new transfer station.
- Area D may need a new transfer station with an opportunity to consolidate with the Glenemma transfer station or other facilities

The CSRD should undertake a transfer station review to assess the opportunity to establish new facilities and potentially amalgamate some of the sites to increase collection and transportation efficiencies, as well as to increase the range of services available at each site.

Organics Diversion

The CSRD has made great strides in the area of organic waste diversion but there are still communities lacking access to composting facilities and organics collection. Residents of Golden and Sicamous are not provided any food waste collection, and there is no local food waste processing facility. There is a potential to partner with the municipality of Golden to secure a suitable site for a facility, review options that include a transfer station with hauling to Revelstoke for composting, or to engage a private processor to accept residential curbside organics. The development of suitable organics diversion options needs to consider GHG impacts relating to hauling in the context of what is diverted from landfill.

Demolition and Land Clearing (DLC) Waste Diversion

The diversion of demolition and land clearing (DLC) waste is one of the main focus areas of 2022 and for the coming years. The CSRD has noted that current demolition permit requirements issued by member municipalities are inconsistent and there is a need to collaborate with the CSRD to ensure that the process aims to maximize DLC waste diversion. The CSRD wants to review its own permitting process and potentially develop a model bylaw for use by member municipalities. The CSRD wants to partner with member municipalities to develop and implement bylaws that require source segregation when a building is demolished.

Waste Diversion Enforcement and Education

Instead of implementing landfill bans on divertible materials, the CSRD has instead opted to encourage source segregation of divertible materials through the use of differential tipping fees. Thanks to Bylaw No. 5835, 2021, the CSRD has the ability to impose higher tipping fees if divertible waste, or so called marketable waste, is not separated prior to landfill disposal. Loads of waste that do not contain marketable materials are charged a tipping fee of \$80 per tonne, while loads that contain marketable materials are charged at \$240 per tonne. However, based on the region's 2021 per-capita disposal rate of 658 kg, it would appear that this tipping fee differential may be ineffective incentivizing diversion. The CSRD wants to focus on improving enforcement and is interested in understanding the tipping point when the tipping fees can more effectively drive improved per-capita disposal rates.



The Waste Stream Management Information Reporting Bylaw No.5662 was established in 2013 to identify businesses involved in waste diversion and enable data collection on materials and quantities diverted. However, the CSRD still has not established an administrative structure to enable bylaw enforcement. As of 2022, there are still no facilities registered under this bylaw.

There is also an opportunity to review existing bylaws to ensure that they are fulfilling their original intent and effectively encouraging waste diversion. The regional district may want to consider if the use of variable tipping fees is still suitable or if the use of disposal landfill bans will be more effective. If the CSRD makes changes to the existing bylaw, these must be approved by the MoE.

For bylaws to be effective, the CSRD will need to work closely with member municipalities to educate waste generators (residents and ICI) on requirements and the need for waste diversion. There are some ICI generators that consistently bring marketable wastes in loads going to landfill. Due to insufficient education and enforcement protocols, this continues without any financial deterrent.

The Salmon Arm Landfill serves the largest waste shed in the region. The facility is currently operated by contractors and the operations contract was recently extended for another five years (until 2027). The current service delivery model is not working well and the contractor has not been able to effectively educate and enforce the variable tipping fees which are designed to encourage waste diversion.

The CSRD is interested in reviewing the cost-benefit of operating targeted facilities using in-house staff instead of contractors. For some facilities, such as the Salmon Arm Landfill, the use of regional district staff as front-end (public facing) staff would be beneficial. The messaging to facility users could be more consistent and the tipping fees enforcement more effective.

Extended Producer Responsibility (EPR)

There are currently over 20 regulated provincial EPR programs covering a wide range of material categories. Current EPR programs mainly focus on the residential sector and not the ICI sector. New product categories are continually being evaluated for inclusion into the Recycling Regulation. The MoE's Five-Year Action Plan 2021-2026 for EPR identifies electric-vehicle batteries and chargers, mattresses, single-use fuel canisters, fire extinguishers, electronic products (e.g., solar panels, and e-cigarettes) as materials that will be regulated under the Recycling Regulation as EPR initiatives. By 2025, the MoE will evaluate options to ensure improved recovery and recycling of ICI packaging and paper.

