

Notice of Meeting and Meeting Agenda Core Area Liquid Waste Management Committee

Wednesday, April 8, 2015	9:00 AM	6th Floor Boardroom

Committee Members:

N. Jensen (Chair), S. Brice (Vice-Chair), M. Alto, R. Atwell, D. Blackwell, J. Brownoff, V. Derman, B. Desjardins, C. Hamilton, L. Helps, B. Isitt, C. Plant, D. Screech, L. Seaton, G. Young

1. Approval of Agenda

2. Adoption of Minutes

- **2.1. 15-218** Minutes of the meeting of February 11, 2015
 - <u>Recommendation:</u> That the Minutes of February 11, 2015, be adopted.
- **2.2.15-221**Minutes of the meeting of February 18, 2015Recommendation:That the minutes of February 18, 2015, be adopted.
- **2.3. 15-300** Minutes of the meeting of March 11, 2015

<u>Recommendation</u>: That the minutes of the meeting of March 11, 2015, be adopted.

3. Chair's Remarks

4. Presentations/Delegations

5. Committee Business

5.1.	15-325	Independent Oversight of Options Development Beyond June 2015
	<u>Recommendation:</u>	That the Core Area Liquid Waste Management Committee direct staff to bring back Terms of Reference, timing implications, budget and financial implications in addition to a short list of names to be considered for the roles of Fairness and Transparency Advisor, Technical Oversight Panel, and engineering and financial support to the May Core Area Liquid Waste Management Committee meeting.
5.2.	15-329	Core Area Wastewater Treatment and Resource Recovery Project - Request for Technical Information
	<u>Recommendation:</u>	That the Core Area Liquid Waste Management Committee receive this report for information and direct staff to forward it to the Westside and Eastside Wastewater Treatment and Resource Recovery Select Committees and CRD Board for information.

	Area Liquid Waste Jement Committee	Notice of Meeting and Meeting Agenda	April 8, 2015
5.3.	15-307	Seaterra Program and Budget Update 21	
	<u>Recommendation:</u>	That it be recommended to the Capital Regional District Board: That the Seaterra Program and Budget Update 21 be received for information.	
5.4.	15-304	Westside Wastewater Treatment and Resource Recovery Select Committee Previous Agenda Package	
	<u>Recommendation:</u>	That the Core Area Liquid Waste Management Committee receive the agenda pact of the March 7, 2015, meeting of the Westside Wastewater Treatment and Resource Recovery Select Committee for information.	-
5.5.	15-305	Eastside Wastewater Treatment and Resource Recovery Select Committee Previous Agenda Packages	
	<u>Recommendation:</u>	That the Eastside Wastewater Treatment and Resource Recovery Select Committee Agenda packages of March 18 and April 1, 2015, be received for information.	e
5.6.	15-311	Motion for Which Notice Has Been Given: Options for Wastewater Treatment (Director Hamilton)	
	<u>Recommendation:</u>	WHEREAS: It is critical that there be positive action taken to meet funding deadline and regulatory requirements for waste water treatment for the Capital Regional Dis BE IT RESOLVED that: Capital Regional District (CRD) staff be directed to support municipalities and First Nations who want to explore options for waste water treatment that are economically responsible, technically feasible, environmentally sound and current provincial and federal deadlines; AND THAT funding be provided from the sewage treatment budget to support an independent assessment of alternative locations to McLoughlin and Hartland, with the and regular engagement of staff and elected representatives from participating municipalities, First Nations and the public; AND THAT any decisions taken to amend the Liquid Waste Management Plan be of in an open and transparent public process; AND THAT any further money spent be recoverable under the funding arrangement with the Provincial and Federal Governments and that clarity be sought that the fun- arrangement with Provincial and Federal governments be able to support the communities to the extent it supported the CRD driven process.	trict; ient meet full done

6. New Business

7. Adjournment

Next Meeting: May 13, 2015



Minutes of a Meeting of the Core Area Liquid Waste Management Committee Held Wednesday, February 11, 2015, in the Board Room, 625 Fisgard St., Victoria, BC

Present: Directors: N. Jensen (Chair), S. Brice (Vice-Chair), M. Alto, R. Atwell, D. Blackwell (9:16), J. Brownoff, V. Derman, B. Desjardins, C. Hamilton, L. Helps, B. Isitt, C. Plant, D. Screech, L. Seaton, G. Young
Staff: R. Lapham, Chief Administrative Officer; L. Hutcheson, General Manager, Parks and Environmental Services; D. Lokken, General Manager, Finance and Technology; T. Robbins, General Manager, Integrated Water Services; A. Orr, Senior Manager, Corporate Communications; A. Sweetnam, Program Director, Seaterra Program; D. Telford, Senior Manager, Environmental Engineering; S. Santarossa, Corporate Officer; N. More, Committee Clerk (recorder)

The meeting was called to order at 9:00 a.m.

1. Approval of Agenda

MOVED by Director Screech, **SECONDED** by Director Brice, That the agenda be approved with the following amendments: the February 4 minutes be removed from the agenda, item 8 be considered ahead of item 5, and the supplementary agenda be added.

Desjardins OPPOSED

2. Adoption of Minutes

MOVED by Director Helps, **SECONDED** by Director Brice, That the minutes of the January 7, 2015, meeting be adopted as previously circulated.

CARRIED

3. Chair's Remarks:

Chair Jensen remarked that the slide in the orientation presentation from Feb. 4 showing the comparative cost of construction by facility capacity had been updated with information from Whistler, and the Dockside Green figure had been corrected.

4. Presentations/Delegations

 David Langley, re agenda item 5: expressed that clarity on scope, tasks, budget and schedule for market sounding was essential and that the Committee and the Regional Water Supply Commission have a duty to inform the public about water supply. The delegation provided a written submission, on file at Legislative and Information Services.

Director Blackwell entered the meeting at 9:15 a.m.

2) Bryan Gilbert, re agenda item 5, 10 a and b: spoke in favour of a tertiary treatment and gasification process and expressed an interest in getting involved in the public engagement process.

- 3) Dr. Shaun Peck, re agenda item 5 and 6: expressed that there were many options available for engineered solutions to minimize wastewater impacts on environment and it was important to keep it at a cost the public could bear. He felt the current wastewater treatment practice could comply and that the regulations could be challenged. The delegation provided a written submission, on file at Legislative and Information Services.
- 4) Norma Brown, re agenda item 5: felt a market sounding could provide a new direction for the project and expressed that the project would be a legacy project.
- 5) Thomas Maler, re agenda item 5: expressed concern about superbugs amplified by secondary and tertiary treatment and spoke in favour of the use of a gasifier to remove them. The delegation provided a written submission, on file at Legislative and Information Services.

The Committee discussed item 8 ahead of item 5.

8. Extension of the Conditional Financial Agreement for the Biosolids Energy Centre

- a) Letter from John McBride, Chief Executive Officer, PPP Canada, 9 January 2014, re: Extension of the Conditional Financial Agreement for the Biosolids Energy Centre with Capital Regional District
- b) Accompanying Staff Report: Biosolids Funding Agreement

Chair Jensen gave an overview of the letter from John McBride and the staff report, commenting that the Conditional Financial Agreement is related to the biosolids aspect of the project and has a closing date of March 31, 2015. For PPP Canada to consider an extension, certain conditions must be met. In consideration of the letter, three alternatives were noted within the staff report. Staff provided some clarification, such as:

- To agree with the existing terms and timelines in the current Conditional Financial Agreement, and entering into a Financial Agreement by March 31, 2015, would mean unpausing the plan to build the biosolids plant at Hartland Landfill.
- To accept the PPP Canada revised proposal for a one-year extension to the Conditional Financial Agreement would present challenges in committing to the stated PPP conditions.

Staff provided highlights of the report and the Committee sought clarification:

- PPP Canada is aware of the Eastside and Westside Wastewater Treatment and Resource Recovery select committees and their process
- the timeline for the two Select committees to bring back solutions could be up to six months, with another potential six months if there is rezoning, resulting in a Core Area Liquid Waste Management Plan amendment submission to the Province by early 2016
- environmental impact reviews on new sites could take up to two years

The Committee requested a report come forward in one week giving more information on what the alternatives would entail, and future options for gasification. The Committee sought clarification on a number of points, such as:

- the RFP for the biosolids energy centre provided information on volume of residual solids and the need to produce biogas, struvite and beneficial reuse of the remaining product, and did not stipulate a two-stage process
- the gasification process in relation to producing biogas and struvite
- the conditional funding agreement was tied to the process already identified for resource recovery, and a change in the process would put that funding at risk

The Committee discussed gasification and the market sounding, and the need for more information on the options with PPP Canada as indicated in the letter and discussed in the staff report. Chair Jensen called a meeting for the following week to receive the information on the options and the gasification process.

MOVED by Director Plant, **SECONDED** by Director Screech,

That it be recommended to the Capital Regional District Board:

That staff be directed to commence discussions with PPP Canada to explore enhancements to both the alternatives in the staff report, and report back to the Core Area Liquid Waste Management Committee with implications and recommendations to move forward while maintaining the existing funding commitment.

CARRIED

3

MOVED by Director Brice, **SECONDED** by Director Alto,

That it be recommended to the Capital Regional District Board:

That the correspondence from John McBride, Chief Executive Officer, PPP Canada, 9 January 2014, re: Extension of the Conditional Financial Agreement for the Biosolids Energy Centre with Capital Regional District, be received for information.

CARRIED

5. Market Sounding for Emerging Technologies and Best Practices for Wastewater Treatment

L. Hutcheson provided an overview of the report, including impacts on solid waste planning and the kitchen scraps program, and more detail on the alternatives. The Committee sought assurance that the market sounding would include best practices whether emerging or conventional technology.

On the motion, the Committee discussed the timeline, fair process, objective results, response of firms, the work of the Select Committees, and the funding.

MOVED by Director Desjardins, **SECONDED** by Director Hamilton,

That it be recommended to the Capital Regional District Board:

That a Request for Qualifications/Request for Proposals process be conducted to engage a consultant to complete a comprehensive market sounding of emerging technologies and best practices for wastewater treatment.

DEFEATED

Alto, Blackwell, Brownoff, Brice, Derman, Hamilton, Isitt, Jensen, Plant, Screech and Young OPPOSED On the following motion, the Committee discussed the scope of the work to include a bigger wastewater treatment capacity than what may be studied by the Select Committees.

MOVED by Director Isitt, **SECONDED** by Director Desjardins,

That it be recommended to the Capital Regional District Board:

That staff be directed to conduct a high-level Request for Technical Information market sounding of emerging technologies and best practices for wastewater treatment.

Young OPPOSED

4

6. Amendment No. 9 Conditional Approval Submittals to the Ministry of Environment – Core Area Liquid Waste Management Plan

Chair Jensen introduced the report and gave a brief overview. The Committee discussed the committee date for meeting Inflow and Infiltration (I&I) goals for the municipalities. A workshop on I&I will be presented to the Committee at a later date, including information on design capacity, jurisdictional responsibility, and a model bylaw relating to private I&I.

MOVED by Director Helps, SECONDED by Director Screech,

That it be recommended to the Capital Regional District Board:

That staff be directed to submit the Sanitary Sewer Overflow Management Plan: 2014 Update and the Public and First Nations Consultation Summary Report to the Minister of Environment for approval.

CARRIED

7. Seaterra Program and Budget Update No. 19

Chair Jensen introduced the report.

MOVED by Director Seaton, **SECONDED** by Director Brice, That it be recommended to the Capital Regional District Board: That Seaterra Program and Budget Update No. 19 be received for information.

CARRIED

9. Correspondence

W. H. Shoemaker, Deputy Minister, Ministry of Environment, 5 February 2015, re: letter from Westside Wastewater Treatment and Resource Recovery Select Committee

MOVED by Director Screech, SECONDED by Director Desjardins,

That it be recommended to the Capital Regional District Board:

That the correspondence from W.H. Shoemaker, Deputy Minister, Ministry of Environment, 5 February 2015, re: letter from Westside Wastewater Treatment and Resource Recovery Select Committee, be received for information.

CARRIED

10. Motions with Notice

a) Options for Wastewater Treatment (Director Hamilton)

MOVED by Director Hamilton, **SECONDED** by Director Alto, That the motion be postponed.

CARRIED

5

b) Recommendation to Request Province to Extend Completion Date (Core Area and West Shore Sewage Treatment Technical and Community Advisory Committee, November 27, 2014)

MOVED by Director Brice, **SECONDED** by Director Helps, That it be recommended to the Capital Regional District Board: That the following motion be received for information and referred to staff: That the Province be requested to extend the completion date of the wastewater treatment program from 2018 to 2020 to match the federal deadline.

CARRIED

11. New Business

a) Correspondence from Westside Solutions, 10 Feb 2015, re: Senior Government Funding Agreements

MOVED by Director Desjardins, **SECONDED** by Director Helps, That the correspondence from Westside Solutions, 10 Feb 2015, re: Senior Government Funding Agreements be received for information.

12. Motion to Close the Meeting

MOVED by Director Brownoff, **SECONDED** by Director Brice,

Motion to close the meeting in accordance with the Community Charter, Part 4, Division 3, 90 (1) (a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality; (e) the acquisition, disposition or expropriation of land or improvements, if the board considers that disclosure could reasonably be expected to harm the interests of the regional district; and 90 (2) (b) the consideration of information received and held in confidence relating to negotiations between the regional district and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party.

CARRIED

The Committee moved to the closed session at 11:42 a.m. The Committee rose from the closed session at 12:25 p.m. without report.

13. Adjournment

MOVED by Director, **SECONDED** by Director, That the meeting be adjourned at 12:25 p.m.

CARRIED

6

CHAIR

RECORDER



Minutes of a Special Meeting of the Core Area Liquid Waste Management Committee Held Wednesday, February 18, 2015, in the Board Room, 625 Fisgard St., Victoria, BC

Directors: N. Jensen (Chair), S. Brice (Vice-Chair), R. Atwell, D. Blackwell, Present: J. Brownoff, V. Derman, B. Desjardins, C. Hamilton (8:34), L. Helps, B. Isitt (8:44), C. Plant, D. Screech, L. Seaton, G. Young Staff: R. Lapham, Chief Administrative Officer; D. Lokken, General Manager, Finance and Technology; A. Sweetnam, Program Director, Seaterra Program; T. Robbins, General Manager, Integrated Water Services; G. Harris, Senior Manager, Environmental Protection; A. Orr, Senior Manager, Corporate Communications: R. Smith, Senior Manager, Environmental Resource Senior Management: Telford. D. Manager, Environmental Engineering; S. Santarossa, Corporate Officer; N. More, Committee Clerk (recorder) Also Present: Alternate Director L. Hundleby

Absent: Director M. Alto

The meeting was called to order at 8:32 a.m.

1. Approval of Agenda

MOVED by Director Plant, **SECONDED** by Director Screech, That the agenda be approved with the addition of the supplementary agenda.

CARRIED

2. Chair's Remarks

Director Hamilton entered the meeting at 8:34 a.m.

Chair Jensen remarked on attempted meetings with senior government Ministers and an upcoming meeting with the provincial Minister of Environment, the stipulations of the funding agreements and the project outlines, a City of Victoria process, and the impact on cost to each household if the funding is lost.

3. Presentations/Delegations

1) Dr. Shaun Peck, re agenda item 4: spoke in favour of anaerobic digestion and the application to land of sewage sludge as fertilizer with strict conditions. He felt whatever is planned has to fit into the current sewerage piping systems and identification of the land, technology and piping for the treatment plants should be done before planning an energy resource facility at Hartland. He spoke in favour of challenging the federal regulation such as by a judicial review of the scientific basis. The delegation provided a written submission, on file at Legislative and Information Services.

