

AGENDA



Town of Lunenburg Council Meeting

Thursday, July 9, 2020 at 2:00 p.m.

Zoom/YouTube Live Broadcast

➤ Welcome and acknowledgement of Mi'kma'ki the ancestral and unceded territory of the Mi'kmaq People – Mayor Rachel Bailey.

1. Agenda - motion to approve.
2. Waste Water Treatment Plant Retrofit Engineering Pre-design work process and call for proposals – staff report (TBC).
3. Adjournment – motion to approve.

Here is the updated report for council. There are still some question marks that need to be addressed and filled in but these issues can be addressed in time. Some points about the report.

1. The intent of the report is to layout a sequence and timelines that we anticipate are required to be able to make decisions confidently regarding the best options for the WWTP and outfall upgrades.
2. The timelines are built around getting the decisions made in time to start the preliminary design so it can be completed within the defined time constraints for funding.
3. The timeline has a lot of steps to it. There are many factors that could affect this.
4. The key points for council input:
 - a. Approve the engagement of Dalhousie University Centre for Water Studies as a part of the engineering assessments. Approve the engagement of a support engineer to assist in writing the Preliminary Design RFP. Budget for both is part of the Preliminary Design budget.
 - b. Sizing for upgrade. This is a significant issue related to Project Lunenburg where there has been discussion about growth in the 50% range.
 - c. Option selection:
 - i. WWTP upgrade including any capacity increase
 - ii. Outfall extension

Regards,
Ian

#	Activity	Description	Who	Duration	Anticipated Completion Date	Budget	Factors in Decision Process
1	DAF Review	Suitability assessment and operations improvements	SUEZ	1 week	TBA – end of July?	Operations budget	Assessment of the DAF performance. Is it viable to be a part of the long term solution.
2	Flood Study	Assessment of anticipated flood levels and measures needed for new plant	CBCL and SS&DI	3 months	End of July	Approved in 2020/21 Capital Budget	Does the plant need to be moved? – Preliminary indications: No, it can be protected in place but control measures need to be included in the design. The study results will indicate what controls measures are needed.
3	Salt Water Intrusion Study	Determine causes and propose concept solutions and estimates	TBA - Consultant	2 months	Being tendered now, late September completion	Approved in 2020/21 Capital Budget	Can enough salt be removed from the stream that materials selection can change to less corrosion-resistant materials? - Does the remedial work get included in the project or is it longer term. Can proceed to preliminary design without final results and incorporate later.
4	Continuous flow trial	Adjustments to process controls to try to improve effectiveness, prove concept	In-house	Ongoing	End of August	Operations budget	Assessment of the DAF performance. Is it viable to be a part of the long term solution.
5	UVT testing	Test UVT every day	In-house	Ongoing	End of August	Operations budget	UVT trends will indicate if low UVT is an ongoing problem.

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6	Hire Dalhousie University Centre for Water Resources	In depth assessment: Phase 1 <ul style="list-style-type: none"> • MBBR assessment • Salinity effects on DAF and Aeration Phase 2 <ul style="list-style-type: none"> • Optimization of DAF • UV effectiveness 	In-house	2 weeks	End of July or earlier	Total budget: \$25,000 Phase 1: \$12,500 Phase 2: \$12,500 Budget source, preliminary design budget	Phase 1 <ul style="list-style-type: none"> • Assessment of MMBR technology effectiveness • Salinity effects on DAF/Aeration, what lengths do we need to go with engineering solutions Phase 2 <ul style="list-style-type: none"> • Optimization of DAF – overlap with SUEZ • UV assessment – does UV capacity need to increase?
7	Public Consultation	Review objectives and get feedback	Staff and support engineer?	1 month	End of August	\$2,500 through existing engineering support contract.	Suggested scope – conduct interviews with Donna K. and the fishers, Bluenose Coastal action, council, staff.
8	Phase 1 Assessments	Assessment of MBBR and salinity effects	Dalhousie University	6 weeks	Mid September	See #6 above	Will assist in the decision process for what technology is to be used.
9	Sizing for upgrade-	As per Project Lunenburg plan there is a plan for 50% increase in residents – the plant is at capacity now and 50% capacity increase is not included in the concepts nor the cost estimates so far.	??	??	End of August	??	Need to decide on design capacity right away. This is a critical factor, and will change the project a lot. If a capacity increase is required, even the lowest cost option of an upgrade to the existing plant will require some new facilities to be built and have a significant impact.

#	Activity	Description	Who	Duration	Anticipated Completion Date	Budget	Factors in Decision Process
10	Option Review and recommendations	Review study results, testing results and baseline against original CBCL and Dillon reports. Develop recommendations for; <ul style="list-style-type: none"> • WWTP upgrade and flood control measures • Outfall changes 	Staff and support engineer	2 months	End of September	Operations budget	There will be a lot of more detailed information available at this point which should point to an obvious decision for the plant, such as: <ul style="list-style-type: none"> • The performance is ok therefore maintain the existing technology and update the existing system with recommended improvements or, • Performance is still poor therefore a total upgrade is needed. The decision on whether to upgrade to a new MMBR system or change to an MBR system can be a phase within pre-design. • What capacity changes are needed for growth Plus, recommendation on the extent of outfall extension, visual only or dilution as well.
11	Council review and decision	Review recommendations and any other information requested from staff	Town Council	?	End of September /early October	NA	Council decisions on: <ul style="list-style-type: none"> • WWTP upgrade including any capacity increase • Outfall extension Note that if there are any delays in decisions for the WWTP design, the per-design for the outfall extension can proceed independently.
12	Phase2 assessments	DAF and UV assessments	Dalhousie University	3 months	Dec 2020	See #6 above	Define final DAF improvements if DAF's are to be kept. Determine if the UV system capacity needs to be addressed.

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13	Preliminary Design Services tender	Write RFP, issue tender and award design contract for; <ul style="list-style-type: none"> • WWTP upgrade and flood control measures • Outfall changes Scope will be confined to available budget.	Staff and support engineer	6 weeks	Award target is mid October and latest by early November	\$5,000, Funding source; preliminary design budget	