There are still many problematic materials not identified in the MoE's action plan. Used couches, clothing and textiles, and agricultural plastics are some identified materials that the regional district is finding particularly challenging to manage. Agricultural plastics are currently only covered by a voluntary program with collection limited to an annual event in Salmon Arm. It will be valuable for the CSRD to identify which specific materials it would like the regulator to focus on in the future.

The CSRD has been very progressive in developing partnerships with stewardship agencies to be able to offer recycling options for a wide suite of regulated EPR products and materials. The regional district has some concern that the financial incentives provided by stewards are not sufficient to fully cover the management costs of EPR materials. The key feature of EPR policy is to shift the responsibility (physically and economically) to the producer and away from municipalities, but this is still not happening. Although curbside financial support from Recycle BC (through so called 'financial

incentives’) appear sufficient, the incentives associated with transfer station and depot operation are not. The CSRD estimates that recycling depot staffing is costing them \$250,000 - \$300,000 per year which is not compensated by financial incentives. The depots taking household hazardous waste are forced to accept more than regulated materials, only offset some of the costs by the financial incentives paid by stewards.

Review of Goals and Targets

Sustainability was clearly a key driver of the CSRD’s 2009 SWMP and looking forward, the regional district will need to revisit principles, goals and targets to better align with MoE guidance, which was published after the SWMP was developed. In the future, the region may want to feature circular economy principles and focus on the bigger issues needed to advance the region’s sustainability priorities.

The current SWMP has no “hard” performance targets (i.e., linked to planned improvements to per-capita disposal rates). Therefore, the CSRD has not been able to effectively measure its performance against targets. A new SWMP should be developed with specific targets and more details that can guide priorities for budgeting and implementation. In developing a target, the CSRD may want to separate the regular municipal solid waste from the residential and ICI sectors to demolition and land clearing (DLC) waste.

3 Recommended Steps for a Full Plan Renewal

A SWMP renewal process must align with the MoE’s document “A Guide to Solid Waste Management Planning” published in 2016. The steps proposed for the CSRD are illustrated in Figure 1 and described in Table 1.

The development of a SWMP requires adequate consultation with the general public and potentially affected stakeholders. The most successful stakeholder engagement and public consultation processes are those that are well integrated into the entire four-step planning process. Therefore, consultation and engagement are shown as a separate step that intersect with all four planning steps.

The four-step process is likely to take approximately two years to complete.