Director Isstt entered the meeting at 8:44 a.m.

2) Bryan Gilbert, re agenda item 4: spoke against the staff report and expressed that the information was based on old technology and the costs did not match other reports by consultants such as AECOM.

3) Janet Riddell, re agenda item 4: expressed concern with information on gasification, questioned the fate of biosolids and felt that resource recovery from the biosolids should occur locally.

4. Supplemental Report – Biosolids Treatment and Funding: Background and Current Status of the Resource Recovery Centre

Chair Jensen introduced the report and reviewed the upcoming deadlines. R. Lapham provided an overview of the report. A. Sweetnam provided technical information.

The Committee discussed the cost of gasification, the reason for the meeting, various technological points, examples of wastewater treatment and gasification in other communities, comparisons of information between current and past reports, wastewater treatment and technology currently in place within the regional district, the balance of pros and cons within the report and the combining of solid and liquid waste.

On the motion, the Committee discussed the value of the proposed request for information from the Province.

MOVED by Director Brownoff, SECONDED by Director Blackwell,

That staff be asked to contact the BC Ministry of the Environment to request a written response on combining liquid and solid waste into a gasification or waste-to-energy system.

DEFEATED

2

Atwell, Brice, Derman, Desjardins, Hamilton, Helps, Isitt, Jensen, Plant, Screech, Seaton OPPOSED

On the following motion, the Committee discussed the veracity of the staff report, the objectivity of consultants and engineers engaged by the CRD, the consequences of receiving a report for information, and the issue of trust.

MOVED by Director Screech, **SECONDED** by Director Brice, That it be recommended to the Capital Regional District Board:

That this report be received for information.

DEFEATED

Atwell, Brice, Brownoff, Derman, Desjardins, Hamilton, Helps, Isitt OPPOSED

No further action was taken.

5. New Business: There was no new business.

6. Adjournment

Before adjournment, the Committee requested a standing item on Committee agendas to receive minutes from the Select Committees.

MOVED by Director Helps, **SECONDED** by Director Brice, That the meeting be adjourned at 10:30 a.m.

CARRIED

CHAIR

RECORDER



Meeting Minutes Core Area Liquid Waste Management Committee

Wednesday, March 11, 2015	9:00 AM	6th Floor Boardroom

PRESENT

DIRECTORS: N. Jensen (Chair), S. Brice (Vice-Chair), M. Alto, R. Atwell, D. Blackwell, J. Brownoff, V. Derman, B. Desjardins, C. Hamilton, L. Helps, B. Isitt (9:05), C. Plant, D. Screech, L. Seaton, G. Young STAFF: R. Lapham, Chief Administrative Officer; L. Hutcheson, General Manager, Parks and Environmental Services; D. Lokken, General Manager, Finance and Technology; A. Sweetnam, Program Director, Seaterra Program; A. Orr, Senior Manager, Corporate Communications; S. Santarossa, Corporate Officer; N. More, Committee Clerk (Recorder) ALSO PRESENT: Dr. Robert Simm, Stantec

1. Approval of Agenda

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Approval of the Agenda with the addition of the Supplementary Agenda

Director Isitt entered the meeting at 9:05 am. Chair Jensen informed the Committee that the minutes listed as items 2.1 and 2.2 were still in preparation.

Moved by Director Desjardins, seconded by Director Helps, That items 2.2 and 2.3 be withdrawn from the agenda and the supplementary agenda be added and the agenda be approved as amended. CARRIED

2. Adoption of Minutes

2.1.	Minutes of the meeting of February 4, 2015
	Moved by Director Brownoff, seconded by Director Brice, That the minutes of the meeting of February 4, 2015, be adopted. CARRIED
2.2.	Minutes of the meeting of February 11, 2015
	This agenda item was withdrawn.
2.3.	Minutes of the meeting of February 18, 2015
	This agenda item was withdrawn.

3. Chair's Remarks

Chair Jensen remarked on meetings that had occurred with PPP Canada, the Honourable Mary Polack, Minister of Environment, officials from Industry and Infrastructure Canada and from the offices of The Honourable Denis Lebel, Minister of Infrastructure, Communities and Intergovernmental Affairs and from the office of The Honourable James Moore, Minister of Industry. Concerns over timelines and changes to the project were expressed by officials.

4. Presentations/Delegations

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4.1.
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Presentation: Dr. Rob Simm, Stantec -- Resource Recovery Technology

Chair Jensen introduced Dr. Simm, giving highlights of his academic background and professional career, his specialty in wastewater management, his position at Stantec and the work of Stantec in wastewater management nationally and internationally. Dr. Simm discussed technology related to gasification, and projects in which Stantec had not recommended the innovative technology.

Members of the Committee expressed discomfort over the involvement of Stantec in gathering information from proponents of the Westside Wastewater Treatment and Resource Recovery Select Committee process. It was noted that Stantec was seeking clarification of the information provided on behalf of the CRD.

Dr. Simm answered questions from the Committee on a number of technical points.

Chair Jensen clarified that Dr. Simm had been invited to speak as views on emerging technology and risk had been brought up by the Committee and the public.

The Committee sought clarification on the Stantec contract and information gathered from the Westside Select Committee process. Stantec's contract is with the CRD to provide technical expertise when requested. The contract includes confidentiality agreements.

The Committee discussed contract administration, the need to rely on procedures, transparency, and collaboration and heard from staff that the procurement process now in operation was a condition of the funding, and following the process allows the grant money to be credited to the project.

4.2 Delegation: Norma Brown, re: agenda item 4.1

Ms. Brown expressed concern over planning tied to funding, the need for a different engineering opinion, and spoke in favour of resource recovery and focusing on project needs.

4.3 Delegation: Russ Smith, re: agenda item 5.3

Mr. Smith expressed concern over the budget for the Seaterra program in its state of suspension and suggested no further capital be dispensed to the program or the Seaterra Commission until a definitive sewage plan is adopted. The delegation provided a written submission, on file at Legislative and Information Services.

4.4 Delegation: Bryan Gilbert, re: agenda items 5.1 and 5.5

Mr. Gilbert expressed mistrust of the information presented by the CRD and consultants and urged that more effort be made to critique information and involve the public in the process.

5. Committee Business

5.1. EASTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE - TERMS OF REFERENCE

Moved by Director Helps, seconded by Director Brice, That it be recommended to the Capital Regional District Board: 1) That the terms of reference for the Eastside Wastewater Treatment and Resource Recovery Select Committee be amended to create a public advisory committee, and that wording be added to Section 1.0 as follows: "The Eastside Wastewater Treatment and Resource Recovery Select Committee will consider input from a public advisory committee to be established by the Capital Regional District Board regarding the most effective way to engage the public in order to build public support and to get a Plan B approved as soon as possible." 2) That the terms of reference for the Eastside Wastewater Treatment and Resource Recovery Select Committee be amended further so that the words "engage" and "engagement" are changed to "consult" and "consultation" throughout the document. 3) That the Eastside Wastewater Treatment and Resource Recovery Select Committee terms of reference as amended be approved. CARRIED 5.2. Terms of Reference for the East Side Public Advisory Committee Moved by Director Helps, seconded by Director Derman, That it be recommended to the Capital Regional District Board: 1) That the terms of reference for the Eastside Public Advisory Committee be approved; and 2) That the matter of remuneration of reasonable travel expenses for CRD volunteers be forwarded to the Finance Committee for consideration. CARRIED 5.3. Seaterra Program and Budget Update No. 20 and No. 21 The Committee discussed the assignment of resources and sought clarification on items within the budget report. Moved by Director Brice, seconded by Director Helps, That it be recommended to the Capital Regional District Board: That Seaterra Program and Budget Update No. 20 be received for information. CARRIED

5.4.	Eastside Wastewater Treatment and Resource Recovery Select Committee Agenda Package, March 4, 2015
	Moved by Direcctor Derman, seconded by Director Helps, That the Eastside Wastewater Treatment and Resource Recovery Select Committee Agenda Package, March 4, 2015, be received for information. CARRIED
5.5.	Westside Wastewater Treatment and Resource Recovery Select Committee Agenda Package, March 10, 2015
	The Co-Chairs of the Westside Select Committee provided an update on the amended minutes as opposed to the draft minutes presented in the Westside March 10 agenda.
	Moved by Director Desjardins, seconded by Director Hamilton, That the agenda package of the March 10, 2015, meeting of the Westside Wastewater Treatment and Resource Recovery Select Committee be received for information. CARRIED
6. CORRESPOND	DENCE

6.6.

Correspondence from Robert G. Woodland, Corporate Administrator, City of Victoria, 2 February 2015, Re: East Side Sub-Committee of the Core Area Liquid Waste Management Committee

Moved by Director Helps, seconded by Director Alto, That the correspondence from Robert G. Woodland, Corporate Administrator, City of Victoria, 2 February 2015, Re: East Side Sub-Committee of the Core Area Liquid Waste Management Committee, be received for information. CARRIED

7. New Business

There was no new business.

8. Motion to Close the Meeting

8.1.

Motion to Close the Meeting

Moved by Director Derman, seconded by Director Helps, That the meeting be closed in accordance with the Community Charter, Part 4, Division 3, 90 (1) (a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the regional district or another position appointed by the regional district; (j) information that is prohibited, or information that if it were presented in a document would be prohibited, from disclosure under section 21 of the Freedom of Information and Protection of Privacy Act; and (2) (b) the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party. CARRIED The Committee moved to the closed session at 11:05 a.m. The Committee rose from the closed session at 11:55 a.m.

9. Adjournment

Moved by Director Derman, seconded by Director Screech, That the meeting be adjourned at 11:55 a.m. CARRIED

Next Meeting: April 8, 2015



REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE MEETING OF WEDNESDAY, APRIL 8, 2015

<u>SUBJECT</u> Independent Oversight of Options Development Beyond June 2015

ISSUE

To seek direction regarding establishing independent oversight roles and technical support for the next phase of the Core Area Sewage Treatment project.

BACKGROUND

The CRD Board, at their meeting on March 11, 2015, approved a Proposed Work Plan Overlay for submission to 3P Canada in support of a one-year extension to the Conditional Financial Agreement (CFA) for the Biosolids Energy Centre. The Work Plan Overlay is attached as Appendix A.

The Work Plan presents three phases of work: Option Development, Planning and Implementation. The Westside and Eastside Select Committees, supported directly by municipal staff and consultants, are currently working in the Options Development phase. Each Select Committee is conducting public consultation processes in the upcoming two months and concurrently conducting screening exercises for siting options.

To meet the Work Plan timelines, it is anticipated that preferred solution sets will be recommended by the Select Committees to the Core Area Liquid Waste Management Committee (CALWMC) in June 2015. Over the summer months, detailed feasibility assessments and cost estimates for the solution sets will be conducted and brought forward for consideration and decision making on an amendment to the LWMP, to be submitted by year-end. Concurrently, CRD staff will work closely with the host jurisdiction(s) to ensure that local authority/site zoning is achieved.

In order to ensure that the review process, from June 2015 to year-end, includes the necessary due diligence, is transparent, and committee members and the public have confidence in the findings, the following roles are proposed for consideration:

- 1. Fairness and Transparency Advisor (FTA). Reporting directly to the CALWMC, an FTA will ensure the process of costing the options, working with the host jurisdiction(s) and preparing a LWMP amendment is fair, transparent, impartial and objective.
- 2. Technical Oversight Panel (TOP). Reporting directly to the CALWMC, a TOP of up to three individuals, with a range of expertise, will provide technical oversight to the engineering and financial work necessary to prepare detailed options for decision making.
- 3. Technical support to conduct the detailed analysis and engineering work. Contracted financial, technical and engineering support, separate from resources retained to date, for the Option Development phase of the project.

Core Area Liquid Waste Management Committee – April 8, 2015 Independent Oversight of Options Development Beyond June 2015

In addition to the above and throughout the entire Option Development phase, the established technical working groups of municipal staff and consultants, together with CRD staff, will continue to advise on the project.

The Seaterra Commission, Seaterra staff and consultants will remain in place to undertake the procurement process when the project moves into the Implementation phase. The Seaterra Commission requires its engineering and consultant support in order to meet the timelines committed to in the work plan and conditions of the funding agreements.

IMPLICATIONS

Staff will bring forward timing and financial implications for a series of options to retain the resources outlined in this report to committee next month.

CONCLUSION

In order to ensure that the review process, from June 2015 to year-end, is transparent and committee members and the public have confidence in the findings, the following roles are proposed for consideration: Fairness and Transparency Advisor, Technical Oversight Panel and contracted technical support. Detailed Terms of Reference and suggested names for these roles will be brought back to committee at the next meeting.

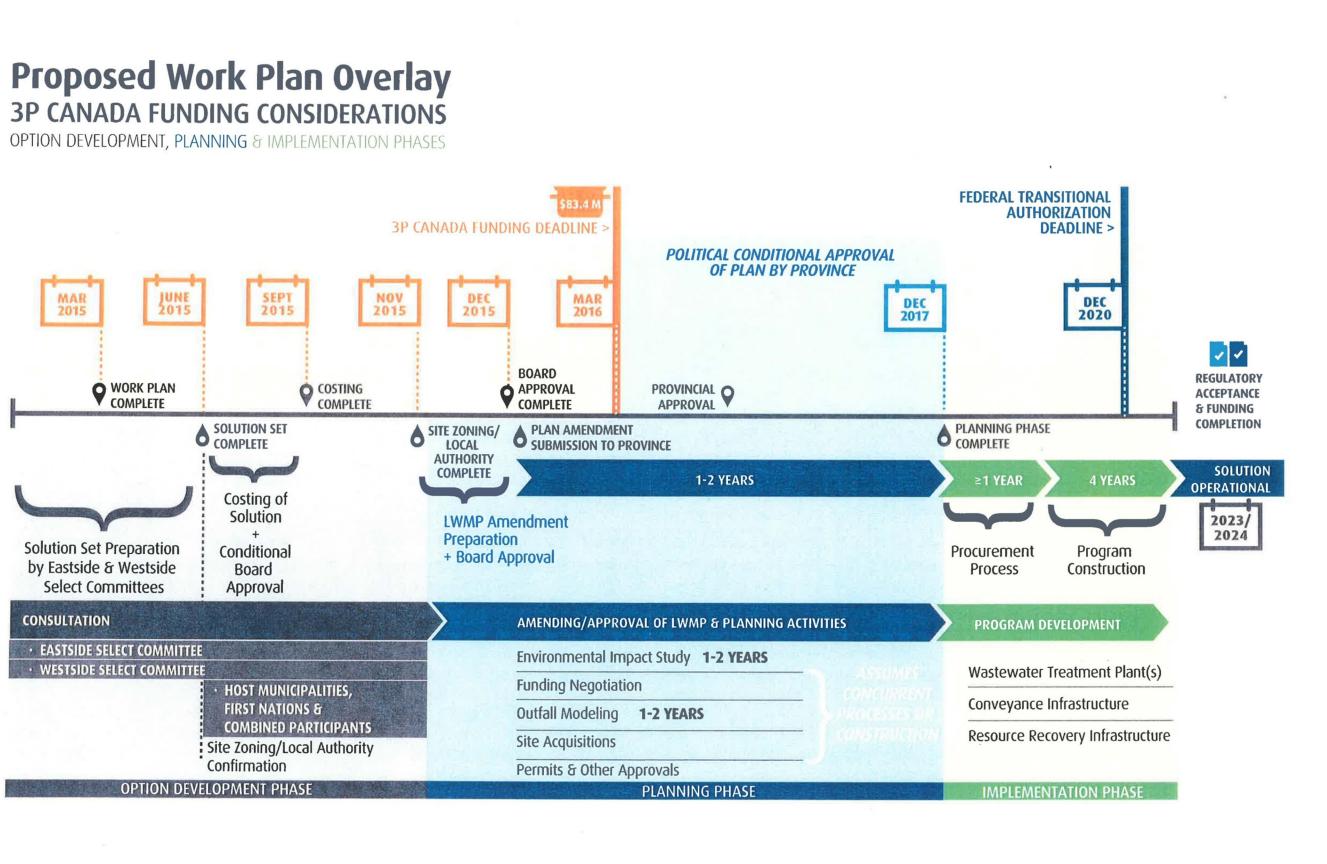
RECOMMENDATION

That the Core Area Liquid Waste Management Committee direct staff to bring back Terms of Reference, timing implications, budget and financial implications in addition to a short list of names to be considered for the roles of Fairness and Transparency Advisor, Technical Oversight Panel, and engineering and financial support to the May Core Area Liquid Waste Management Committee meeting.

