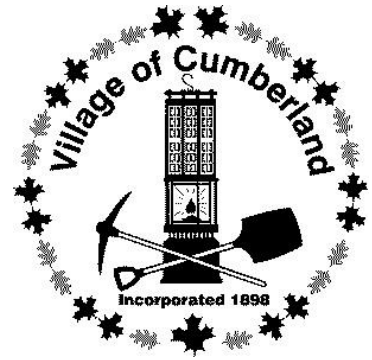


COUNCIL REPORT



REPORT DATE: March 9, 2016
MEETING DATE: March 14, 2016

TO: Mayor and Councillors
FROM: Paul Nash, Liquid Waste Management Plan Project Coordinator
SUBJECT: Proposed Road Map for Liquid Waste Management Plan Report

RECOMMENDATION

- i. THAT Council receive the Proposed Road Map for Liquid Waste Management Plan Report for information.
- ii. THAT Council provide feedback on the proposed road map for the restart of the Liquid Waste Management Plan

SUMMARY

The Liquid Waste Management Plan (LWMP) process must be restarted from Stage 1, but this does not necessarily mean starting from scratch. Much of the prior work is still relevant, but there are new challenges, goals and opportunities to be examined as part of the new LWMP process

The focus is on the Stage 1 tasks – quite simply, how we will engage the stakeholders to define the mandatory “needs”, the desirable “wants” and the potential ways to achieve them.

This report outlines the proposed way forward – the “road map” – for doing the new LWMP. It lays out the approach that will be used, focusing on Stage 1, with the “performance goal” being to achieve the best possible LWMP in the the most expedient manner.

BACKGROUND

1. LWMP Progression

The basic progression of the LWMP can be conceptualized as follows, this is the overall Road Map Stage 1 – Broaden the thinking;

- a) Define the baseline – where are we now?
- b) Set the goals – where do we want and need, to be?
- c) Broad list of options to get there, and mechanism to evaluate them
- d) Identify knowledge gaps and studies needed to fill them

Stage 2 – Sharpen the focus

- a) Screen the options to create the short list
- b) Carry out required studies, how do they impact the options?
- c) Detailed evaluation of the short list
- d) Select preferred option

Stage 3 – How to make it happen

- a) Detailed study of preferred option
- b) Identify steps for implementation
- c) Develop financing plan
- d) Document the process
- e) Decision to adopt and implement

There is a relatively well defined process to achieve this that includes:

- Extensive public engagement;
- Council and staff input;
- Regulatory agencies (Ministry of Environment, Department of Fisheries and Oceans, Ministry of Community, Sport and Cultural Development, etc.);
- Other stakeholders (e.g. First Nations, local environmental groups);
- Expert consultants, and
- More extensive public engagement.

It is possible to combine two stages into one, with approval of Ministry of Environment (MoE). This can include either combining Stages 1 & 2, or Stages 2 & 3. There is one instance where all three were combined into one. A notable advantage of combining stages is that it eliminates the time associated with the Ministry of Environment review process.

The challenge with an LWMP is to follow the process, and get an outcome, without getting bogged down in the process. Keeping it focused and moving forward is the key, and this is the primary task of the LWMP Project Coordinator.

While the above list represents the waypoints along the road map, it is also important to determine who is in the car, what the rules of the road will be, how fast we want to drive, and identify potential potholes.

The following is some discussion of the major aspects of executing the LWMP, and particularly Stage 1, with some questions for Council to consider.

2. Ministry of Environment involvement

The Ministry of Environment owns the LWMP process, and the current set of rules is in the 2011 [Interim Guidelines for Preparing Liquid Waste Management Plans](#).

In the past, MoE was very actively involved in LWMP preparation, usually being on one or both of the Advisory Committees. As the wastewater regulations have become more defined, the major environmental goals are more prescriptive. This is particularly so with the new Federal wastewater regulations, where there is no relaxation of any of the requirements. Thus, the

mandatory environmental requirements are often already defined, and there is less need for the MoE to be intimately involved in the process.

The wastewater legislation has changed since 2011, so an updated statement from MoE is required in terms of the winter and summer discharge criteria. Once this is received, MoE may decide to not participate in the Committee, and just be copied on major correspondence, with specific meetings when appropriate.