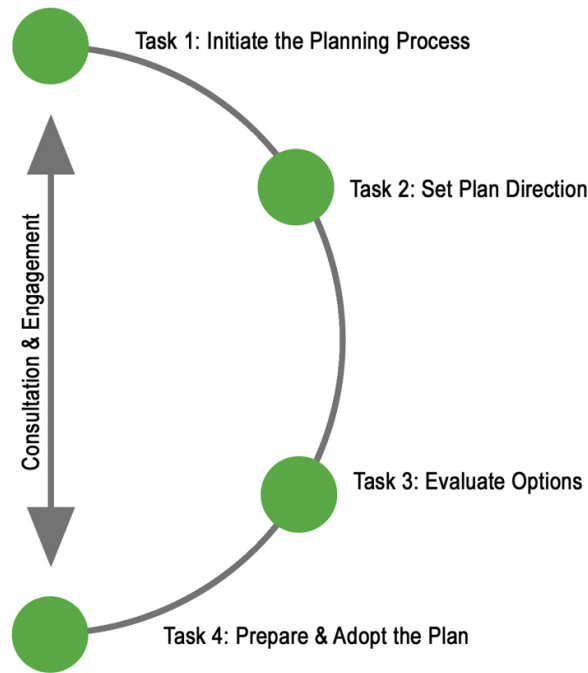


Figure 1: MoE's Five-step Plan Development Process

Table 1 Proposed Process for CSRD's Full Plan Renewal

Steps for the CSRD	Description	Proposed Timeframe
Step 1: Initiate the Planning Process		
Set Budget for Planning Process	The CSRD will need to decide on how the Plan renewal process will be undertaken, by when and by whom. Regional district staff will need to identify how much support is needed from external consultants to support the planning process and the budget needed. This memo provides recommendations on the overall consultation and engagement approach and approximate budget allocation.	By end of December, 2022
Gain Board Decision to Initiate Process	<p>CSRD staff will need to present rationale for why a full plan renewal is required at this point ahead of 2028, which is the due date set out by the MoE. The Board will need to pass a resolution to update the SWMP. The Board will need to approve the planning process, the proposed scope of work and the proposed budget. The scope of work presents the aspects of the existing SWMP that will be changed. It will be informed by the key topics identified in this memo.</p> <p>CSRD staff will be responsible for notifying interested parties once the Board resolution is passed. The notification will state that the SWMP will be updated and should include CSRD's contact information. The 2016 MoE guide provides a list of groups to notify.</p>	Early 2023

Steps for the CSRD	Description	Proposed Timeframe
Establish Advisory Committee(s)	<p>The CSRD will need to develop the terms of reference for the Public and Technical Advisory Committee (PTAC). A joint committee is recommended rather than separate committees for public and technical stakeholders. A single committee provides more collaboration and learning opportunities between committee members, is easier to manage and will facilitate the development of a single set of recommendations for presentation to the Board.</p> <p>The PTAC composition needs to reflect balanced participation between government, First Nation, private sector and community interests. The current member list for the Plan Monitoring Advisory Committee (PMAC) can be used as a starting point and PMAC members can be asked to transition to the new PTAC. The transition to a PTAC and the addition of new members will occur once the Board passes a resolution to begin the SWMP development. Other interested parties must be notified about the planning process and the opportunity for joining the PTAC. An application form can be used to screen applicants and the Board will review, appoint PTAC membership and dissolve the PMAC. The Board must formally establish PTAC.</p> <p>Refer to more considerations for PTAC in Section 4.</p>	Early 2023
Design Communication & Engagement Plan	<p>CSRD staff are recommended to start designing the consultation and engagement process. It will be important to meet with First Nation band members to determine the best approach to engaging them in the process. Some key considerations for the Communication & Engagement Plan are included in Section 4 of this memo.</p> <p>Once the PTAC is established, its members should be engaged to finalize the Communication & Engagement Plan. PTAC may seek Board approval if deemed necessary.</p>	Early 2023
Step 2: Set Plan Direction		
Prepare Background Information and Review Current Waste Management System	<p>This task will build directly on the 5-year SWMP Effectiveness Review completed by MH in September 2022. A current system review needs to present background information, such as plan area characteristics, demographics, population growth projections, as well as current waste management practices at all levels of the waste hierarchy.</p> <p>As per the MoE Guide, the CSRD needs to create a list of all waste management facilities in the region, including those owned by the CSRD, member municipalities and the private sector. In a new SWMP these facilities are typically listed in a schedule that can easily be updated through a minor amendment, for example if new facilities open or existing facilities change their status.</p> <p>The Current System Review will take stock of the region's current waste management system, summarize how the actions of the existing SWMP have been implemented (i.e., summary of the 5-year effectiveness review), and identify gaps, emerging issues, and opportunities to be considered during the Plan update, including those identified through the 5-year effectiveness review.</p>	Early 2023 - Mid 2023