Concurrence:	Dan Telford, P.Eng., Senior Manager, Environmental Engineering
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence	Larisa Hutcheson, P.Eng., Acting Chief Administrative Officer

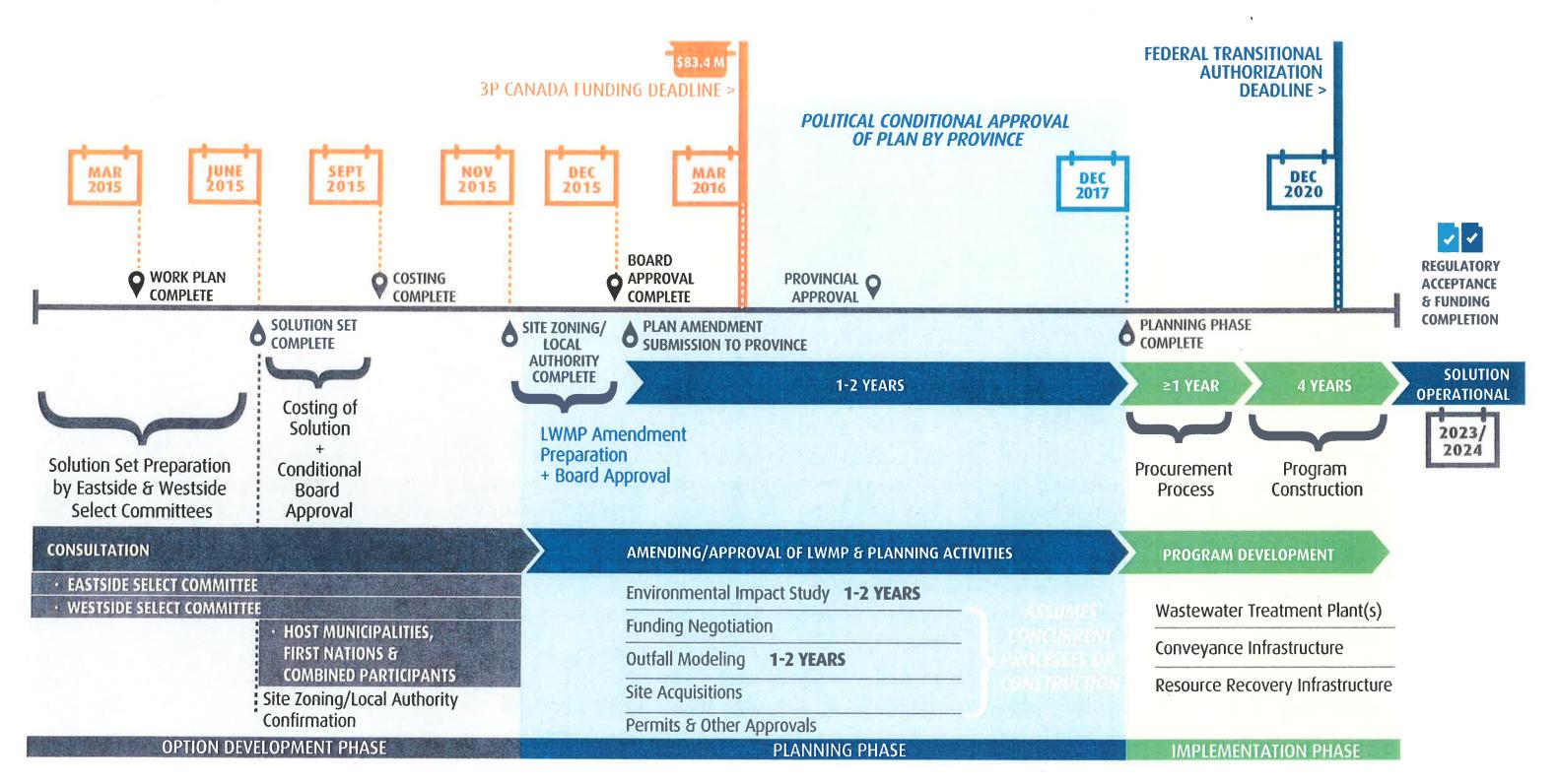
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Attachments: Appendix A – Work Plan Overlay



Proposed Work Plan Overlay 3P CANADA FUNDING CONSIDERATIONS

OPTION DEVELOPMENT, PLANNING & IMPLEMENTATION PHASES



APPENDIX A



REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE MEETING OF WEDNESDAY, APRIL 8, 2015

<u>SUBJECT</u> Core Area Wastewater Treatment and Resource Recovery Project – Request for Technical Information

ISSUE

To provide the Core Area Liquid Waste Management Committee (CALWMC) with submissions resulting from the Request for Technical Information (RFTI).

BACKGROUND

At its meeting of February 11, 2015, the CALWMC requested that a RFTI market sounding of emerging technologies and best practices for wastewater treatment be issued. The process was to be conducted at a high-level by CRD staff in a relatively quick timeline, along the lines of the RFTI issued by the Westside Select Committee in late 2014. The scope of this RFTI was to be expanded to include higher treatment capacities and the potential for processing other solid waste streams such as kitchen scraps, fats/oils/greases and municipal solid waste. Information received from this process would be made available to both the Westside and Eastside Select Committees to assist them in developing options.

Appendix A provides the RFTI documents that were posted on the CRD website and BC Bid on February 27, 2015, inviting all interested industry representatives to make submissions by the closing date of March 26, 2015. All respondents to the previously issued Westside Select Committee RFTI were invited to resubmit based on the expanded scope and potentially higher treatment capacities needed for the core area.

Ten submissions were received, three of which were from new respondents that had not participated in the previous Westside RFTI process. The submissions were found to provide a significant volume of technical information which should prove useful to the Westside and Eastside Select committees and the technical support teams working to develop conceptual options as well as the technical team that will undertake the detailed technical analysis and costing evaluations of the solution sets generated through the public consultation process. In summary, the RFTI provided the following points of interest:

- Four respondents were equipment suppliers that did not provide any information regarding particular technologies or processes
- Six respondents were system suppliers
 - One provided an emerging technology (pilot plants)
 - Five provided established technologies
- One respondent (Veolia Water Technologies Canada Inc.) provided examples of integration of other waste streams based on co-digestion of raw sludge and food waste, as well as some information related to thermal processing of residual solids and resource recovery. This company recently supplied the new wastewater treatment system to Sechelt.
- One respondent (Mequipco Ltd.) represents a company (UNISON SOLUTIONS) that provides a system for biogas treatment to convert digester gas into vehicle fuel.

The following appendices provide further information on the individual submissions.

Appendix B provides a list of the respondents along with their general project areas of interest.

Appendix C provides a brief summary sheet for each submission, indicating whether or not information was provided regarding the specific area of interest listed in the terms of reference.

Appendix D provides all submissions received in their entirety.

CONCLUSION

The information received from the RFTI market sounding provides a significant volume of technical information which should prove useful to the Westside and Eastside Select committees and the technical support teams working to develop conceptual options as well as the technical team that will undertake the detailed technical analysis and costing evaluations of the solution sets generated through the public consultation process.

This RFTI process did not include retaining specialized technical assistance to conduct a detailed review and analysis of the submissions and no opinions on acceptability or recommendations are provided by staff at this time.

RECOMMENDATION

That the Core Area Liquid Waste Management Committee receive this report for information and direct staff to forward it to the Westside and Eastside Wastewater Treatment and Resource Recovery Select Committees and CRD Board for information.

Submitted by:	Dan Telford, P.Eng., Senior Manager, Environment Engineering
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Larisa Hutcheson, P.Eng., Acting Chief Administrative Officer

DT:mr

Attachments: Appendix A – Request for Technical Information

Appendix B – Summary List of RFTI Respondents

Appendix C – Respondent Submission Summary Sheets

Appendix D – Respondent Submission Packages



Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information

1. INVITATION

The purpose of this Request for Technical Information (RFTI) is to invite interested industry representatives (collectively *Respondents*) to submit responses indicating both proven and emerging technologies that would be suitable for wastewater treatment and resource recovery for the core area communities within the Capital Regional District (CRD).

This RFTI is not a tender or an offer or a request for proposals, and there is no intention by the CRD or Core Area Liquid Waste Management Committee (CALWMC) to make an offer by issuing this RFTI, or to otherwise create any contractual obligations. The purpose of this RFTI is only to gather information.

2. CLOSING DATE

Responses should be submitted by Thursday, March 26, 2015.

Note: This RFTI does not create a prequalification process. Not responding to the RFTI does not preclude any vendor from responding to any future Request for Expressions of Interest, Request for Qualifications, Request for Proposals, Tender or other procurement process relating to the design or construction of wastewater treatment systems or facilities with the CRD.

Information contained in the response will not be binding on either the CRD or the Respondent.

By submitting a response to this RFTI, a Respondent acknowledges and agrees that:

- (a) the RFTI responses and any other documents submitted in response to this RFTI, or any portion thereof, will not be held confidential by the CRD and will be used by the CRD for options analysis, public outreach and consultation and other purposes related to this wastewater treatment and resource recovery project;
- (b) the RFTI responses and any other documentation received by the CRD from the Respondent as part of this RFTI process are subject to the Freedom of Information and Protection of Privacy Act (the "Act");
- (c) the Respondent has not submitted any information that qualifies for non-disclosure under section 21 of the Act ("...Release harmful to the business interests of a third party..."), and expressly <u>consents to the CRD's public disclosure of any and all</u> information submitted by the Respondent to the CRD in response to this RFTI;
- (d) the CRD shall have no liability whatsoever in respect of costs, losses or damages of any kind howsoever arising in relation to this RFTI or the use of the information provided by the Respondent pursuant to this RFTI.

The information requested under this RFTI is outlined in the attached Terms of Reference. Additional information outside the scope of this RFTI is also welcome.

Responses should indicate the Project name: *Core Area Wastewater Treatment and Resource Recovery Project – Request for Technical Information* on the outside of the envelope or package, or in the subject line of the e-mail and marked to the attention of **General Manager**, **Parks & Environmental Services**.

3. E-MAIL OR MAIL RESPONSES WILL BE ACCEPTED

4. INQUIRIES

All inquiries regarding the RFTI are to be directed, by mail or e-mail, to the contact person identified below:

General Manager, Parks & Environmental Services Core Area Liquid Waste Management Committee 625 Fisgard Street, PO Box 1000 Victoria, BC V8W 2S6

or

Ihutcheson@crd.bc.ca

Inquiries or questions may be recorded, answered and distributed to one or more Respondents as determined by the General Manager, Parks & Environmental Services.



Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information

Terms of Reference

Purpose

The purpose of this Request for Technical Information (RFTI) is to invite interested industry representatives (collectively *Respondents*) to submit responses indicating both proven and emerging technologies and best practices for wastewater treatment, resource recovery and integration of other waste streams such as kitchen scraps, fats/oils/greases (FOG) and municipal solid waste (MSW). The information received may be used as part of the options analysis and contribute to the Capital Regional District's (CRD) objective of implementing the most suitable wastewater treatment system(s) for the Core Area municipalities and First Nations.

Introduction

The CRD is currently in the process of planning wastewater facilities to serve the Core Area municipalities and First Nations. On October 8, 2014, the Core Area Liquid Waste Management Committee (CALWMC) of the CRD enabled municipalities to proceed with developing alternative options for wastewater treatment and resource recovery. The four westside municipalities (Esquimalt, View Royal, Colwood and Langford) and the Songhees Nation have formed the Westside Wastewater Treatment and Resource Recovery Select Committee and the three eastside municipalities (Victoria, Saanich and Oak Bay) have formed the Eastside Wastewater Treatment and Resource Recovery Select Committee.

The CRD is responsible for integrating the results of the assessment from the two select committees into the Core Area Liquid Waste Management Plan.

Submission Criteria

The objective for this RFTI is to gather information on proven and emerging technologies currently available and to consider which wastewater treatment and resource recovery technologies are most suitable for implementation in the Core Area wastewater management project.

These technologies must be able to meet or exceed the mandated treatment requirements as specified by the BC Provincial and Federal governments. In addition, the long-term social, environmental and economic benefits of these technologies must be highlighted as compared with "established or proven technologies." Specific objectives of this best practices sounding and options analysis are to provide solutions that:

 Maximize response to climate change. Given the potential future impacts of climate change, new wastewater treatment systems must respond to climate change by optimizing greenhouse gas reduction.

 Maximize opportunities for resource recovery. This is essential for an appropriate climate change response which should reduce life-cycle costs and recover scarce resources.

2

- Accomplish a high standard of treatment. Advanced or tertiary treatment providing high quality effluent and substantially dealing with emerging chemicals must be addressed.
- **Provide best value for money to taxpayers.** Value for money is accomplished by achieving enough benefit to justify money spent. Technologies that have higher initial capital costs may potentially provide higher environmental benefits such as climate change mitigation and lower life cycle costs resulting in better long term value for money to taxpayers.
- Identify and investigate opportunities to integrate other waste streams. Technologies that might be cost effective with relatively small footprints that can be incorporated into the treatment facilities as part of the solution to maximize opportunities for resource recovery are of significant interest. The possibility of waste stream integration using kitchen scraps, FOG and MSW as feedstock should be considered as part of this submission.

Design Flow Rates

The current flow rates from the individual Core Area municipalities and First Nations range from 5 to 38 ML/day. The Core Area Wastewater Treatment and Resource Recovery project (CAWTRR) is looking at possible location(s) for siting the required plant(s) depending whether the treatment system is distributed or centralized. To aid in this endeavour, flow rates have been determined that CAWTRR would like information on. These flow rates are:

- 5 ML/day
- 10 ML/day
- 20 ML/day
- 30 ML/day
- 40 ML/day
- 50 ML/day
- 70 ML/day
- 108 ML/dav
- 124 ML/day

A map of the current trunk collection system has been attached for reference (Attachment 1).

Submission Requirements

Based on the flow rates listed above, the CAWTRR is looking for Respondents to provide the following information:

Land Requirements

What is the probable size of land parcel required to site the stated technology?

- What are the staging capabilities in order to accommodate growth?
- Does the technology need to be situated at grade or does it lend itself to below grade conditions?
- What are the potential power requirements for the operation of the technology?
- Can the technology lend itself to integration into a multifunction structure (i.e., recreational/commercial/residential development located around or on top of the plant)?
- What are the probable storage/parking requirements for chemicals necessary for the treatment process?

Treatment Requirements

- Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?
- Can the provided technology achieve greater treatment levels than those established by the MOE?
- If so, what treatment levels can be achieved?
- Can the provider provide technology to treat sewage sludge on-site?
- Does the provided technology require treatment of sewage sludge off-site?