MoE also allows variations to both the committee structure and the stage progression, which are discussed later. The Village has been in contact with the MoE to discuss their preferred level of involvement, however as of the writing of this report we are awaiting response, and we're hopeful this will be confirmed shortly.

3. Setting the scope

The intent of the Stage 1 process is to consider all available options, but some of these have been previously rejected. If they are still technically feasible, should they be brought back onto the table for re-consideration? The most obvious ones being;

- Joining the South Sewer Project
- Having CVRD landfill leachate, pre-treated, coming to the Cumberland WWTP for final treatment and "disposal"
- Having Cumberland wastewater going to the CVRD landfill to a new, combined WWTP, with effluent return for disposal

The assumption going into the renewed Stage 1 process is that there is no appetite for Council to reinvestigate these options again.

Question: Should these options, especially the South Sewer Project, be ruled out from the start?

4. Goal Setting – Needs, wants, and knowing the difference

Arguably the most critical part of the LWMP is setting the goals, and ensuring that these are the right goals for the community. By design, the LWMP focuses on three things:

1. Bringing the community into compliance with the current wastewater regulations
2. Creating a financing plan, including borrowing authority if needed
3. Ensuring that there has been appropriate public engagement

For the context of the LWMP, these are the "needs" – they *must* be satisfied.

They also represent each of the three legs of the "triple bottom line" approach – environmental, economic and social.

But while these goals are *necessary*, they may not be *sufficient* to get a truly successful outcome.

Communities typically have other goals that are relevant, but not defined in the LWMP. This is particularly true for "aspirational goals" that are often set in Vision Plans, Official Community Plans and Sustainability Plans. These can be characterized as "wants", some are specific to wastewater, others are applicable to the whole community. Examples of wastewater specific goals are:

- Noise and odour reduction
- Reclaimed water

- Maximizing other resource recovery (biosolids, energy)
- Aesthetics to complement the existing community
- Specific land use goals (e.g. move the WWTP out of town)
- How much future capacity to build?
- Stormwater handling
- Minimizing/eliminating external inputs, especially chemicals

And examples of broader goals, that can be applicable to most municipal projects, include:

- Pursuing innovative solutions
- Using life-cycle cost analysis, not just first cost
- Maximizing use of outside funding
- Reducing CO2 emissions
- Encouraging economic development
- Desire for public interaction with public facilities, multiple use of public facilities (e.g. meeting space)
- Maximizing local content in construction and operation
- Social purchasing

The major upgrade and expansion of the wastewater treatment system is often the single largest capital project a community takes on. As such, it should not only embody the values of the major Plans (Vision, OCP, Sustainability Plan, etc.), *it should be an exemplary case of implementing them.* It can easily be seen that a narrow focus purely on the MoE defined needs of the LWMP process can lead to something that is not consistent with the community's broader goals.

Thus, the LWMP represents an opportunity to look at all the aspirational goals, and see how the wastewater project(s) can work towards them, and even outright achieve them. Some goals that would not normally be associated with wastewater might be achievable, if emphasis is placed on them.

It inevitably involves some difficult decisions in that achieving the aspirational goals usually - but not always - increases the costs of a project. It may also show that certain goals are mutually exclusive, or are simply unachievable. In effect, the goal setting process is laying out the evaluation system for the options, and ultimately, for a tender or Request for Proposals for the future construction project.

The LWMP process is then a true test of the importance the community places on achieving its aspirational goals, and how well the major Plans have laid out the decision making process.

This is the most important part of the public engagement, to capture the aspirations of the community into goals and evaluation process of the LWMP.

Question: What aspirational goals does Council want to see for the LWMP process?

5. The Committee Structure

A LWMP typically has three committees, the Public Advisory Committee, the Technical Advisory Committee, both reporting to a Project Steering Committee. This structure works well (or is supposed to) for large cities and complex situations like Victoria. For a small community, a

simplified approach with a combined advisory committee is possible, and often preferable, and it usually speeds up the process.