Steps for the CSRD	Description	Proposed Timeframe
Establish Principles, Goals and Targets	<p>The CSRD will need to revisit overall goals and priorities. The MoE has developed eight provincial guiding principles for regional districts to follow in developing their solid waste management plans. It is suitable to have a discussion with the PTAC and the Board (if needed) about the suitability of these principles and the need for any additional principles. It may be suitable to establish locally relevant guiding principles, goals and targets that are complementary to provincial principles, goals and targets.</p> <p>The principles, goals and targets proposed by PTAC will help to guide discussions about feasible options and trade-offs between different strategies and initiatives.</p>	Early 2023 - Mid 2023
Consult the Public	<p>In designing the consultation and engagement efforts, the CSRD will need to carefully time the engagement periods at key points during the Plan development. “Survey fatigue” has been increasing in recent years, however the use of engagement surveys can be effective if a survey is carefully crafted and timed. MH recommends a first public survey early in the planning process, which can allow participants to express their values and concerns up-front. Knowing community concerns and priorities would help to steer the direction of Plan development. A second engagement would come later during step 4 and focus on the proposed new SWMP itself, taking into account “what we have heard” during the first engagement period. Although MH recommends that the public is only engaged at two points, we believe that this will provide meaningful engagement and excellent results.</p>	Early 2023 - Mid 2023
Step 3: Evaluate Options		
Develop Feasible Options	<p>The CSRD will collaborate with the PTAC to explore a wide range of possible waste management strategies to achieve the proposed goals and target set out for the Plan. Options for managing waste will be evaluated and the regional district will consult with PTAC to determine the preferred approaches.</p> <p>To organize the discussions on potential strategies, MH proposes a series of PTAC meetings during which the group collectively addresses each major aspect of the Plan. Major themes may be organized in accordance with the waste hierarchy. At each meeting, the PTAC helps to identify preferred options that become the basis of the SWMP.</p> <p>Separate PTAC meetings may be required for aspects such as waste diversion (reduce, reuse, recycling and organics diversion), recovery and residual waste management, system cost recovery, and other issues (e.g., bylaws, emergency management, illegal dumping).</p>	Fall 2023 – Early 2024
Step 4: Prepare and Adopt the Plan		
Prepare a Draft Plan	<p>Step 4 involves combining all background information, proposed principles, goals and targets, as well as all the preferred strategies into one concise document. The SWMP will clearly document the proposed implementation schedule for each strategy over the Plan period (10-year</p>	By mid-2024

Steps for the CSRD	Description	Proposed Timeframe
	<p>period), financial implications (financial and administrative) over the Plan period, funding tools for cost recovery and monitoring plan provisions.</p> <p>The draft SWMP will be finalized in collaboration with PTAC, the Board will review the draft Plan prior to public consultation.</p>	
<p>Consult the Public – Seek Comments on the Draft Plan</p>	<p>The public and other interested parties will have the opportunity to review the draft SWMP in full. During this second engagement period, the CSRD will need to follow the engagement activities as outlined in the Communications and Engagement Plan developed during project initiation. Engagement activities often includes a second survey, which can either be completed online, via mail-out or phone.</p> <p>The CSRD will need to identify which engagement techniques are suitable for its residents and stakeholders. Engagement opportunities are traditionally offered via open-houses, but it may be more suitable to hold less formal pop-up events at local community gatherings (e.g., fairs, markets, etc.,)</p> <p>Public engagement information needs to be developed to effectively communicate what’s proposed and what it may mean to residents and other stakeholders. The CSRD is likely to communicate via newspaper ads, news releases, information booth storyboards, videos, etc.</p>	<p>Fall 2024</p>
<p>Prepare Report on Consultation</p>	<p>All received stakeholder feedback that was received through the engagement on the draft SWMP will need to be summarized in a report. Recommended changes to the SWMP should be identified so that PTAC is able to review them and ensure that adequate consultation has been undertaken and the SWMP is adapted to meet community needs.</p> <p>If needed, CSRD staff will also present to the Board on public engagement results and the PTAC’s recommended changes to the SWMP.</p>	<p>Late 2024</p>
<p>Submit Plan to Ministry for Review and Approval</p>	<p>Once the SWMP is approved by the Board, the CSRD will be responsible for the submission to the MoE together with the Public Consultation Summary Report.</p> <p>It is not uncommon to wait several months before receiving any MoE review feedback. Until then, the CSRD may start to implement its proposed SWMP strategies. If the plan will allow borrowing without going to referendum, then it is incumbent on the CSRD Board to lobby MoE to approve expeditiously.</p>	<p>Early 2025</p>

4 Overall Consultation and Engagement Process

The consultation and engagement associated with a full plan renewal focuses on three primary elements that need to be integrated into the planning process. The planning process is much more likely to be successful if the methodology aligns with IAP2 (International Association for Public Participation) guidelines for effective public participation (Figure 2).