Resource Recovery

- Detail potential resource recovery opportunities associated with the technology.
- Provide several case studies that show how this technology has been successfully implemented.
- At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).

Operations

- Number of individuals required to operate the technology?
- Explain about typical noise levels produced. How can these levels be lowered?
- Explain about typical odour levels produced. How can these levels be lowered?
- What is the typical traffic in and out of the plant on a daily basis?
- Provide a high level cost estimate for operational and maintenance costs associated with the flow scenarios.

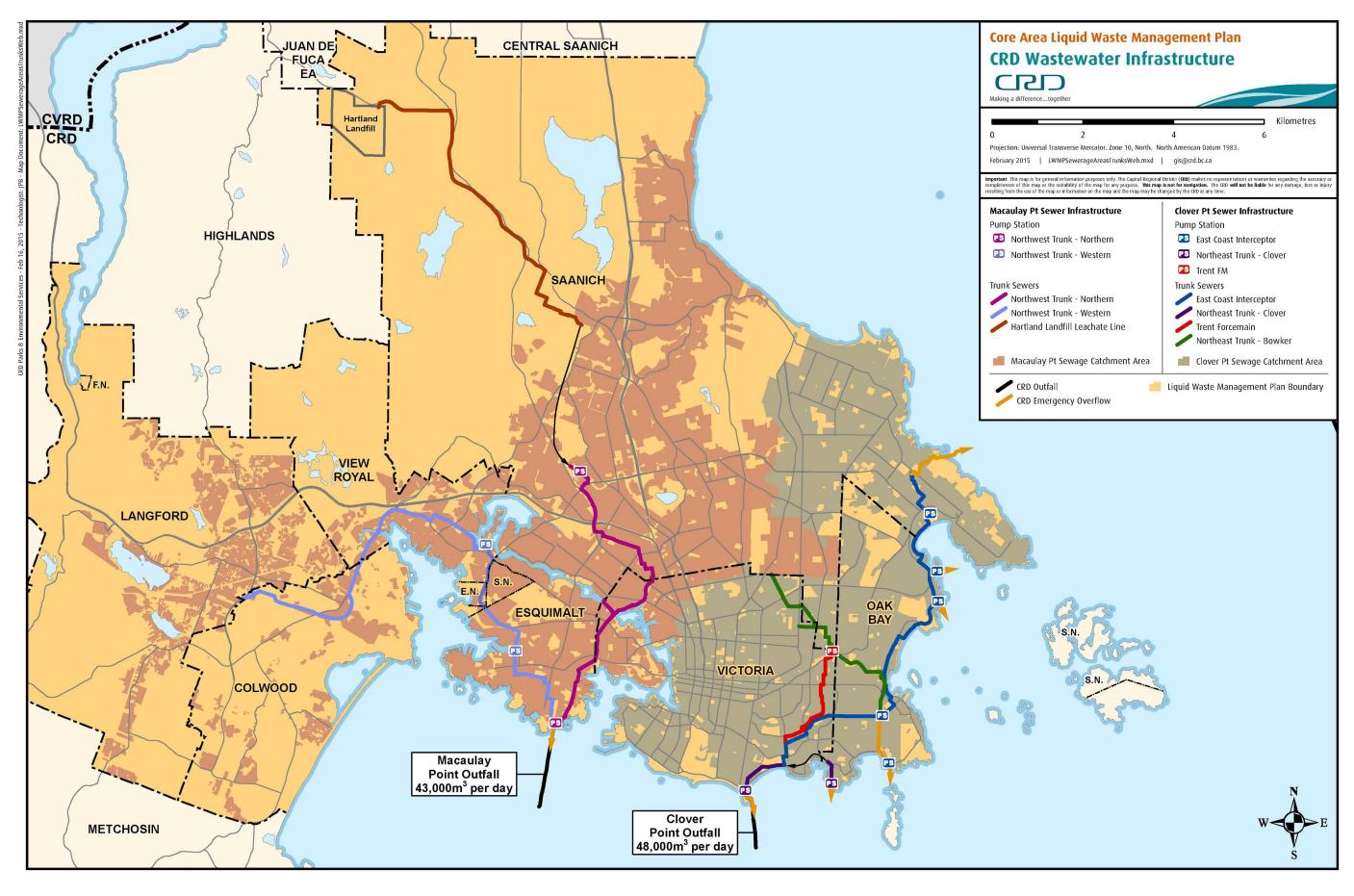
Construction

- Provide a high level budgetary cost estimate for the construction only associated with the offered flow scenarios.
- Show the typical design and construction schedule that is expected for each of the flow scenarios exclusive of the permit processes.
- Industry Usage
 - Provide several case studies that show how this technology has been successfully implemented.
 - At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).
 - Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.

Integration of Other Waste Streams

- Provide several case studies that show how this technology has been successfully implemented.
- At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?
- Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed into the proposed process?
- Include in the case studies: associated project costs, flows or tonnage treated and resources recovered.

Attachment: 1



Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information

Respondents Summary (

Submission #	Respondent Name	Land Requirements 5 – 124 ML/d	Wastewater Treatment	Resource Recovery	Operations	Construction	Industry Usage	Integration of Other Waste Streams
1.	Boydel Wastewater Technologies Inc	1	~	1	1	~	✓	0
2.	Econo Services India Prt Ltd	1	1	1	~	~	~	0
3.	ECOfluid Systems Inc	1	~	1	~	1	1	0
4.	Herhof Canada Technik Inc	0	0	0	0	0	0	0
5.	Mequipco Ltd	~	~	✓	1	~	✓	0
6.	Noram Engineering and Constructors Ltd	1	1	1	~	~	1	0
7.	Promag Enviro Sys Ltd (Lakeside Equip Corp)	1	1	0	~	~	1	0
8.	Ramtech Environmental Products	0	0	0	0	0	0	0
9.	Veolia Water Technologies Can Inc	1	~	1	1	~	1	~
10.	World Water Works	~	~	✓	✓	✓	✓	0

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information Respondent # <u>1</u> – Submission Summary

Respondent Contact: Information:	Boydel Wastewater Technologies Inc. Randy de Luca, President PO Box 1409 Ladysmith, BC Canada V9G 1A9
	Tal: 250 916 9007

Tel: 250-816-8007 Email: deluca@boydel.ca

Administrative Review Summary:

This submission is based on an emerging and innovative wastewater treatment technology with some pilot tests completed.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to site the stated technology?	✓		5 ML/d plant required 2-4 acres
What are the staging capabilities in order to accommodate growth?	~		Each module add 0.75 ML/d
Does the technology need to be situated at grade or does it lend itself to below grade conditions?	~		Can be located below grade
What are the potential power requirements for the operation of the technology?	~		No details
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?	~		Yes
What are the probable storage/parking requirements for chemicals necessary for the treatment process?	~		Total space not provided
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Treatment Requirements Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?	Provided		
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal			Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations? Can the provided technology achieve greater treatment levels than those established by the	~		Comments Yes, secondary Yes, with additional
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations? Can the provided technology achieve greater treatment levels than those established by the MOE? If so, what treatment levels can be achieved? Can the provider provide technology to treat sewage sludge on-site?	√ √		Comments Yes, secondary Yes, with additional processes Tertiary Dewatering process can be on-site
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations? Can the provided technology achieve greater treatment levels than those established by the MOE? If so, what treatment levels can be achieved? Can the provider provide technology to treat	✓ ✓ ✓	Provided	Comments Yes, secondary Yes, with additional processes Tertiary Dewatering process can be on-site No, for dewatering of sludge
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations? Can the provided technology achieve greater treatment levels than those established by the MOE? If so, what treatment levels can be achieved? Can the provider provide technology to treat sewage sludge on-site? Does the provided technology require treatment	✓ ✓ ✓ ✓		Comments Yes, secondary Yes, with additional processes Tertiary Dewatering process can be on-site No, for dewatering of

	1	1	
Provide several case studies that show how this technology has been successfully implemented.		✓	Pilot plants only. No full scale plants
At what developmental stage is this technology			Emerging technology.
considered to be at (i.e. research, emerging,			Respondent
innovative, established or adaptive use).			recommending pilot study
	Provided	Not	Administrative Review
Operations	Provided	Provided	Comments
Number of individuals required to operate the	✓		1 Operator for 15 module
technology?	•		plant
Explain about typical noise levels produced.	✓		Respondent claims no
How can these levels be lowered?	7.		noise
Explain about typical odour levels produced.	 ✓ 		Respondent claims
How can these levels be lowered?	12		odourless
What is the typical traffic in and out of the plant on a daily basis?	 ✓ 		Operators and delivery vehicles
Provide a high level cost estimate for operational			\$0.25-0.30 cost per m ³
and maintenance costs associated with the flow	1		
scenarios.			
		Not	Administrative Review
Construction	Provided	Provided	Comments
Provide a high level budgetary cost estimate for			\$13-15 million for 5 ML/d
the construction only associated with the offered	 ✓ 		plant
flow scenarios.			
Show the typical design and construction	1		Total time needed not
schedule that is expected for each of the flow	v .		provided
scenarios exclusive of the permit processes.		Not	Administrative Review
Industry Usage	Provided	Provided	Comments
Provide several case studies that show how this		 ✓ 	Pilot projects
technology has been successfully implemented.		¥	55 2.229
At what developmental stage is this technology			Emerging and Innovative
considered to be at (i.e. research, emerging,	✓		
innovative, established or adaptive use).	-		
Include in the case studies: associated project		 ✓ 	
costs, flows treated and levels both of treatment achieved and resources recovered.		v v	
		Not	Administrative Review
Integration of Other Waste Streams	Provided	Provided	Comments
Provide several case studies that show how this			
technology has been successfully implemented.		 ✓ 	
At what developmental stage is this technology			
considered to be at (i.e. research, emerging,		 ✓ 	
innovative, established or adaptive use)?			
Does this technology require pre-processing of			
the proposed other waste streams and the		1	
wastewater residual solids before they are fed		1.00	
into the proposed process?			
Include in the case studies: associated project			
a sala dia ma kana ang kana sa ka sa			
costs, flows or tonnage treated and resources recovered.		✓	

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information Respondent # <u>2</u> – Submission Summary

Respondent Contact: Information:	Econo Services India Prt Ltd Ganesan Subramanian, CEO #3, 3 rd Floor, SRIJEES, 177/103 Lloyds Road, Royapattah, Chennai – 600 014, India
	Tel: 91-44-2811-6044

Email: ceo@econoservices.com

Administrative Review Summary:

This submission is an established wastewater treatment system, developed and supplied from India.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to site the stated technology?	✓		Minimum area of 500m²/ML/d plant
What are the staging capabilities in order to accommodate growth?	1		Modular and scalable system
Does the technology need to be situated at grade or does it lend itself to below grade conditions?	1		Suitable at grade or below grade
What are the potential power requirements for the operation of the technology?	1		400 kHW/day for each ML/d treated
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?	~		Plant can be built in the basement of buildings
What are the probable storage/parking requirements for chemicals necessary for the treatment process?	1		No chemical required
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?	1		Yes, secondary
Can the provided technology achieve greater treatment levels than those established by the MOE?	1		Yes, with additional processes
If so, what treatment levels can be achieved?	1	1	Tertiary
Can the provider provide technology to treat sewage sludge on-site?	~		Yes, the proposed process can digest sludge on-site
Does the provided technology require treatment of sewage sludge off-site?	~		No, digestion can be done on-site

-	_	Not	Administrative
Resource Recovery	Provided	Provided	Review Comments
Detail potential resource recovery opportunities	1		Treated water for
associated with the technology.			reuse
Provide several case studies that show how this		1	None requested from
technology has been successfully implemented.			their clients
At what developmental stage is this technology			Established water
considered to be at (i.e. research, emerging,	 ✓ 		reuse applications
innovative, established or adaptive use).			
Operations	Provided	Not	Administrative
Operations	Flovided	Provided	Review Comments
Number of individuals required to operate the	1		1 operator per shift
technology?	V		~ ~ ~
Explain about typical noise levels produced. How	1		Noise from blowers
can these levels be lowered?	•		only
Explain about typical odour levels produced. How	1		Odour almost
can these levels be lowered?	V 1		completely eliminated
What is the typical traffic in and out of the plant on a	1		No traffic of material
daily basis?	•		in and out
Provide a high level cost estimate for operational and			No total cost
maintenance costs associated with the flow	1		provided
scenarios.			
		Not	Administrative
Construction	Provided	Provided	Review Comments
Provide a high level budgetary cost estimate for the			\$4 million per ML/d
construction only associated with the offered flow	 ✓ 		
scenarios.			
Show the typical design and construction schedule			9 months for 5 ML/d
that is expected for each of the flow scenarios	 ✓ 		plant
exclusive of the permit processes.			
Industry Usage	Provided	Not	Administrative
	Flovided	Provided	Review Comments
Provide several case studies that show how this	1		Info of up to 0.15
technology has been successfully implemented.			ML/d plant
At what developmental stage is this technology			Established
considered to be at (i.e. research, emerging,	 ✓ 		Technology
innovative, established or adaptive use).			
Include in the case studies: associated project costs,			No info on cost and
flows treated and levels both of treatment achieved	✓		resource recovery
and resources recovered.			
Integration of Other Waste Streams	Provided	Not	Administrative
Integration of other Waste offeans	TTOVIded	Provided	Review Comments
Provide several case studies that show how this		1	No details
technology has been successfully implemented.			
At what developmental stage is this technology			Established
considered to be at (i.e. research, emerging,		✓	wastewater
innovative, established or adaptive use)?			Technology
Does this technology require pre-processing of the			No experience in
proposed other waste streams and the wastewater		1	MSW projects
residual solids before they are fed into the proposed			
process?			
Include in the case studies: associated project costs,		1	Client's confidential
flows or tonnage treated and resources recovered.			info

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project **Request for Technical Information** Respondent #<u>3</u> – Submission Summary

Respondent Contact: Information:	ECOfluid Systems Inc. Justin Hebner 200 Granville St #1800, Vancouver, BC V6C 1S4
	Tel: 604-662-4544, Ext 522 Email: jhebner@ecofluid.com

Administrative Review Summary: This submission is based on a fully established wastewater treatment technology.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to site the stated technology?	1		Information for 5 ML/d and 10 ML/d only
What are the staging capabilities in order to accommodate growth?	~		Module can be added to provide up to 20 ML/d
Does the technology need to be situated at grade or does it lend itself to below grade conditions?	~		Above or below grade
What are the potential power requirements for the operation of the technology?	~		For 5 ML/d plant power cost, \$78,000 to \$98,000
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?	~		Possible and can be done
What are the probable storage/parking requirements for chemicals necessary for the treatment process?	~		General plant layout provided
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?	~		Yes, secondary
Can the provided technology achieve greater treatment levels than those established by the MOE?	~		Yes, with additional processes
If so, what treatment levels can be achieved?	✓		Tertiary
Can the provider provide technology to treat sewage sludge on-site?	~		Dewatering can be provided on-site
Does the provided technology require treatment of sewage sludge off-site?	✓		Suggested off-site treatment
Resource Recovery	Provided	Not Provided	Administrative Review Comments
Detail potential resource recovery opportunities associated with the technology.	\checkmark		Suggested anything possible, but no details