It is proposed to combine the PAC and TAC to create a single Wastewater Advisory Committee (WAC). For Cumberland, some of the technical work, like the Environmental Impact Study (EIS), which investigated excess Wet Weather Flow (WWF) management, has already been done, and the initial focus of this committee will be more on stakeholder input. As the LWMP proceeds, there is more technical work to be done outside the committee, but all such work is reported back to the WAC.

The second requirement is for a Project Steering Committee, which is often a subcommittee of Council, but in the case of Cumberland this committee – which makes the actual decisions - can be Council itself.

Thus, it is proposed to have a single Wastewater Advisory Committee which reports to a Project Steering Committee that is a Committee of the Whole.

Feedback: Council feedback on Committee Structure

6. Committee membership and function

Traditionally, the advisory committees have included community, staff, Council, business interests neighboring first nations, consultants, and government representatives.

The Ministry of Environment has traditionally had a representative on the Committee, but this may not happen for Cumberland, and this need to be confirmed with the MoE.

For the Wastewater Advisory Committee, the following members are suggested to be included in the Terms of Reference and invited to participate in the committee:

- General public – Members at large selected from residents of Cumberland to provide a mix of environmental, social and economic perspectives, and age and gender representation
- Local environmental groups
- K'omoks First Nations
- Local business groups
- Provincial and federal ministries or agencies who have indicated interest or whose mandate will be affected by or will affect the planning process (e.g. Environment Canada, Fisheries and Oceans Canada);
- Council member (ex-officio)
- Staff – LWMP Project Coordinator, Chief Administrative Officer, Director of Operations, and other staff as required (ex-officio)
- Technical Consultant – advisor (ex-officio)

In terms of function, it is proposed to set a regular monthly date and time for meetings, generally aligned with the Council meeting schedule. A monthly routine is the best baseline, but if progress is being made faster, especially in the goal setting and option identification stages, then bi-weekly meetings can be held. Advisory committee meetings will be open to the public.

Some of the committee meetings will be more like a “workshop” rather than a rigid committee meeting. It is suggested to specifically plan for at least one day-long workshop for a “strategic planning” type exercise.

It is recommended that the representation on the new Wastewater Advisory Committee start from scratch, with representatives of the former Cumberland LWMP Public Advisory Committee free to apply, but required to participate in the same application process as all new members.

Once Council has provided input on the framework for the committee, the next step will be to come back with the WAC terms of reference for approval.

Feedback: Council feedback on committee membership

7. Public Engagement

Ensuring adequate public consultation is a key pillar of the LWMP process. The Advisory Committee will include members of the public, and meetings are open to the public. This may constitute sufficient public engagement, but it is possible to do much better. A truly successful public engagement will have the people taking interest, ownership and, ideally, “excitement” in the project. It is unusual for wastewater projects to (positively) inspire the public, but as the largest capital project the Village is likely to do, this should be a goal. The public are encouraged to bring their hopes, dreams, fears *and* solutions.

It is proposed to have a series of specific public engagement events, so they can get “up close and personal” with their wastewater, and Advisory Committee. To this end, the following public participation is proposed to include the following elements:

- “know where it goes” – a site tour of the existing facilities, and of the CVRD biosolids composting facility
- An open house/workshop at the start of the goal setting process, with presentations from staff and Technical Consultant
- An open house/workshop at the end of the goal setting process/start of the options development
- A session at/with the local community school students – they are, after all, the ones that will inherit the project!
- An LWMP specific portal on the Village website, with all the documentation, regular updates and opportunities for feedback. Also including links to other resources such as other town LWMPs, successful wastewater treatment projects, and FCM award winning projects like Sechelt and Cranbrook

Maintaining the interest, and productivity of engagement is key, and sometimes difficult. The more the engagement can differ from rigid “public hearing” type events, the better, without becoming mere “entertainment”. Conference planners have long grappled with this and so some of their techniques can be used, including:

- Have each event at a different location, not all of which have to be municipally owned
- Have a guest speaker at each event, showcasing a successful project, or local Member of Legislative Assembly/Member of Parliament
- Have “round table” type workshop sessions when appropriate
- Use of interactive voting, such as the [Data On The Spot](#) system used at Federation of Canadian Municipality conferences
- Provide some (lots) of sponsored product from local food and beverage businesses

- Have a “dinner” and/or a “debate” event
- Combine with some other public event
- Ensure the process does not drag on indefinitely

Suggestion: Public engagement process to be developed by the Advisory Committee

8. Role of the Project Coordinator

The main task for the LWMP Project Coordinator is to “drive” the process, to ensure all the things are happening that should, and keep it “on the road” rather than veering off onto side streets, and potential dead ends.