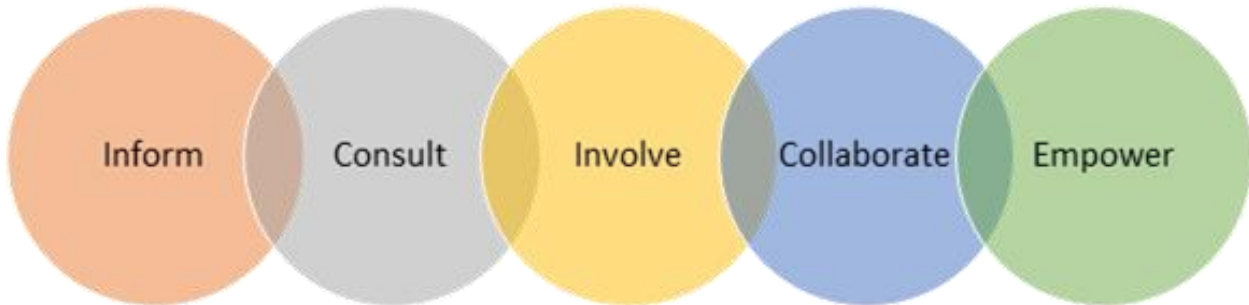


Figure 2: IAP2 Spectrum of Public Participation

A suitable approach to consultation focuses on three primary elements that are well-integrated into the Plan development process:

- Process communications
- Targeted stakeholder engagement
- Broad public consultation

The figure below identifies the three elements needed for the SWMP development process.