1

Submission # 3

Provide several case studies that show how this	~		Reclaimed water
technology has been successfully implemented.	✓		examples provided
At what developmental stage is this technology			Fully established
considered to be at (i.e. research, emerging,	\checkmark		wastewater treatment
innovative, established or adaptive use).			technology
	Drawided	Not	Administrative Review
Operations	Provided	Provided	Comments
Number of individuals required to operate the	✓		3-5 Operators for
technology?	•	<i>u</i>	5 ML/d-10 ML/d plant
Explain about typical noise levels produced. How	1		Noise issue can be
can these levels be lowered?			addressed
Explain about typical odour levels produced.	\checkmark		Odour control system
How can these levels be lowered?			can be provided
What is the typical traffic in and out of the plant on a daily basis?	✓		Staff only traffic
Provide a high level cost estimate for operational			5 ML/d plant \$328,500
and maintenance costs associated with the flow	\checkmark		to \$456,000
scenarios.			
O	Duranialard	Not	Administrative Review
Construction	Provided	Provided	Comments
Provide a high level budgetary cost estimate for			5 ML/d plant \$10.1 to
the construction only associated with the offered	 ✓ 		\$13.5 million
flow scenarios.			
Show the typical design and construction			12-18 months
schedule that is expected for each of the flow	✓		
scenarios exclusive of the permit processes.		Net	Administrative Deview
scenarios exclusive of the permit processes. Industry Usage	Provided	Not Provided	Administrative Review Comments
		Not Provided	
Industry Usage Provide several case studies that show how this technology has been successfully implemented.	Provided ✓		Comments
Industry Usage Provide several case studies that show how this technology has been successfully implemented. At what developmental stage is this technology	~		Comments
Industry Usage Provide several case studies that show how this technology has been successfully implemented. At what developmental stage is this technology considered to be at (i.e. research, emerging,			Comments Provided with details
Industry Usage Provide several case studies that show how this technology has been successfully implemented. At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).	~		Comments Provided with details Fully established
Industry Usage Provide several case studies that show how this technology has been successfully implemented. At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use). Include in the case studies: associated project	~		Comments Provided with details
Industry Usage Provide several case studies that show how this technology has been successfully implemented. At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use). Include in the case studies: associated project costs, flows treated and levels both of treatment	~		Comments Provided with details Fully established
Industry Usage Provide several case studies that show how this technology has been successfully implemented. At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use). Include in the case studies: associated project	~	Provided	Comments Provided with details Fully established No cost provided
Industry Usage Provide several case studies that show how this technology has been successfully implemented. At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use). Include in the case studies: associated project costs, flows treated and levels both of treatment	~		Comments Provided with details Fully established
Industry UsageProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.Integration of Other Waste StreamsProvide several case studies that show how this	✓ ✓ ✓	Provided Not Provided	Comments Provided with details Fully established No cost provided Administrative Review
Industry UsageProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.Integration of Other Waste StreamsProvide several case studies that show how this technology has been successfully implemented.	✓ ✓ ✓	Provided	Comments Provided with details Fully established No cost provided Administrative Review
Industry UsageProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.Integration of Other Waste StreamsProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology	✓ ✓ ✓	Provided Not Provided	Comments Provided with details Fully established No cost provided Administrative Review
Industry UsageProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.Integration of Other Waste StreamsProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging,	✓ ✓ ✓	Provided Not Provided	Comments Provided with details Fully established No cost provided Administrative Review
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Industry UsageProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.Integration of Other Waste StreamsProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?Does this technology require pre-processing of the proposed other waste streams and the	✓ ✓ ✓	Provided Not Provided	Comments Provided with details Fully established No cost provided Administrative Review
Industry UsageProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.Integration of Other Waste StreamsProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed	✓ ✓ ✓	Provided Not Provided	Comments Provided with details Fully established No cost provided Administrative Review
Industry UsageProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.Integration of Other Waste StreamsProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed into the proposed process?	✓ ✓ ✓	Provided Not Provided	Comments Provided with details Fully established No cost provided Administrative Review
Industry UsageProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.Integration of Other Waste StreamsProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed into the proposed process?Include in the case studies: associated project	✓ ✓ ✓	Provided Not Provided	Comments Provided with details Fully established No cost provided Administrative Review
Industry UsageProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.Integration of Other Waste StreamsProvide several case studies that show how this technology has been successfully implemented.At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed into the proposed process?	✓ ✓ ✓	Provided Not Provided	Comments Provided with details Fully established No cost provided Administrative Review

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information Respondent #<u>4</u> – Submission Summary

Respondent Contact: Information:	Herhof Canada Technik Inc. Jutta Zillgen 119 McLeod Ave, Spruce Grove, AB T7X 2K6				
	Tel: 780-975-3713 Email: jutta@juttaz.com				

Administrative Review Summary:

This respondent is a project management company/supplier. The information provided was for fine screens for treatment plants. General descriptions were given on wastewater treatment processes and equipment.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to site the stated technology?		~	
What are the staging capabilities in order to accommodate growth?		~	
Does the technology need to be situated at grade or does it lend itself to below grade conditions?		~	
What are the potential power requirements for the operation of the technology?		~	
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?		~	
What are the probable storage/parking requirements for chemicals necessary for the treatment process?		✓	
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?		~	
Can the provided technology achieve greater treatment levels than those established by the MOE?		~	
If so, what treatment levels can be achieved?		~	
Can the provider provide technology to treat sewage sludge on-site?		~	
Does the provided technology require treatment of sewage sludge off-site?		~	
Resource Recovery	Provided	Not Provided	Administrative Review Comments
Detail potential resource recovery opportunities associated with the technology.		~	

	1	1	
Provide several case studies that show how this		✓	
technology has been successfully implemented.			
At what developmental stage is this technology		1	
considered to be at (i.e. research, emerging,		v	
innovative, established or adaptive use).		Not	Administrative
Operations	Provided	Provided	Review Comments
Number of individuals required to operate the			
technology?		✓	
Explain about typical noise levels produced. How		1	
can these levels be lowered?		✓	
Explain about typical odour levels produced. How		~	
can these levels be lowered?		v	
What is the typical traffic in and out of the plant on a		1	
daily basis?		v	
Provide a high level cost estimate for operational			
and maintenance costs associated with the flow		 ✓ 	
scenarios.			
Construction	Provided	Not	Administrative
	Flovided	Provided	Review Comments
Provide a high level budgetary cost estimate for the			
construction only associated with the offered flow		~	
scenarios.			
Show the typical design and construction schedule			
that is expected for each of the flow scenarios		✓	
exclusive of the permit processes.			
Industry Usage	Provided	Not	Administrative
		Provided	Review Comments
Provide several case studies that show how this	 ✓ 		For fine screen
technology has been successfully implemented.			applications
At what developmental stage is this technology considered to be at (i.e. research, emerging,			Established
innovative, established or adaptive use).	· ·		
Include in the case studies: associated project			
costs, flows treated and levels both of treatment		1	
achieved and resources recovered.			
		Not	Administrative
Integration of Other Waste Streams	Provided	Provided	Review Comments
Provide several case studies that show how this			
technology has been successfully implemented.		✓	
At what developmental stage is this technology			
considered to be at (i.e. research, emerging,		 ✓ 	
innovative, established or adaptive use)?			
Does this technology require pre-processing of the			
proposed other waste streams and the wastewater		1	
residual solids before they are fed into the proposed			
process?			
Include in the case studies: associated project			
costs, flows or tonnage treated and resources		~	
recovered.			

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information Respondent #<u>5</u> – Submission Summary

Tel: 604-273-0553 Email: mgreig@mequipco.com

Administrative Review Summary:

Wastewater treatment equipment and processes. This supplier is a local representative of a company, Organica, which recently supplied the wastewater system to Sechelt. It represents a company, UNISON, which provides systems for biogas treatment, to convert gas from digester to vehicle fuel.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to site the stated technology?		~	
What are the staging capabilities in order to accommodate growth?	~		Modular design can be provided
Does the technology need to be situated at grade or does it lend itself to below grade conditions?	×		Can be located above or below grade
What are the potential power requirements for the operation of the technology?	×		No details
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?	~		Sechelt WRC was supplied by this company
What are the probable storage/parking requirements for chemicals necessary for the treatment process?	~		Layout provided
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?	~		Yes, secondary
Can the provided technology achieve greater treatment levels than those established by the MOE?	~		Yes, with additional process
If so, what treatment levels can be achieved?	✓		Tertiary
Can the provider provide technology to treat sewage sludge on-site?	~		Various sludge treatment equipment can be provided to treat sludge on-site or off-site

Does the provided technology require treatment of sewage sludge off-site?	~		Various sludge treatment equipment can be provided to treat sludge on-site or off-site
Resource Recovery	Provided	Not Provided	Administrative Review Comments
Detail potential resource recovery opportunities associated with the technology.	✓		Water and phosphorus recovery are possible
Provide several case studies that show how this technology has been successfully implemented.	 ✓ 		System brochures are provided
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).	~		Proven
Operations	Provided	Not Provided	Administrative Review Comments
Number of individuals required to operate the technology?		~	
Explain about typical noise levels produced. How can these levels be lowered?		✓	
Explain about typical odour levels produced. How can these levels be lowered?	×		Treatment can be provided
What is the typical traffic in and out of the plant on a daily basis?		\checkmark	
Provide a high level cost estimate for operational and maintenance costs associated with the flow scenarios.		~	
Construction	Provided	Not Provided	Administrative Review Comments
Provide a high level budgetary cost estimate for the construction only associated with the offered flow scenarios.		~	
Show the typical design and construction schedule that is expected for each of the flow scenarios exclusive of the permit processes.	~		Approximately 18 months
Industry Usage	Provided	Not Provided	Administrative Review Comments
Provide several case studies that show how this technology has been successfully implemented.	 ✓ 		Many provided
At what developmental stage is this technology	~		Established
considered to be at (i.e. research, emerging, innovative, established or adaptive use).			
	~		No cost info provided
innovative, established or adaptive use). Include in the case studies: associated project costs, flows treated and levels both of treatment	✓ Provided	Not Provided	No cost info provided Administrative Review Comments
innovative, established or adaptive use). Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.			Administrative Review

Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed into the proposed process?	~	
Include in the case studies: associated project costs, flows or tonnage treated and resources recovered.	~	

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information Respondent #<u>6</u> – Submission Summary

Respondent Contact: Information:	NORAM Engineering and Constructors Ltd. Carl Finlay, Senior Process Engineer-Wastewater Granville Square, Suite 1800 – 200 Granville Street Vancouver, BC V6C 1S4

Tel: 604-696-6913 Email: cfinlay@noram-eng.com

Administrative Review Summary:

This respondent is a wastewater system design constructor. The submission is based on well established technology with many installations worldwide.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to site the stated technology?	~		Info up to 50 ML/d are provided
What are the staging capabilities in order to accommodate growth?	✓		Modular construction
Does the technology need to be situated at grade or does it lend itself to below grade conditions?	✓		Entire system below grade is possible
What are the potential power requirements for the operation of the technology?	✓		Info up to 50 ML/d are provided
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?	~		Yes, some small scale examples are provided
What are the probable storage/parking requirements for chemicals necessary for the treatment process?	~		Limited space required
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?	~		Yes, secondary
Can the provided technology achieve greater treatment levels than those established by the MOE?	~		Yes, with additional processes
If so, what treatment levels can be achieved?	✓		Tertiary
Can the provider provide technology to treat sewage sludge on-site?	~		Below grade digestor can be provided to treat sludge on-site
Does the provided technology require treatment of sewage sludge off-site?	~		Yes, dewatered sludge needs to be transported off-site
Resource Recovery	Provided	Not Provided	Administrative Review Comments
Detail potential resource recovery opportunities associated with the technology.	~		Suggested anything is possible with additional processes, but no details provided

1

Submission # 6

Provide several case studies that show how this		~	
technology has been successfully implemented.			
At what developmental stage is this technology		1	
considered to be at (i.e. research, emerging,		✓	
innovative, established or adaptive use).			
Operations	Provided	Not	Administrative
	TTOVIdeu	Provided	Review Comments
Number of individuals required to operate the			Info up to 50 ML/d. 2-
technology?	 ✓ 		3 operators for a 5
			ML/d plant
Explain about typical noise levels produced. How	×		Within WorkSafeBC
can these levels be lowered?	l v		limits
Explain about typical odour levels produced. How	×		Treatment can be
can these levels be lowered?	v		provided
What is the typical traffic in and out of the plant on a			Info based on 5 ML/d
daily basis?	✓		provided
Provide a high level cost estimate for operational and			Info up to 50 ML/d,
maintenance costs associated with the flow	 ✓ 		\$350,000 for a 5 ML/d
scenarios.			plant
		Not	Administrative
Construction	Provided	Provided	Review Comments
Provide a high level budgetary cost estimate for the		Trovided	Info provided for up to
construction only associated with the offered flow			50 ML/d, \$10-25
scenarios.	✓		million for a 5 mL/d
scenarios.			plant
Show the typical design and construction schedule			For 5 ML/d plant 12-
	 ✓ 		24 months
that is expected for each of the flow scenarios	, v		24 monuns
exclusive of the permit processes.		Net	A duo in intrativo
Industry Usage	Provided	Not Provided	Administrative
Devide a second a second to the table of the table of the		Provided	Review Comments
Provide several case studies that show how this	 ✓ 		200 facilities in
technology has been successfully implemented.			operation worldwide
At what developmental stage is this technology	1		Established
considered to be at (i.e. research, emerging,	 ✓ 		
innovative, established or adaptive use).		2	
Include in the case studies: associated project costs,			
flows treated and levels both of treatment achieved		✓	
and resources recovered.			
Integration of Other Waste Streams	Provided	Not	Administrative
		Provided	Review Comments
Provide several case studies that show how this		~	
technology has been successfully implemented.			
At what developmental stage is this technology			
considered to be at (i.e. research, emerging,		~	
innovative, established or adaptive use)?			
Does this technology require pre-processing of the			
proposed other waste streams and the wastewater		1	
residual solids before they are fed into the proposed		× 1	
process?			
Include in the case studies: associated project costs,		~	
flows or tonnage treated and resources recovered.		, v	

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information Respondent #<u>7</u> – Submission Summary

Respondent Contact: Information:	Promag Enviro Systems Ltd Ken Magaw (Lakeside Equipment Corp's Representative) 8042 Winston Street Burnaby, BC V5A 2H5
	Tel: 604-421-6844

Email: kmagaw@promagenviro.ca

Administrative Review Summary:

The responses were based on their Wastewater treatment equipment information only.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to	~	TTOTIACU	Equipment
site the stated technology?			dimensions only
What are the staging capabilities in order to accommodate growth?	~		Equipment Info
Does the technology need to be situated at grade or does it lend itself to below grade conditions?	~		Equipment Info
What are the potential power requirements for the operation of the technology?	~		Equipment Info
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?	~		Equipment Info
What are the probable storage/parking requirements for chemicals necessary for the treatment process?	~		No chemicals required
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?	~		Equipment info
Can the provided technology achieve greater treatment levels than those established by the MOE?	~		Equipment info
If so, what treatment levels can be achieved?	✓		Equipment info
Can the provider provide technology to treat sewage sludge on-site?	✓		No
Does the provided technology require treatment of sewage sludge off-site?	~		No
Resource Recovery	Provided	Not Provided	Administrative Review Comments
Detail potential resource recovery opportunities associated with the technology.		~	
Provide several case studies that show how this technology has been successfully implemented.		✓	