In order to accomplish this goal, the LWMP Project Coordinator will work closely with the Technical Consultant (to be engaged). While it is the Technical Consultant’s job to provide answers to technical questions, it is up to the both the LWMP Project Coordinator and Technical Consultant to ensure the right questions are being asked. Often, the desire to set, and limit the scope of the Technical Consultant can lead to some questions not being asked that could or should.

The project coordinator is to ensure that the LWMP is seen and developed within the context of the greater goals and aspirations of the Village – the scenery around the destination. The challenge, as with real driving, is to take in the scenery without taking one’s eyes off the road or destination, and it is the Project Coordinator’s job to do that.

Specific tasks include:

- Leading public engagement
- Providing Council with ongoing update reports
- Liaising with MoE and other external stakeholders
- Documenting the process

The Technical Consultant will be engaged through a Request for Proposals process once Council has confirmed the general parameters for the LWMP project.

9. Role of the Technical Consultant

By having a project coordinator take care of the responsibility of moving the overall process along, the engineering consultant can focus on “engineering”. In project language, they are the “owners engineer” and their job is to advise Cumberland on the best way to achieve the goals. They do not need to know all the answers, but must be able to find them if they don’t.

It is not necessarily their job to design the solution, but to determine what the characteristics of a successful solution are.

Specific tasks include

- Formalizing the mandatory environmental goals with MoE
- Analyzing the baseline data and identifying any knowledge gaps
- Setting the parameters for present and future flows and loadings
- Assist the Project Coordinator in the public engagement
- Developing options

- Reviewing all proposed options
- Reporting

For the reporting structure, it is proposed to have the Technical Consultant produce a series of Technical Memos on the major issues, that defines the key components, the relevant data, and, critically, *their interpretation/opinion on the issue*. It is very important to keep a clear distinction between ideas, data, and opinion. Anyone can bring forward ideas, and even data, but the opinion, and recommendation, on technical issues, is the sole responsibility of the technical consultant. These will be identified at the start and completed and updated as appropriate.

10. Reporting.

The LWMP requires detailed documenting and reporting, and this work will be shared between the Project Coordinator and the Technical Consultant

The Technical Consultant will produce a series of Technical Memos describing the major technical elements of the LWMP including, but not limited to:

- Flows and Loads
- Effluent Quality requirements
- Biosolids handling
- Stormwater management
- Conveyance (piping)
- Siting and site servicing

The Project Coordinator will produce a series of Project Memos describing other relevant aspects of the LWMP including;

- Context within Village of Cumberland Plans (OCP, etc.) – the “aspirational goals”
- Options for grant funding
- Public input summaries

These memos get developed as the LWMP proceeds, and are included in the stage reports. They also form the background for the evaluation of the options, and potentially a future Request for Proposals. The Project Coordinator and the Technical Consultant will collaborate on the production of the major Stage reports.

There will be two additional forms of reporting:

- Minutes from the Advisory Committee meetings, to record the development of its input
- A monthly or quarterly “status report” to the Steering Committee and community that tracks
 - Progress against the major milestones
 - Project budget
 - Anticipated developments

The object of all the reporting is to sufficiently document the process - to record what happened on the road trip, but without being so onerous as to distract from the road trip.

11. Funding Opportunities

The LWMP process includes the development of a financing plan for the proposed works, and once adopted, gives the municipality borrowing authority for this purpose.