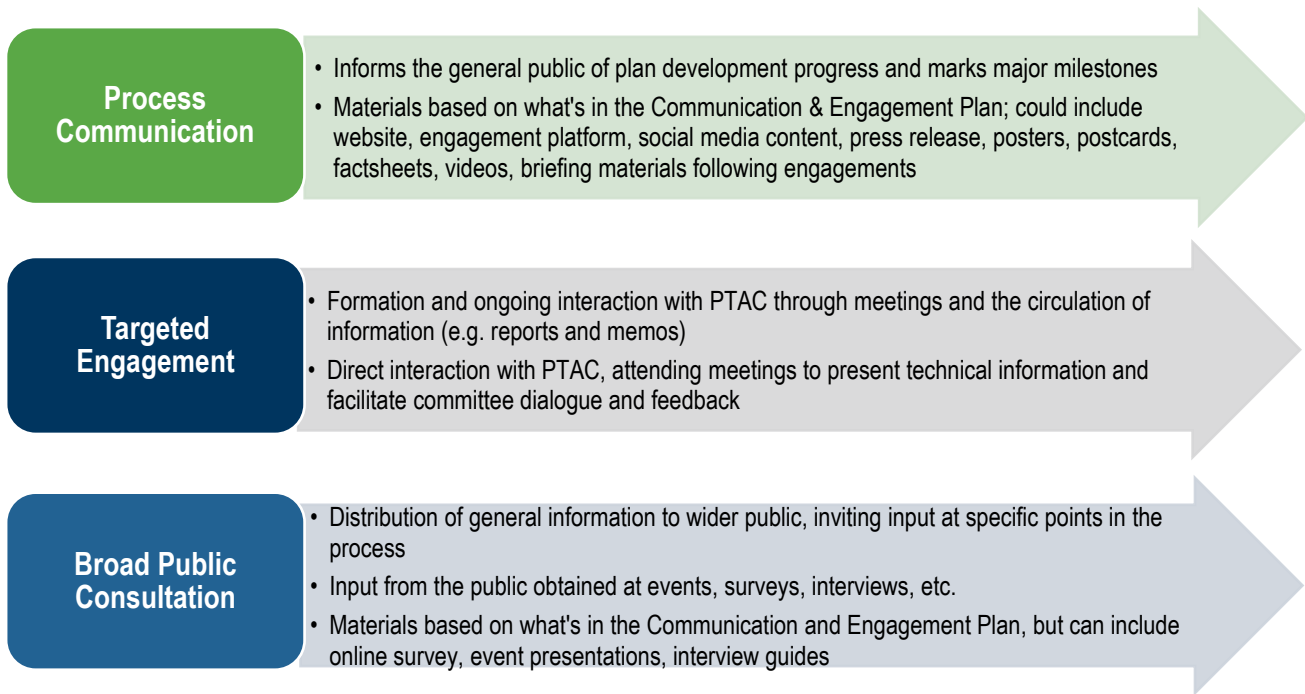


Figure 3 Three Primary Elements Needed for the Planning Process

4.1 Stakeholders

When developing the consultation and engagement plan the CSRD will need to identify who the stakeholders are. Internal stakeholders (i.e., individuals who work for the CSRD) are also part of the broader group of relevant stakeholders. Sometimes stakeholders are referred to as the “public” and stakeholder engagement is synonymous with Public Consultation.

The planning process is often structured to obtain input from four main stakeholder groups: PTAC, Engagement with the Public and Interested Parties, First Nation communities, and the Regional Board.

Stakeholder: any individual or group of individuals, organization or political entity with an interest in the outcome of a decision.

Communications & Engagement plan: traditionally includes context and background statement, engagement goal, objectives and engagement techniques, as well as communications goal objectives/strategies and evaluation framework for feedback.

The CSRD may want to conduct some virtual/ in-person interviews when representatives from identified stakeholder groups are able to share their feedback and insights on how they would like to participate in the planning process (e.g., through PTAC or through other means). Those interviewed can be asked about their preference for how to be engaged. The input received from the interviews can help to inform a more tailored community-centric engagement plan that is accessible and meaningful for all.

PTAC

A Plan Monitoring Advisory Committee (PMAC) was established to monitor CSRD’s current Plan implementation and effectiveness. The PMAC was set up to provide multi-stakeholder advice to CSRD staff on related issues identified through the implementation of the SWMP, including policy, new

initiatives, plan amendments, community feedback, staff reports, program performance, public consultation and future updates.

When the CSRD is initiating the renewal process of its SWMP, the PMAC will transition to a Public and Technical Advisory Committee (PTAC). There will be opportunities to solicit and select new members to be part of setting plan objectives and exploring waste management options. Existing PMAC members can be encouraged to apply to participate on the PTAC.

CSRD staff are concerned that only member municipalities and one member from the public are actively involved in PMAC. Table 2 shows the current PMAC membership and the organizations they represent. There are no representatives of First Nations communities currently involved.

Table 2 Current PMAC Membership

Standing Committee Members	
Provincial Agencies	<ul style="list-style-type: none"> ▪ MoE
Regional District	<ul style="list-style-type: none"> ▪ Two representatives (Team Leader, Environmental Health Services, and Waste Reduction Coordinator)
Municipal representatives	<ul style="list-style-type: none"> ▪ City of Salmon Arm ▪ Town of Golden ▪ City Of Revelstoke ▪ District of Sicamous
Electoral Area Representative	<ul style="list-style-type: none"> ▪ Golden -Columbia ▪ Revelstoke -Columbia ▪ South Shuswap ▪ City of Salmon Arm Representative ▪ Falkland - Salmon Valley - Ranchero ▪ Sicamous - Malakwa ▪ North Shuswap - Seymour Arm
First Nations	<p>Five local First Nation's bands may select one member from their band (Little Shuswap Indian Band, Neskonlith Indian Band, Spallumcheen Indian Band, Adams Lake Indian Band, and Okanagan Indian Band). However, there is currently no First Nation representation on PMAC.</p>
Interest Group Representatives	<ul style="list-style-type: none"> ▪ Local Environmental Group/Recycling Organization ▪ Large Commercial Hauler/Operator ▪ Operator/Owners private solid waste facilities ▪ Organizations with Recycling Experience
General Public	<p>Although PMAC can include up to 6 members to represent the public, only Area A and C are currently represented.</p> <p>Representatives from the public are appointed to the Committee by the CSRD Board; ideally one member to represent each electoral area and member municipality.</p>

The PTAC will act as the cornerstone of the consultation process. The PTAC will help provide consistency and transparency throughout. The CSRD should take the opportunity to revisit the PTAC

and PMAC's Terms of Reference and exploring what these two committees can look like in the future and how they can be more engaged in a Plan renewal process and future Plan implementation.