Submission # 7

At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).		~		
Operations	Provided	Not Provided	Administrative Review Comments	
Number of individuals required to operate the technology?	~		Equipment Info	
Explain about typical noise levels produced. How can these levels be lowered?	~		Equipment Info	
Explain about typical odour levels produced. How can these levels be lowered?	~		Equipment Info	
What is the typical traffic in and out of the plant on a daily basis?	~		Equipment Info	
Provide a high level cost estimate for operational and maintenance costs associated with the flow scenarios.	~		No details	
Construction	Provided	Not Provided	Administrative Review Comments	
Provide a high level budgetary cost estimate for the construction only associated with the offered flow scenarios.	ussociated with the offered flow ✓			
Show the typical design and construction schedule that is expected for each of the flow scenarios exclusive of the permit processes.	~		Equipment Info	
Industry Usage Provid		Not Provided	Administrative Review Comments	
Provide several case studies that show how this technology has been successfully implemented.	plemented.		No details	
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).	~		Established equipment technology	
Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.	~		Equipment info	
Integration of Other Waste Streams	Provided	Not Provided	Administrative Review Comments	
Provide several case studies that show how this technology has been successfully implemented.		~		
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?		~		
Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed into the proposed process?		~		
Include in the case studies: associated project costs, flows or tonnage treated and resources recovered.		~		

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information Respondent # <u>8</u> – Submission Summary

Respondent Contact: Information:	Ramtech Environmental Products Alex Simon, Applications Engineer Unit B, 2130 33 rd Ave, SW Calgary, AB			
	Tel: 403-221-8585, Ext 457 Email: asimon@ramtech.ca			

Administrative Review Summary:

Wastewater treatment equipment information only, no responses provided to the questions from this RFTI.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to site the stated technology?		✓	
What are the staging capabilities in order to accommodate growth?		~	
Does the technology need to be situated at grade or does it lend itself to below grade conditions?		~	
What are the potential power requirements for the operation of the technology?		~	
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?		\checkmark	
What are the probable storage/parking requirements for chemicals necessary for the treatment process?		\checkmark	
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?	~		Secondary based on product brochures
Can the provided technology achieve greater treatment levels than those established by the MOE?		~	
If so, what treatment levels can be achieved?		~	
Can the provider provide technology to treat sewage sludge on-site?		\checkmark	
Does the provided technology require treatment of sewage sludge off-site?		~	
Resource Recovery	Provided	Not Provided	Administrative Review Comments
Detail potential resource recovery opportunities associated with the technology.		~	
Provide several case studies that show how this technology has been successfully implemented.		✓	

Submission # 8

At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).		~	
Operations	Provided	Not Provided	Administrative Review Comments
Number of individuals required to operate the technology?		✓	
Explain about typical noise levels produced. How can these levels be lowered?		~	
Explain about typical odour levels produced. How can these levels be lowered?		~	
What is the typical traffic in and out of the plant on a daily basis?		~	
Provide a high level cost estimate for operational and maintenance costs associated with the flow scenarios.		~	
Construction	Provided	Not Provided	Administrative Review Comments
Provide a high level budgetary cost estimate for the construction only associated with the offered flow scenarios.		~	
Show the typical design and construction schedule that is expected for each of the flow scenarios exclusive of the permit processes.		~	
Industry Usage	Provided Not Provide		Administrative Review Comments
Provide several case studies that show how this technology has been successfully implemented.	✓		
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).		~	
Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.		~	
Integration of Other Waste Streams	Provided	Not Provided	Administrative Review Comments
Provide several case studies that show how this technology has been successfully implemented.	w how this		
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?		~	
Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed into the proposed process?		~	
Include in the case studies: associated project costs, flows or tonnage treated and resources recovered.		✓	

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information Respondent #<u>9</u> – Submission Summary

Respondent Contact: Information:	Veolia Water Technologies Canada Inc. Chris Howorth, Business Developer 3138 Brookridge Drive, North Vancouver, BC V7R 3A8
	Tel: 604-562-0301 Email: chris.howorth@veolia.com

Administrative Review Summary:

Wastewater and biosolids treatment system supplier offers over 350 proprietary processes for water and wastewater treatment – Information covers all areas requested.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to site the stated technology?	~		Suggestion for 3 technologies. 500 m ² to 1650 m ² for a typical 5 ML/d plant
What are the staging capabilities in order to accommodate growth?	~		Modular design can be provided
Does the technology need to be situated at grade or does it lend itself to below grade conditions?	✓		At grade or underground
What are the potential power requirements for the operation of the technology?		~	
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?	~		Sechelt WRC was built by this company
What are the probable storage/parking requirements for chemicals necessary for the treatment process?		~	
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?	~		Yes, secondary
Can the provided technology achieve greater treatment levels than those established by the MOE?	~		Yes, with additional processes
If so, what treatment levels can be achieved?	~		Tertiary (optional), a large site is required
Can the provider provide technology to treat			Yes, anaerobic

Does the provided technology require treatment of sewage sludge off-site?	✓		No, can be on-site
Resource Recovery	Provided	Not Provided	Administrative Review Comments
Detail potential resource recovery opportunities associated with the technology.	~		Water, heat, carbon and phosphorus recovery are possible
Provide several case studies that show how this technology has been successfully implemented.	~		System brochures are provided
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).	~		Proven and Innovative
Operations	Provided	Not Provided	Administrative Review Comments
Number of individuals required to operate the technology?		~	
Explain about typical noise levels produced. How can these levels be lowered?		✓	
Explain about typical odour levels produced. How can these levels be lowered?	~		Odour control system can be provided
What is the typical traffic in and out of the plant on a daily basis?		~	
Provide a high level cost estimate for operational and maintenance costs associated with the flow scenarios.		~	
Construction	Provided	Not Provided	Administrative Review Comments
Provide a high level budgetary cost estimate for the construction only associated with the offered flow scenarios.	~		\$5 to \$11 million for 5 ML/d plant. Others are provided as well
Show the typical design and construction schedule that is expected for each of the flow scenarios exclusive of the permit processes.	~		18 months for 5ML/d plant; 30 months for 50 ML/d plant
Industry Usage	Provided	Not Provided	Administrative Review Comments
Provide several case studies that show how this technology has been successfully implemented.	~		Case studies for various technologies are provided
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).	~		Innovative and established technologies can be provided
Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.	~		No cost data are provided
Integration of Other Waste Streams	Provided	Not Provided	Administrative Review Comments
Provide several case studies that show how this technology has been successfully implemented.	~		Examples of water reuse; energy recovery; co-digestion of sludge with food waste, oil and grease; are included

At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?	~		Established
Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed into the proposed process?		~	
Include in the case studies: associated project costs, flows or tonnage treated and resources recovered.		~	

Capital Regional District Core Area Wastewater Treatment and Resource Recovery Project Request for Technical Information Respondent #<u>10</u> – Submission Summary

Respondent Contact: Information:	World Water Works Inc. Chandler Johnson, Chief Technology Officer Oklahoma City, OK 73107
	Tel: 617-899-1566 Email: cjohnson@worldwaterworks.com

Administrative Review Summary:

This submission is an established wastewater treatment technology, with many installations.

Land Requirements	Provided	Not Provided	Administrative Review Comments
What is the probable size of land parcel required to site the stated technology?	✓		Information for 124 ML/d plant only
What are the staging capabilities in order to accommodate growth?	~		Modular approach at 31 ML/d each
Does the technology need to be situated at grade or does it lend itself to below grade conditions?	✓		Can be located underground
What are the potential power requirements for the operation of the technology?	~		No total amount provided
Can the technology lend itself to integration into a multifunction structure (i.e., recreational/ commercial/residential development located around or on top of the plant)?	~		System can be located on roof top of a building
What are the probable storage/parking requirements for chemicals necessary for the treatment process?	~		Chemicals required at 14.2 m ² for every 30 days
Treatment Requirements	Provided	Not Provided	Administrative Review Comments
Can the provided technology meet the treatment requirements (i.e., secondary) established by the Ministry of Environment (MOE) and federal regulations?	~		Yes, secondary
Can the provided technology achieve greater treatment levels than those established by the MOE?	~		Yes, with additional processes
If so, what treatment levels can be achieved?		\checkmark	Better than secondary
Can the provider provide technology to treat sewage sludge on-site?	~		They can provide any technology to treat sludge
Does the provided technology require treatment of sewage sludge off-site?	~		No, technologies can be provided to treat sludge on-site

Resource Recovery	Provided	Not Provided	Administrative Review Comments
Detail potential resource recovery opportunities associated with the technology.	 ✓ 		Energy recovery from digestor
Provide several case studies that show how this technology has been successfully implemented.		✓	
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).		~	
Operations	Provided	Not Provided	Administrative Review Comments
Number of individuals required to operate the technology?	~		For 30 ML/d plant, 3 operators
Explain about typical noise levels produced. How can these levels be lowered?	~		Sound control can be provided
Explain about typical odour levels produced. How can these levels be lowered?	 ✓ 		Odour control can be provided
What is the typical traffic in and out of the plant on a daily basis?		~	
Provide a high level cost estimate for operational and maintenance costs associated with the flow scenarios.			
Construction	Provided	Not Provided	Administrative Review Comments
Provide a high level budgetary cost estimate for the construction only associated with the offered flow scenarios.		~	
Show the typical design and construction schedule that is expected for each of the flow scenarios exclusive of the permit processes.	~		46-52 weeks
Industry Usage	Provided	Not Provided	Administrative Review Comments
Provide several case studies that show how this technology has been successfully implemented.	~		
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use).	~		Established
Include in the case studies: associated project costs, flows treated and levels both of treatment achieved and resources recovered.	~		Only two projects with costs
Integration of Other Waste Streams	Provided	Not Provided	Administrative Review Comments
Provide several case studies that show how this technology has been successfully implemented.		1	
At what developmental stage is this technology considered to be at (i.e. research, emerging, innovative, established or adaptive use)?		~	
Does this technology require pre-processing of the proposed other waste streams and the wastewater residual solids before they are fed into the proposed process?		~	
Include in the case studies: associated project costs, flows or tonnage treated and resources recovered.		\checkmark	

SUBMISSIONS TO THE CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE REQUEST FOR TECHNICAL INFORMATION

March 2015

Attached are submissions received from:

Boydel		https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-BOYDEL.pdf
Eco Fluid Systems		https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-ECOFLUIDSYSTEMS.pdf
Econo Services		https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-ECONOSERVICES.pdf
Herhof Canada Technik Inc		https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-HERHOFCANADATECHNIKINC.pdf
Lakeside Equipment Corporation	Closed Loop Reactor (CLR) Process	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-LAKESIDEEQUIPMENTCORPORATION- ClosedLoopReactor.pdf
	Raptor Fine Screen	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-LAKESIDEEQUIPMENTCORPORATION- RaptorFineScreen.pdf
	Raptor SpriaGrit Vortex Grit System	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-LAKESIDEEQUIPMENTCORPORATION- RaptorSpiraGrit.pdf

	Spiraflo Clarifier	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-LAKESIDEEQUIPMENTCORPORATION- SpirafloClarifier.pdf
Mequipco		https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-MEQUIPCO.pdf
Noram Vertreat	Part 1	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-NORAMVERTREAT-Part1.pdf
	Part 2	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-NORAMVERTREAT-Part2.pdf
Ramtech Environmental Products		https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-RAMTECHENVIRONMENTALPRODUCTS.pdf
Veolia	PDF	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-VEOLIA.pdf
	Videos	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-VEOLIA-Video-SolumstrandWWTPNorway.mp4
		http://crdcentral.crd.bc.ca/media/Veolia/Veolia%20Water%20Technologies%20Ca nada%20(formerly%20John%20Meunier%20Inc).mov
	DVDs	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CAWLMC-RFTI-AppendixD-VEOLIA-DVD-Title1-Athos.mov

	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-VEOLIA-DVD-Title2-Athos.mov
	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-VEOLIA-DVD-Title3-Athos.mov
World Water Works	https://goto.crd.bc.ca/teams/es/0360CommitteesCommissions/2015-04-08-SR- CALWMC-RFTI-AppendixD-WORLDWATERWORKS.pdf



REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE MEETING OF WEDNESDAY, APRIL 8, 2015

SUBJECT Seaterra Program and Budget Update No. 21

<u>ISSUE</u>

The Commission must report in writing, at least once every 30 days, on the progress of the Seaterra Program. During budget discussions, the Core Area Liquid Waste Management Committee (Committee) requested monthly financial reporting on the Seaterra Program.

BACKGROUND

Attached is a monthly financial update for the Seaterra Program (Schedule A) year-to-date for February 2015. The 2015 Seaterra Financial Plan (Schedule B) is also attached for information. The report reflects actuals and commitments to the end of February 28, 2015.

At the July 9, 2014 Committee and Board meeting an information report was presented that discussed the Seaterra Program being placed on pause and options for reducing the work-plan for 2014. The attached program summary report reflects the reduced service level as directed by the Committee.

The 2015 – 2019 Financial Plan will be adjusted for the current known delays in timing. This budget estimate will be revised as new information becomes available on core drivers and assumptions used in establishing the original program budget.

ALTERNATIVES

- 1. That the Core Area Liquid Waste Management Committee receives Seaterra Program and Budget Update No. 21 for information.
- 2. That the Core Area Liquid Waste Management Committee request additional financial information.

FINANCIAL IMPLICATIONS

The current projected variance is a direct result of the program service delivery being placed on pause.

CONCLUSION

The Committee will continue to receive additional information in future updates.

RECOMMENDATION

That the Core Area Liquid Waste Management Committee recommends to the Capital Regional District Board:

That Seaterra Program and Budget Update No. 21 be received for information.

Submitted by:	Diana E. Lokken, CPA,CMA, General Manager, Finance & Technology Dept.
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

DL:sb

Attachments: Schedule A – 2015 Program Summary Report Schedule B – Program Financial Plan Seaterra Program Progress Report No. 22

2015 Program Summary Report Year to Date 28-February-2015

	2015 Budget	Year to Date Actuals	Commitments Unpaid (CU)	Total YTD Actuals + CU	Variance Budget - YTD	Projected CU Dec 31 2015 (Note 1)
WASTEWATER TREATMENT - MCLOUGHLIN	72,460,000	0	1,541,413	1,541,413	72,460,000	1,540,000
CONVEYANCING PIPES AND PUMPSTATIONS	53,672,000	1,097,723	2,545,923	3,643,646	52,574,277	1,300,000
RESOURCE RECOVERY CENTRE	31,388,000	9,994	2,858,430	2,868,424	31,378,006	2,800,000
COMMON COSTS	9,294,000	209,260	5,454,058	5,663,318	9,084,740	3,500,000
INTERIM FINANCING	2,211,000	0	0	0	2,211,000	0
PROGRAM CONTINGENCY	9,560,000	0	0	0	9,560,000	0
TOTAL	178,585,000	1,316,977	12,399,824	13,716,801	177,268,023	9,140,000

Note 1: Work-in-progress to be completed in 2016.