But this is not the only way to fund a wastewater treatment project. There are various senior government grant and financing programs available:

- Building Canada fund
- Gas Tax fund
- Federation of Canadian Municipalities Green Municipal fund
- New Federal “low carbon economy” Fund (to be announced soon)

A common feature of these funds is the “better” the project, the more likely it is to qualify for external grants, and “better” these days’ means;

- Doing higher quality treatment than is required by regulation
- Reducing CO2 emissions
- Achieving benefits across all three parts of the triple bottom line
- Demonstrating innovations that can be replicated by other municipalities
- Leveraging/partnering funding from other sources

There are some additional funding options that can relate to specific aspects of a project

- Various “innovation” and “technology development” funds, (Agri-Innovations, Forestry Innovations, Sustainable Development Technology Canada)
- Economic development funds (Island Coastal Economic Trust, Western Economic Diversification)
- Potential third party funding for specific aspects of a project (RBC Blue Water Project, Bill and Melinda Gates Foundation)

There are some limited funding opportunities that might be used for parts of the LWMP process itself, specifically;

- The BC Infrastructure Planning Grant Program
- FCM’s Green Municipal Fund for Plans, Studies and Pilot Tests
- Community Planning and Economic Development programs

In order to qualify for some of these funding avenues, the project must include/address innovation, economic development, CO2 reductions etc. It is not normal to use these funding avenues for wastewater planning, but if the decision is made to specifically include these aspects in wastewater planning, then funding may be available. Integrating economic development opportunities into wastewater planning represents an innovation in itself.

As part of the process the Project Coordinator will start investigating and if feasible, applying for funding for the LWMP process, and once identified, the proposed works.

12. Potential Short Cut to the Final Destination

The LWMP process has three mandatory components of environmental compliance, a financing plan, and public consultation.

But the “final destination” of the LWMP process is not just to complete the Plan, but to have an actual project built that implements the Plan.

The major impediment to building the Planned Project is usually the financing part, as borrowing cannot happen until the entire LWMP is complete and signed off by the Minister. Even then, many communities complete their Plans but take years to implement them, often from awaiting grant funding to avoid or minimize borrowing.

If voter approval for borrowing, and/or sufficient grant funding is obtained to complete the Project, before the LWMP is completed, then permission can be obtained from MoE to register directly under the Municipal Wastewater Regulation (MWR).

It must be noted that to do this, there can be no “relief” from any of the conditions of the MWR. One of the reasons many municipalities do the LWMP in the first place is to get community specific environmental criteria, and this flexibility is given up in registering directly under the MWR.

The feasibility of this option will be discussed with MoE at the initial meeting.

13. Hitting the Road – Next steps for March - April - May 2016

Once Council has had the opportunity to provide feedback on the items reviewed in this report, the next steps are to start moving forward with the renewed LWMP Process. A general overview of next steps for the following three months is as follows:

1. Meet with Ministry of Environment
2. Prepare background report summarizing applicable work to date, for distribution to Council, future Committee members, the RFP for the Technical Consultant, and the general public
3. Prepare and release the Request For Proposals for Technical consultant
4. Set committee Terms of Reference for Council approval and recruit members
5. Identify short term funding opportunities for the LWMP process itself
6. Identify long term funding opportunities for the actual project
7. Develop public consultation plan in coordination with Advisory Committee
8. Start the process of identifying options

FINANCIAL IMPLICATIONS

There is currently \$106,370 that has been carried forward from the 2015 budget for the Liquid Waste Management Planning process; however \$37, 903 is already earmarked for the PPP Canada Business Case, leaving \$68,467.

As Council chose not to participate in the South Region Project it is possible that a portion of the money allocated for the PPP Canada Business Case won't be spent (An accounting of the costs that the Village is responsible for has been received from the CVRD and staff is currently reviewing the breakdown).

During the 2016 budgeting process additional funding will be allocated to help undertake the LWMP planning process.

STRATEGIC OBJECTIVE

Restarting the LWMP process relates directly to Council's 2016 draft strategic objective of *Developing an environmentally sustainable method of treating the liquid waste that is produced by the Village.*

ATTACHMENTS

None

CONCURRENCE

Michelle Mason, Financial Officer

Rob Crisfield, Manager of Operations

OPTIONS

1. Receive this report
2. Provide feedback on the proposed road map for the restart of the Liquid Waste Management Plan
3. Any other action deemed appropriate by Council

Respectfully submitted,



Paul Nash
Project Coordinator – Liquid Waste Management Planning
Village of Cumberland



Sundance Topham
Chief Administrative Officer