As described in Section 3, the PTAC members are typically invited to attend a series of meetings when key waste management topics are discussed. Ahead of each meeting, PTAC members will have access to the agenda, technical memos describing the context and possible options to discuss. Each meeting would be designed to solicit input on potential strategy options from PTAC members before identifying preferred options that can be included in a new SWMP.

The Columbia Shuswap region is large and comprises four waste sheds. A SWMP can either be developed with input from split advisory committees which represent the different areas of the region, or through one committee. MH recommends that the CSRD establish only one PTAC, which has public, local government and technical representation as well as region-wide representation. One advisory committee is easier to manage and communicate with when options are discussed and evaluated.

Engagement with the Public and Interested Parties

Members from the public who do not get involved in the PTAC may choose to be engaged in the planning process by, for example, responding to a survey on the CSRD's website, or by attending pop-up events or more formal open houses.

MH is recommending offering the public and other interested parties the chance to provide input into the plan development process at two main points: The first would be early on, allowing participants to express their values and concerns up front to help steer the direction of Plan development. The second engagement would come later on, focusing on the proposed (draft) SWMP itself and taking into account "what we have heard" during the first engagement. A two-stage engagement approach should be sufficient if they are carefully timed.

First Nation Communities

The MoE is placing increasing emphasis on regional districts' efforts to collaborate and partner with local First Nations communities with respect to SWMP development and implementation. The CSRD has an existing service agreement and is in active communication with the Little Shuswap Lake Band as the Band operates a recycling depot on reserve land, as a satellite location to the Scotch Creek Recycling Depot.

Previously the CSRD has invited representatives from the five Bands (Little Shuswap Indian Band, Neskonlith Indian Band, Spallumcheen Indian Band, Adams Lake Indian Band and Okanagan Indian Band) within the region to participate in the PMAC. However, Band members have not taken up the offer, and the First Nations communities have not been represented at PMAC meetings.

Some regional districts have recently appointed a specific First Nation liaison person on behalf of the organization. This may be a suitable option for the CSRD, as there is no specific facilitating liaison role currently.

The CSRD must continue to ensure engagement with local First Nations communities takes place. The success of many regional waste diversion strategies relies on close collaboration for the effective application of waste bylaws, promotion, and public education on waste prevention and diversion initiatives.



When the SWMP is renewed, it will be important to adequately involve First Nation communities to ensure that their waste management needs are met. MH recommends that the CSRD invite Band members from the First Nation communities to participate in virtual/ in-person interviews to share their feedback and insights on how they would like to participate in the planning process (e.g., through PTAC or through other means). The engagement techniques may need to be somewhat different to engagement activities used with the wider public. Those interviewed can be asked about their preference for how to be engaged.

Equipped with this important feedback, the CSRD can develop the Communication & Engagement Plan to cater specifically to consultation and interactions with First Nation communities during Plan development.

CSRD Board

The Regional Board will be involved in key parts of the planning process, including:

- Approving the Plan renewal initiation
- Reviewing and approving the PTAC member recommendations
- Providing input on overall goals and priorities (not required, but may be beneficial)
- Reviewing the draft Plan prior to public consultation
- Reviewing the draft plan before it is submitted for provincial government review. The Board may want to review public engagement results and PTAC's recommended changes to the SWMP.

CSRD staff will need to engage Board members to determine what level of involvement they should have. Some regional boards place the greatest responsibility on the PTAC and are only involved in the review of the draft and final plan. Other boards are more involved throughout the process.

5 Next Steps

Renewing a SWMP is a large undertaking and needs to be adequately resourced. Support from external consultants can help CSRD staff keep a streamlined and efficient process. For staff who are involved with operational daily waste management tasks, it can be challenging to objectively assess the waste management system and identify opportunities for improvement. Having support from external consultants can bring experience from similar SWMP planning projects that have shown to be effective and satisfied MoE requirements. External consultants should be working closely with CSRD staff as an intertwined and seamless project team.

