

To: Mayor and Council
From: Paul Gipps, CAO

Meeting Date: May 20, 2025
Meeting Type: Regular Council Meeting

Prepared by: Kiel Wilkie, Capital Project Manager
Department: Infrastructure & Development Engineering

Title: Liquid Waste Management Plan Stage 3 Report Adoption
Description: An overview of the stage 3 report, seeking adoption to send to the Ministry of Environment for Approval

RECOMMENDATION

THAT the Liquid Waste Management Plan Stage 3 Report (Attachment A to the report to Council dated May 20, 2025) be adopted.

EXECUTIVE SUMMARY

The Provincial Liquid Waste Management Plan (LWMP) is essentially a formal agreement between the Province and local government based on a three-stage report process that specifies how a community will manage its liquid waste long-term. The primary objectives of the Provincial LWMP process is to ensure the protection of public health, the environment, and to ensure effective public consultation.

The primary benefits to the local government of having a Provincially approved LWMP include:

- Streamlined Regulatory Approval: When it comes time to implement projects contained within the LWMP, the regulatory approval process is much less cumbersome.
- Simplified Borrowing: Borrowing for identified projects does not require larger community approval.
- Increased Likelihood of Obtaining Grant Funding: Grant funding is much more likely when an approved plan is in place.

The District's Liquid Waste Management Plan is in the final stage of the three-stage process. In the summer of 2023, the District received endorsement from the Ministry of Environment (MOE) for the Stage 1 & 2 report and authorization to proceed to Stage 3 of the LWMP process.

Stage 3 primarily involves the MOE seeking clarification on items from the Stage 1 & 2 process and requesting a more comprehensive analysis on areas they believe lack depth. During stage 3, the MOE has requested the following:

- Finalize the District's treatment and disposal plan for plant effluent, incorporating a reclaimed water reuse strategy.
- Provide more information and clarification on the District's retrofit sewer plans and environmental impact work for an Okanagan Lake discharge.
- Update cost estimates.
- Engage with both local Indigenous partners and community stakeholders.

The District and its consultants have made significant efforts to address these items, with plans and actions documented in the Stage 3 report. This report has been reviewed by the file manager at the Province, who recommended seeking Council endorsement before submitting the report for final approval.

DISCUSSION/ANALYSIS

The District attempts to update their LWMP dates back over 10 years. In the early 2010s, significant effort was made by staff to update the District's 1998 LWMP to facilitate plant improvements, community growth, and establish a long-term effluent disposal system. Due to Provincial reluctance to allow the District to use a groundwater well to draw down the aquifer and increase the disposal field's capacity, the process stalled. Efforts were rejuvenated in 2020 when the disposal fields experienced infiltration issues, expediting the WWTP Phase 4 project, including the addition of a filter on the effluent.

The District completed the Stage 1 & 2 LWMP report process from 2021 to 2023. Stages 1 & 2 focused largely on the required improvements to the collection and wastewater treatment plant, and the clean water return to the environment. The plan also addressed the District biosolids plan and stormwater management. There was also a significant public consultation aspect to the Stage 1 & 2 reports, and the District received an award for these efforts with its "What Happens After You Flush" campaign.

The Stage 1 & 2 reports emphasized the District installing its own treated water outfall into Okanagan Lake as a long-term community disposal option. The Stage 3 report keeps this option open but acknowledges the challenges of implementing this solution and discusses the potential to consider options like sending future excess wastewater to the Kelowna Wastewater Treatment Plant for processing.

Reclaimed water reuse was a major focus of the Stage 3 report. The District developed a three-phase reclaimed water strategy, focusing on using a groundwater well near the disposal fields for stream augmentation and eventually making pressurized irrigation water available to some users in the lower flats area that doesn't have access to the public pressurized irrigation water. There is also the possibility of using the groundwater well for a larger future twinned irrigation system, but this requires acceptance from the larger farming community due to many regulatory challenges in using reclaimed water, particularly on direct food-to-mouth crops.