Seaterra Program Management Expenditure Report Year to Date 28-February-2015

	2015 Budget	Year to Date Actuals	Commitments (Note 1)
CAPITALIZED COSTS			
Salaries and Wages	3,238,000	70,456	1,094,908
Consultants	4,791,000	66,392	3,893,848
Allocations - Finance	44,000	0	0
Rentals and Leases	391,000	51,640	260,360
Operating - Other Costs	476,000	6,853	136,861
TOTAL	8,940,000	195,341	5,385,977

Note 1: Includes multi year commitments

Seaterra Commission Expenditure Report Year to Date 28-February-2015

	2015 Budget	Year to Date Actuals	Commitments
CAPITALIZED COSTS			
Honoraria	250,000	13,919	68,081
Travel	41,000	0	0
Operating - Other Costs	63,000	0	0
TOTAL	354,000	13,919	68,081

SCHEDULE A-3



Seaterra Program Financial Plan

	Costs to Dec 2014	2015	2016	2017	2018	2019	Total
WASTEWATER TREATMENT - MCLOUGHLIN	10,142,443	36,047,000	90,288,000	106,506,000	43,987,000	7,954,854	294,925,297
CONVEYANCING PIPES & PUMP STATIONS	14,424,144	22,748,000	75,168,000	10,485,000	106,000	0	122,931,144
RESOURCE RECOVERY CENTRE	4,652,206	3,069,000	63,900,000	164,133,000	18,187,000	0	253,941,206
COMMON COSTS	8,098,638	6,645,000	8,533,000	8,756,000	9,890,000	6,403,000	48,325,638
INTERIM FINANCING	49,715	320,000	1,937,000	8,796,000	13,274,000	2,482,000	26,858,715
PROGRAM CONTINGENCY	0	3,399,000	13,966,000	19,608,000	3,952,000	0	40,925,000
TOTAL	37,367,146	72,228,000	253,792,000	318,284,000	89,396,000	16,839,854	787,907,000



Seaterra Program Progress Report No. 22

February 28, 2015 Prepared by: Seaterra Program Management Office In addition to reporting on activities that are the responsibility of the Seaterra Program Commission, this progress report also includes updates on activities that are the responsibility of the Core Area Liquid Waste Management Committee (CALWMC) and the Capital Regional District (CRD) Board, namely, activities related to facility siting and agreements with municipalities or other government agencies. Those matters that are the direct responsibility of the CALWMC and CRD Board are clearly identified in the text as "CRD responsibility" and are identified in Section 1.2.

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- 1.2 Core Area Liquid Waste Management Committee (CALWMC)/Capital Regional District (CRD) Board Issues

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- 3.0 Activities Resource Recovery Centre Suspended
- 4.0 Activities Macaulay Pump Station Suspended

5.0 Activities – Craigflower Pump Station

- 5.1 Construction Status
- 5.2 Schedule
- 5.3 Significant Issues/Decisions Pending

6.0 Activities – Clover Pump Station - Suspended

7.0 Activities – Currie Pump Station - Suspended

8.0 Activities – Arbutus Road Attenuation Tank

- 8.1 Design/Engineering Status
- 8.2 Procurement Status
- 8.3 Status of Approvals
- 8.4 Major Commitments This Period
- 8.5 Schedule
- 8.6 Significant Issues/Decisions Pending
- 9.0 Activities Clover Forcemain Suspended

10.0 Activities – Currie Forcemain - Suspended

- 11.0 Activities ECI/Trent Twinning Suspended
- 12.0 Activities Macaulay Forcemain Suspended

13.0 Program Updates

- 13.1 Program Cost/Budget Update
- 13.2 Program Schedule Update
- 13.3 Procurement
- 13.4 Major Commitments This Period
- 13.5 Project Controls
- 13.6 Environmental
- 13.7 Safety

14.0 Communications - Suspended

15.0 Program Financing - Suspended

Appendix A Monthly Program Cost Report

Overall Program

February 2015 Project Status

SAFETY



 \checkmark

No Lost Time Incidents in the previous 3 months.

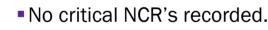
COST

Program on budget - <20% Program Contingency committed.</p>

SCHEDULE

- Procurement of McLoughlin DBF Contract delayed indefinitely.
- Uncertainty of site location has made the Program schedule unachievable. Additional delays anticipated.
- •All activities suspended from June 27, 2014, with the exception of the construction of the Craigflower Pump Station and the design of the Arbutus Road attenuation tank.

OUALITY



ENVIRONMENT

No incidents or breach in regulatory compliance recorded.

RISK



 \checkmark

- The overall program completion of 2018 not possible as a result of the zoning impasse for the implementation of a wastewater treatment plant at McLoughlin Point.
- Potential withdrawal of funding as a result of no wastewater treatment plant site.

COMMUNITY



Public & Municipal engagement suspended.

Key

- No site allocated for the implementation of the WWTP, jeopardizing the overall Program.
- **Issues**: Potential withdrawal of funding as a result of no WWTP site.
 - •All activities suspended from June 27, 2014, with the exception of the construction of the Craigflower Pump Station and the design of the Arbutus Road attenuation tank.

Financial Summary

Budget

Commitmer

Forecast at

Variance

McLoughlin

DBF Awarded

Construction

Commissioni

Resource R

DBFO Awarde

Construction

Commissioni

Conveyance

Macaulay PS

Clover PS DB

All Conveyand





(\$M)

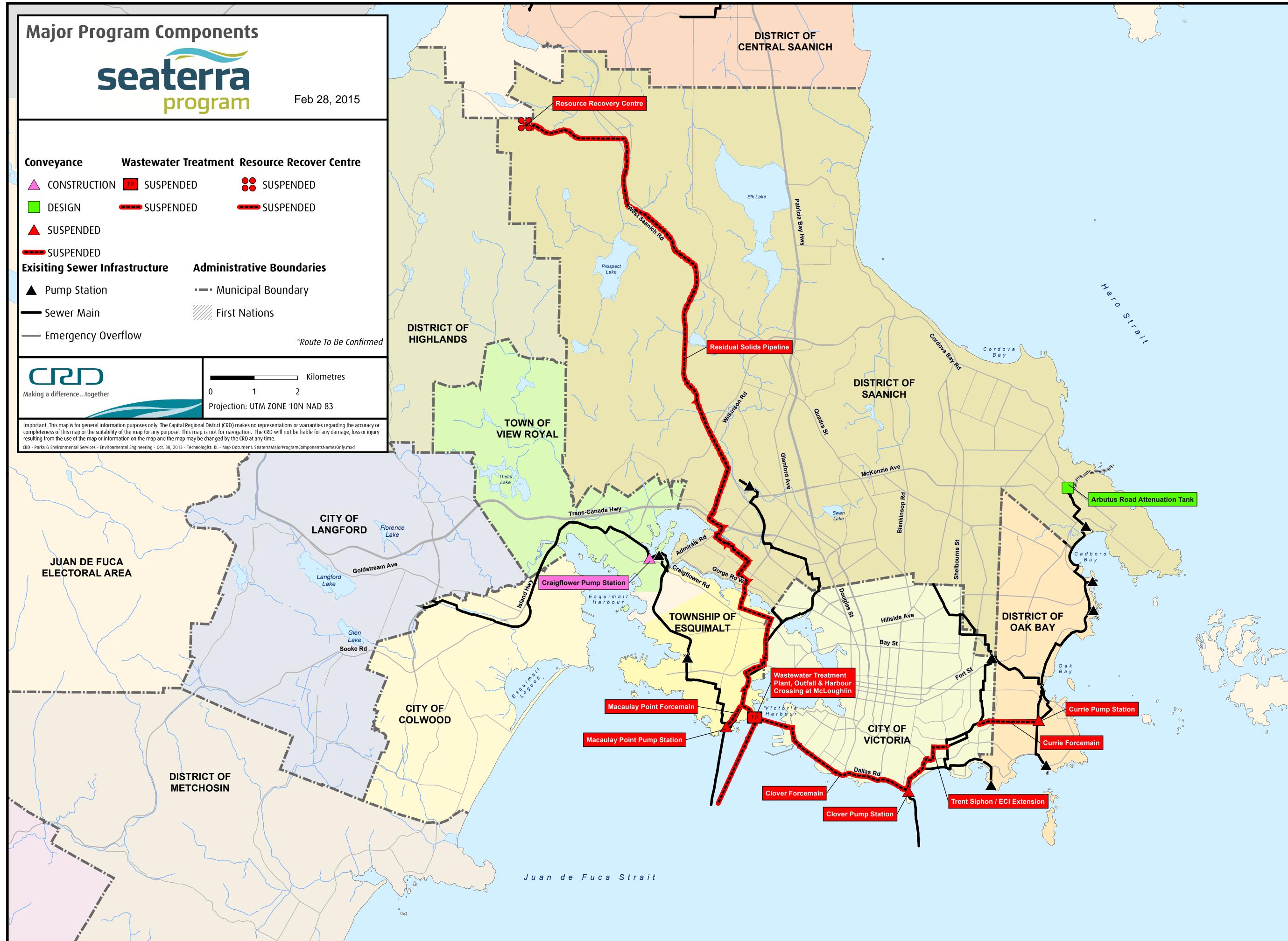
	787.9
nt To Date	51.1
Completion	787.9
Completion	787.9

Schedule Key Dates

Target

Pt, Outfall, Harbour Crossing				
b	Q3 2014			
Complete	Q2 2018			
ing Complete	Q4 2018			
ecovery Centre & Pipe	eline			
ed	Q1 2015			
Complete	Q4 2017			
ing Complete	Q1 2019			
e Pump & Pipeline				
B DB Awarded	Q4 2015			
3 Awarded	Q3 2014			
ce Complete	Q3 2017			







1. Executive Summary

1.1 Seaterra Program

- 1.1.1 Costs this period are \$903,681 (See section 13.1.3 for details) for a total cost to date of \$38,749,606.
- 1.1.2 Commitments this period are (\$31,232) for a total commitment to date of \$51,149,429 (approximately 6.5% of the Program budget).
- 1.1.3 Procurement activities on the Program remain suspended for the month of February 2015 following the Township of Esquimalt's rejection of the zoning required for the implementation of a wastewater treatment facility at McLoughlin Point.
- 1.1.4 As a result of the suspension of procurement activities in June 2014, the Program schedule cannot be completed before the end of 2018. Acquisition of a new site and completion of any rezoning and environmental approvals required followed by construction and commissioning of the wastewater treatment plant (WWTP) and the Resource Recovery Centre (RRC) are the activities that will determine and drive a revised Program critical path.
- 1.1.5 The selected preferred proponent for the McLoughlin Design-Build-Finance (DBF), Harbour Resource Partners has conditionally extended the validity of their bid to March 31, 2015.
- 1.1.6 Construction related activities continued on the Craigflower Pump Station project. The pump station is approximately 85% complete. The remaining mechanical and electrical equipment are being installed and architectural finishes are being completed.
- 1.1.7 Detailed Design for the Arbutus Road Attenuation Tank is approximately 95% complete. The design drawings and specification are currently being edited to incorporate comments that have been received. The construction Request for Qualification (RFQ), scheduled to be issued in the last week of May 2014, has been suspended indefinitely pending further direction on the entire Seaterra Program.

Major Issues:

CRD:

- Approval of a WWTP site.
- The LWMP approved by the MOE July 3, 2014, includes a WWTP at McLoughlin Point and may require further amendment for changes to the Program resulting from the current inability to proceed with the implementation of a wastewater treatment facility at that site.
- The Clover Pump Station rezoning application remains on hold pending further direction on the entire Seaterra Program.

• Relocation of rock/gravel stockpile from the proposed site of the RRC at Hartland remains on hold.

Major Activities Planned – Next Period:

CRD:

 The CALWMC and CRD Board will meet in March 2015 to discuss next steps of the Seaterra Program.

Commission/PMO:

 Awaiting direction from the CRD Board on an approved site for the WWTP and determining next steps for the Program.

1.2 Core Area Liquid Waste Management Committee/CRD Board Issues

- 1.2.1 Completion of Federal and Provincial Funding Agreements pending final zoning approvals and sign off by the Ministers.
- 1.2.2 Potential invalidation of Federal and Provincial Funding Agreements due to the Ministers' decision to not intercede in the zoning impasse that exists for the implementation of a WWTP at McLoughlin Point.
- 1.2.3 Determine next steps for the Program.

2. Activities – McLoughlin Point Wastewater Treatment Plant Project - Suspended

- 3 Activities Resource Recovery Centre (RRC) Suspended
- 4. Activities Macaulay Pump Station- Suspended
- 5. Activities Craigflower Pump Station

5.1 Construction Status

5.1.1 The pump station and piping work is approximately 85% complete. The roofing installation is progressing, mechanical and electrical equipment are being mounted in place and architectural finishing details are ongoing.

5.2 Schedule

5.2.1 The shoring failure that occurred in November 2013, together with other construction related issues has caused delays to the construction schedule. The general contractor forecast's a substantial completion date of May 2015. There is no impact to the Program critical path.

5.3 Significant Issues/Decisions Pending

5.3.1 An insurance claim for the resulting costs of the shoring failure was compiled by the general construction contractor Jacob Bros Construction Ltd. (JBC) and presented to the insurance adjuster for review July 14, 2014. The claim continues to be assessed by the appointed adjuster Charles Taylor Adjusting. An interim payment has been made and a final settlement is being negotiated between JBC and the insurer.

6. Activities – Clover Pump Station - Suspended

7. Activities – Currie Pump Station - Suspended

8. Activities – Arbutus Road Attenuation Tank

8.1 Design/Engineering Status

8.1.1 KWL completed the 95% detailed design drawings and specifications. Package has been reviewed and comments returned to KWL to incorporate into the finalize design. An open house, to present design information, scheduled for early June 2014 has been deferred pending further direction on the entire Seaterra Program.

8.2 **Procurement Status**

8.2.1 A RFQ to prequalify construction contractors scheduled to be issued at the end of May 2014 has been suspended indefinitely pending further direction on the entire Seaterra Program.

8.3 Status of 3rd Party Approvals

8.3.1 LWMP Amendment No. 9 which includes updating the Arbutus Road Attenuation Tank size has been approved by the CRD Board and by MOE.

8.4 Major Commitments This Period

8.4.1 None this period.

8.5 Schedule

8.5.1 The detailed design for the Arbutus Road Attenuation Tank will be reviewed and finalized by March 2015. The procurement process for the construction of the Arbutus Road Attenuation Tank construction has been suspended indefinitely pending further direction on the entire Seaterra Program.

8.6 Significant Issues/Decisions Pending

8.6.1 A decision was made not to proceed with construction while the existing zoning impasse for the WWTP at McLoughlin Point is being resolved.

9. Activities – Clover Forcemain - Suspended

- 10. Activities Currie Forcemain Suspended
- 11. Activities ECI/Trent Twinning Suspended
- 12. Activities Macaulay Forcemain Suspended

13. Program Updates

13.1 Program Cost/Budget Update

- 13.1.1 This report covers the period of February 2015.
- 13.1.2 Total Program budget is \$787,907,200.
- 13.1.3 Costs for this period (February 2015) \$903,681.

13.1.3.1 Summary of Costs:

Craigflower Pump Station & Arbut	\$779,006	
Resource Recovery Centre	\$ 9,994	
Project Management Office		
Salaries	\$52,532	
Consultants – Stantec	\$23,627	
Rentals & Leases	\$25,820	
Operating – Other	\$ 6,073	
	Subtotal	\$108,052
Commission		<u>\$ 6,629</u>
Total		\$903,681
13.1.4 Costs for previous period (January 2	2015) \$451,094.	
13.1.4.1 Summary of Costs:		
Craigflower Pump Station & Arbut	us Attenuation Tank	\$318,717
Project Management Office		
Salaries	\$55,722	
Consultants – Stantec	\$41,765	
	ψ11,700	
Consultants – Blueline Safety	\$ 1,000	
Consultants – Blueline Safety Rentals & Leases		
	\$ 1,000 \$25,820 \$ 780	
Rentals & Leases	\$ 1,000 \$25,820	\$125,087
Rentals & Leases	\$ 1,000 \$25,820 \$ 780	\$125,087 <u>\$7,290</u>

- 13.1.5 Costs to date are \$38,749,606 (Appendix A).
- 13.1.6 Commitments to date are \$51,149,429.
- 13.1.7 Commitments this period are (\$31,232).
 - Commitments for this period include change orders for the Craigflower Pump Station project.