5.1 Staffing Implications

The planning process will require sufficient staff resourcing in order to develop an effective and meaningful SWMP. Currently there are four staff who are responsible for CSRD's solid waste management (Team Leader for the Environmental Health Services, a waste reduction coordinator, a facilities superintendent, and a finance accountant managing the SWMP programs). A summer student is also employed each year to support the team.

When exploring potential SWMP strategies, the CSRD will need to identify future financial and administrative impacts so that the Plan can successfully be implemented once approved. The new SWMP will identify if any additional staff are required for plan implementation.

5.2 Budget Allocation

It is common for regional districts in BC to use external consultants to help support a SWMP renewal process. Budgets often range from \$100,000 – \$160,000 depending on how much of the planning work regional district staff can take on. Engagement costs can be reduced if the majority of the in-person engagement activities can be done by the regional district.

Typical costs are presented in the table below. These are based on MH’s experience with plan development processes over the last five years. The costs are likely to be spread over at least two years.

Table 3 Typical Planning-related Costs

Aspect	Estimated Cost
Current Waste Management System Review & Communication & Engagement Plan Development	\$15,000 - \$25,000 The CSRD has already completed much of the review as part of the 5-year effectiveness review and can expect a lower cost.
Consult the Public (Engagement Period 1)	\$10,000 - \$15,000 assuming online survey
Options Development	\$30,000 - \$50,000 Costs depends on the number of PTAC meetings required. Typically, 3-5 meetings are needed.
Draft Plan Development	\$10,000 – \$15,000
Consult the Public (Engagement Period 2)	\$20,000 - \$35,000 Costs are dependent on selected communication and engagement techniques (e.g., mail-out survey, video developments, etc.).
Consultation reporting and SWMP finalization	\$15,000 – \$20,000
Estimated Costs	\$100,000 - \$160,000

Cost Recovery Modeling

As part of the options assessment, the CSRD will need to assess the system’s long-term financial performance and ensure that overall program can be financed.



Detailed financial analysis has been a key element of many solid waste planning projects. Recently, MH developed a detailed financial model to help the RDKS determine how to better fund its solid waste management system through tipping fees and taxation. Significant capital improvements have been made to the RDKS' solid waste system over the past few years, including construction of a new landfill. The financial model indicated a need to increase the surcharge for waste from industry and from out-of-service-area to ensure sufficient funds are available for future landfill phases. This model is now being used by RDKS staff to guide decisions around tipping fees, surcharges and tax revenue.

Long-term cost models were also developed by MH for the Peace River Regional District and the Capital Regional District to identify the impacts of increased diversion and potential tipping fee increases on landfill revenues in their respective regions.

Costs of financial models vary depending on their complexity and granularity. Model costs typically range from \$20,000 to \$50,000. However, full system models can cost even more if the model is complex with multiple scenario testing.

6 Closing

The COLUMBIA SHUSWAP REGIONAL DISTRICT Retained Morrison Hershfield to conduct the work described in this report, and this report has been prepared solely for this purpose.

This document, the information it contains, the information and basis on which it relies, and factors associated with implementation of suggestions contained in this report are subject to changes that are beyond the control of the author. The information provided by others is believed to be accurate and may not have been verified.

Morrison Hershfield does not accept responsibility for the use of this report for any purpose other than that stated above and does not accept responsibility to any third party for the use, in whole or in part, of the contents of this document. This report should be understood in its entirety, since sections taken out of context could lead to misinterpretation.

We trust the information presented in this report meets Client's requirements. If you have any questions or need addition details, please do not hesitate to contact one of the undersigned.

Morrison Hershfield Limited

Prepared by:



Veronica Bartlett, M.Sc.
Environmental Planner
vbartlett@morrisonhershfield.com

Reviewed By:



Todd Baker, P.Eng.
Senior Environmental Engineer
Global Waste Practice Lead
tbaker@morrisonhershfield.com