Another aspect of the Stage 3 report was conducting additional financial analysis modeling. This work projected the sewer rates required to fund daily operation, maintenance, renewal, and improvement costs. The financial analysis, and community feedback, also recommended transitioning away from using parcel taxes to fund the sewer system, and use utility billing as the primary revenue collection process. In March 2025, Council adopted a bylaw endorsing this transition with a modest rate increase.

FINANCIAL IMPLICATIONS

☐ None ☐ Budget Previously Approved ☒ Other (see below)

Approving the plan itself does not have budget implications, but there is a financial strategy contained within the plan. In March of 2025 Council adopted a modest rate increase over the next four years to help support the plans implementation.

COMMUNICATION & CONSULTATION

The District has been proactive in consulting the community throughout the LWMP process. During the Stage 1 and 2 report, the District undertook an extensive consultation effort to inform the community and gather feedback, which was recognized with an award for these efforts. These efforts were expanded recently during the stage 3 report with information in the citizen bulletin, utility billing mailouts, and social media posts.

However, the primary aspect of community consultation that was lacking in the Stage 1&2 report was the reclaimed water reuse strategy. In response, the District conducted a public engagement session with the Lake Country Farmers Institute (LCFI) and hosted multiple online session for other local governments and provincial agencies.

The LCFI informed staff that the use of reclaimed water is not permitted by grocers for direct food-to-mouth crops, and raised concerns about the long-term impacts on soils where reclaimed water is applied. The third phase of the

reclaimed water reuse strategy was the primary concern as many of these crop types would be impacted. Therefore, the LWMP Stage 3 report was carefully re-written to address these concerns by stating that the third phase of the reclaimed water reuse strategy would not occur without acceptance from the farming community. During the redraft, the LCFI submitted an email to Council requesting that the reclaimed water strategy be removed from the report. After the draft was released, District staff received an email from LCFI thanking for their efforts in considering the LCFI's comments in the wording of the report. It is not currently known if the LCFI now supports the stage 3 report as it stands.

District staff also met with the Water Service Advisory Committee to review the reclaimed water reuse strategy. The committee passed the following resolution which was considered in redrafting the stage 3 report:

It was moved and seconded

THAT the Water Services Advisory Committee supports the development of a reclaimed water reuse strategy, provided that it's implementation does not negatively impact the agricultural community's ability to sell it's product or have long-term impact on agricultural farm land.

Carried.

Additionally, staff met with representatives from the Okanagan Indian Band (OKIB) to review the reclaimed water reuse strategy. The OKIB generally supports the implementation of reclaimed water reuse and efforts to reduce the volumes of treated effluent entering local water bodies. Their primary concern for the stream augmentation phase of the reclaimed water reuse strategy was the potential impact on fish's endocrine disruptors due to pharmaceuticals found in treated wastewater. Staff are continuing to work through an environmental impact study to understand if this is expected to be an issue.

Overall, the District is committed to addressing community concerns, ensuring thorough environmental impact studies, and maintaining open communication with all stakeholders.

ALTERNATE RECOMMENDATION(S)

1. That the following comments and edits be incorporated into the Liquid Waste Management Plan Stage 3 Report (Attachment A), and brought back to Council at a subsequent regular council meeting.
2. That the report not be supported and the project file closed.

Respectfully Submitted.

Kiel Wilkie, Capital Project Manager

Report Approval Details

Document Title:	Liquid Waste Management Plan- Stage 3 Report Adoption .docx
Attachments:	- Attachment A - Liquid Waste Management Plan Stage 3 Report .pdf
Final Approval Date:	May 14, 2025

This report and all of its attachments were approved and signed as outlined below:

Reyna Seabrook, Director of Corporate Services - May 8, 2025 - 3:25 PM

Matthew Salmon, Infrastructure & Development Engineering Director - May 8, 2025 - 3:39 PM

Paul Gipps, Chief Administrative Officer - May 9, 2025 - 9:21 AM

Makayla Ablitt, Legislative & FOI Coordinator - May 14, 2025 - 9:22 AM