13.2 Program Schedule Update

- 13.2.1 The status of the Program schedule continues to degrade. Program completion in 2018 is no longer possible and a new date is pending determination of a site for the WWTP.
- 13.2.2 Major activities and milestones scheduled the next 90 days include the following:

Conveyance Infrastructure:

- Finalize the detailed design for Arbutus Road Attenuation Tank.
- Substantial completion of the Craigflower Pump Station in May 2015.

13.3 Procurement this Period - Suspended

13.4 Major Commitments This Period - Suspended

13.5 Project Controls

13.5.1 Procurement activities on the Program are suspended.

13.6 Environmental

- 13.6.1 Activities:
 - Craigflower Pump Station Project JBC continues with building construction and sewer installation. Environmental site visits were conducted throughout the course of the month and no environmental issues or significant non-compliances were noted.

13.7 Safety

- 13.7.1 Site inspections continued on the Craigflower construction site.
- 13.7.2 There were no safety incidents to report this period.

14. Communications/Public Engagement - Suspended

15. Program Financing - Suspended

Appendix A

Monthly Cost Report



Program Summary Report Month Ending 28-February-2015

	Budget	Cost to Date	Commitments Unpaid	Total CTD + CU	Forecast to Complete	Forecast at Completion	Variance	Variance from Last Report
WASTEWATER TREATMENT - MCLOUGHLIN	283,782,392	10,142,211	1,541,413	11,683,624	272,098,768	283,782,392	0	0
CONVEYANCING -PUMP STATIONS & PIPES	126,786,364	15,520,367	2,545,923	18,066,290	108,720,074	126,786,364	0	0
RESOURCE RECOVERY CENTRE	254,675,629	4,661,586	2,858,430	7,520,016	247,155,613	254,675,629	0	0
COMMON COSTS	50,337,316	8,358,925	5,454,058	13,812,983	36,524,333	50,337,316	0	0
INTERIM FINANCING	31,400,000	66,516	0	66,516	31,333,484	31,400,000	0	0
PROGRAM CONTINGENCY	40,925,499	0	0	0	40,925,499	40,925,499	0	0
TOTAL	787,907,200	38,749,606	12,399,823	51,149,429	736,757,771	787,907,200	0	0



WESTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE

Notice of Meeting on Tuesday, April 7, 2015 at 10:30 am Songhees Wellness Centre, Maplebank Road, Victoria, BC, V9A 4M1

S. Young C. Hamilton

D. Screech L. Seaton

B. Desjardins

Chief R. Sam

AGENDA

- 1. Approval of Agenda
- 2. Adoption of Minutes of March 10, 2015
- 3. Co-Chairs' Remarks
- 4. Presentations/Delegations
- Westside Select Committee Next Stage In Public Consultation (EHQ 15-36) 5.
- 6. Westside Solutions Budget Update (EHQ 15-37)
- 7. Eastside Select Committee - Verbal Update
- 8. New Business
- 9. Motion to close the meeting in accordance with the Community Charter, Part 4, Division 3, 90 (1) (e) the acquisition, disposition or expropriation of land or improvements, if the committee considers that disclosure could reasonably be expected to harm the interests of the region.
- 10. Adjourn

Next Meeting: Tuesday, April 21, 2015, 10:30 am - noon



MINUTES OF A MEETING OF THE WESTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE

Held Tuesday, March 10, 2015, Town of View Royal, Council Chambers, 45 View Royal Avenue, Victoria, BC

- PRESENT: C. Hamilton, Colwood (Co-Chair), B. Desjardins, Esquimalt (Co-Chair); D. Screech, View Royal; S. Young, Langford; Chief R. Sam, Songhees Nation; L. Seaton, Langford
 Councillors: B. Burton-Krahn, Esquimalt; J. Rogers, View Royal; L. Hundleby, Esquimalt;
 Staff: L. Hutcheson, B. Lapham, D. Lokken, M. Montague (Recorder)
- Also Present: J. Miller, Esquimalt; L. Hurst, Esquimalt; B. Brown, Esquimalt; R. Morrison, Esquimalt; M. Baxter, Colwood; S. Russell, Colwood; J. Bowden, Langford; C. Houghton and J. O'Riordan from Aurora Consulting;

Chair Hamilton called the meeting to order at 10:30 am.

1. APPROVAL OF THE AGENDA

MOVED by Councillor Seaton, **SECONDED** by Mayor Screech, That the Westside Wastewater Treatment and Resource Recovery Select Committee approve the agenda with the supplementary agenda.

CARRIED

2. ADOPTION OF MINUTES OF FEBRUARY 10, 2015

The seconder on Item #8 was changed to read Councillor Seaton.

MOVED by Mayor Desjardins, **SECONDED** by Mayor Screech, That the Westside Wastewater Treatment and Resource Recovery Select Committee approve the minutes of February 10, 2015 as amended.

CARRIED

3. CHAIR'S REMARKS

Mayor Hamilton remarked that it is an honour to be meeting today on traditional grounds at Songhees. It is time for decision making and working together to get to the next step as we move towards a resolution.

4. PRESENTATIONS/DELEGATIONS

- 1) David Langley, spoke on agenda item 5.
- 2) John Farquharson, spoke on agenda item 5 and 6.
- 3) Dr. Thomas Maler, spoke on agenda item 5.
- 4) Bryan Gilbert, spoke on agenda item 5

5. WESTSIDE SOLUTIONS -- PUBLIC CONSULTATION SURVEY RESULTS

C. Houghton spoke to the report. The public consultation survey results were included with the report. The information gathered from this survey will be used to develop the next stage of public engagement. Survey information will also be combined with technical information to assist in the development of preliminary wastewater treatment and resource recovery options. The survey summary report, as well as the raw data that has been collected from the surveys will be available online.

MOVED by Mayor Desjardins, SECONDED by Mayor Screech,

That the Westside Wastewater Treatment and Resource Recovery Select Committee receive this report for information.

CARRIED

6. WESTSIDE SOLUTIONS – TECHNICAL COMMITTEE ACTIVITY UPDATE

J. Miller spoke to the report. The Westside Solutions Technical Committee activity update was presented for information. With regard to potential treatment plant locations, the Technical Committee will continue to shortlist preferred sites according to matrix criteria as outlined in the activity update. The preferred sites being evaluated by the Westside Solutions Staff Working Group Technical Committee are for wastewater treatment only, with no integration of other waste streams.

Additional public consultation and the process for information sharing between the Eastside and Westside Technical Staff were discussed.

MOVED by Mayor Desjardins, **SECONDED** by Mayor Young,

That the Westside Wastewater Treatment and Resource Recovery Select Committee request that the Eastside Committee allow the Technical staff for the Eastside and Westside to commence discussions regarding their findings, and discuss ways to move forward with integration of information.

CARRIED

MOVED by Mayor Desjardins, **SECONDED** by Mayor Young,

That the Westside Wastewater Treatment and Resource Recovery Select Committee receive this report for information.

CARRIED.

7. FEDERAL AND PROVINCIAL FUNDING FOR SEWAGE TREATMENT IN THE CORE AREA

MOVED by Councillor Seaton, **SECONDED** by Mayor Desjardins, That the Westside Wastewater Treatment and Resource Recovery Select Committee receive this report for information.

CARRIED

8. WESTSIDE SOLUTIONS BUDGET PROPOSAL AND UPDATE

L. Hutcheson spoke to the report and noted that this budget projects out until the end of September.

MOVED by Mayor Desjardins, **SECONDED** by Mayor Young, that the Westside Wastewater Treatment and Resource Recovery Select Committee receive this report for information.

CARRIED

9. EASTSIDE SELECT COMMITTEE – VERBAL UPDATE

L. Hutcheson reported on this item as there was no representation from the Eastside Select Committee at the meeting. She noted that the Terms of Reference for the Eastside Select Committee is going to the Core Area Liquid Waste Management Committee tomorrow as well as the Public Advisory Committee.

10. NEW BUSINESS

There was no new business.

<u>Next Meeting</u> - The next meeting will be held on April 7, 2015 at 10:30 am; location to be determined. Future meetings of the Westside Wastewater Treatment and Resource Recovery Select Committee will be held the first Tuesday of the month.

11. MOTION TO CLOSE THE MEETING

MOVED by Mayor Desjardins, **SECONDED** by Councillor Seaton,

That the Westside Wastewater Treatment and Resource Recovery Select Committee close the meeting in accordance with the Community Charter, Part 4, Division 3, 90(1)(k) negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public.

CARRIED

12. ADJOURN

MOVED by Councillor Seaton, **SECONDED** by Mayor Screech, That the meeting of the Westside Wastewater Treatment and Resource Recovery Select Committee be adjourned at 12:01 pm.

CARRIED

Chair

Recorder

EHQ 15-36

REPORT TO WESTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE MEETING OF TUESDAY, APRIL 7, 2015

<u>SUBJECT</u> WESTSIDE SELECT COMMITTEE – NEXT STAGE IN PUBLIC CONSULTATION

<u>ISSUE</u>

To provide the Westside Wastewater Treatment and Resource Recovery Select Committee with an update of the upcoming public engagement activities including the Roundtables and Innovation Days.

BACKGROUND

Roundtables:

The Westside Solutions Public Engagement working group is planning three Roundtables that will take place in May.

Public participants for this stage of the process self-identified through the previous rounds of engagement both at the open houses and through the Westside Solutions survey.

Feedback received at the Roundtables will be recorded and made public at a wrap-up open house. This wrap-up event will give the public a summary of the information gathered by Westside Solutions, including the survey, roundtables and technical information.

Innovation Days:

Westside Solutions invited all Request for Technical Information respondents to present a high-level case study on their submissions. These case studies will be presented at Royal Roads University's Centre for Dialogue over three half-day sessions on April 28, 29 and 30.

Westside Solutions will invite members of the Westside and Eastside Select Committees, municipal and band council members, relevant municipal and CRD staff, Roundtable participants and Advisory Committee members. In order to reach the maximum number of people, the presentation will also be webcast and available to view the presentation "live" online and will be recorded and made available on the Westside Solutions website.

WESTSIDE STAFF WORKING GROUP

The Westside staff working group is in agreement with this report.

CONCLUSION

The Roundtables are an opportunity to advance the community discussion to a defined set of practically achievable site solutions based on previous public feedback and technical guidance. The goal of this stage of public engagement is to provide the Westside Select Committee with enough information to select the preferred site(s) for the Westside Wastewater Treatment and Resource Recovery solution recommendation.

RECOMMENDATION

That the Westside Wastewater Treatment and Resource Recovery Select Committee receive this report for information.

Yan checo

Larisa Hútcheson, P.Eng. General Manager Parks & Environmental Services

KQ:cl

EHQ 15-37

REPORT TO WESTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE MEETING OF TUESDAY, APRIL 7, 2015

SUBJECT WESTSIDE SOLUTIONS BUDGET UPDATE

ISSUE

To provide the Westside Wastewater Treatment and Resource Recovery Select Committee with a monthly budget update.

BACKGROUND

At its meeting of November 5, 2014, the Westside Wastewater Treatment and Resource Recovery Select Committee (Select Committee) directed staff to provide the Select Committee with a budget status update on a monthly basis.

A detailed budget for the conceptual planning phase of the project from April 1, 2015 to September 30, 2015, with actual expenses and commitments to February 28, 2015 was received by the Select Committee at its meeting of March 10, 2015. Actual expenses and commitments to March 30, 2015 is presented in Appendix A.

FINANCIAL IMPLICATIONS

Under the Core Area Wastewater Treatment Program budget, requisitioned funds can only be apportioned on the cost sharing basis on which they were raised. The cost sharing of the Program budget is currently apportioned based on 2030 design capacity, 70% average dry weather flow and 30% average annual flow, as previously declared by each participant. This cost sharing may be revisited by the participants in the service. The Westside collectively accounts for 26.76% of the requisition funds raised. The funds raised will be shared between the four Westside municipal participants, as follows.

Colwood15.92%Esquimalt24.85%Langford47.31%View Royal11.92%

WESTSIDE STAFF WORKING GROUP

The Westside staff working group is in agreement with the budget update.

CONCLUSION

A detailed budget is presented for the conceptual planning stage of the project to September 30, 2015. The Committee will continue to receive monthly budget updates through the course of the project.

RECOMMENDATION

That the Westside Wastewater Treatment and Resource Recovery Select Committee receive this report for information.

12 Larisa Hutcheson, P.Eng.

General Manager Parks & Environmental Services

LH:jg

Attachment: 1

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WESTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE

Westside Concept Planning – Preliminary Budget Update No. 5 until September 30, 2015

	Preliminary Budget	Revised Budget (Mar 31, 2015)	Revised Budget (Sep 30, 2015)	Actuals (Mar 30, 2015)	Committed	Total	Remaining
Consultants							
 Aurora 	32,600	97,800	232,800	97,595	135,205	232,800	0
Innovations	·						
Facilitation		10,000	10,000				10,000
Technical		25,000	25,000				25,000
Review							
Staff and Wages	17,000	54,000	109,000	48,915		49,915	60,085
Miscellaneous	400	2,000	9,000	5,111		5,111	3,889
Totals	50,000	188,800	385,800	151,621	135,205	286,826	98,974

prepared March 30, 2015



EASTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE

Notice of Meeting on **Wednesday, March 18, 2015 at 2:30 pm** Board Room, 6th floor, 625 Fisgard Street, Victoria, BC

Lisa Helps (Chair)	Vic Derman (Vice-Chair)	M. Alto	R. Atwell
S. Brice	J. Brownoff	B. Isitt	N. Jensen
C. Plant	G. Young		

AGENDA

- 1. Approval of Agenda
- 2. Adoption of Minutes of March 4, 2015
- 3. Chair's Remarks
- 4. Presentations
 - Eastside Public Advisory Committee Update
- 5. Delegations
- 6. Review Summary of March 4 Facilitated Planning and Strategy Session Regarding Public Consultation
- 7. Review Proposed Work Plan Overlay 3P Canada Funding Considerations
- 8. Westside Select Committee Verbal Update
- 9. New Business
- 10. Motion to close the meeting in accordance with the Community Charter, Part 4, Division 3, 90 (1) (e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the regional district.
- 11. Adjournment
- 12. Next Meeting: April 1, 2015

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Minutes of a Meeting of the Eastside Wastewater Treatment and Resource Recovery Select Committee

Held Wednesday, March 4, 2015, in the Board Room, 625 Fisgard Street, Victoria, BC

Present: Director L. Helps (Chair); Director V. Derman (Vice-Chair); Director R. Atwell; Director S. Brice; Director J. Brownoff; Director B. Isitt; Director C. Plant; Director G. Young; Councillor J. Loveday; Councillor K. Murdoch Staff: R. Lapham, Chief Administrative Officer, L. Hutcheson, General Manager, Parks & Environmental Services, D. Telford, Senior Manager; Environmental Engineering; A. Orr, Senior Manager, Corporate Communications; K. Quayle, Communications Coordinator, Corporate Communications; M. Reilly (recorder) Also Present: Director C. Hamilton, Westside Select Committee; A. Gibbs, Public Assembly

Absent: Director M. Alto, Director N. Jensen

Chair Helps called the meeting to order at 2:30 pm.

1. Approval of Agenda

Chair Helps noted that the agenda should be amended to move Item 7, New Business, ahead of Item 6, as there would not be any further agenda items following the closed part of the meeting.

MOVED by Director Atwell, **SECONDED** by Director Brice, That the agenda be approved as amended.

CARRIED

2. Adoption of Minutes of February 18, 2015

MOVED by Director Derman, **SECONDED** by Director Isitt, That the minutes of February 18, 2015 meeting be adopted as circulated.

CARRIED

3. Chair's Remarks

Chair Helps commented that she is optimistic about the process and thankful to Amanda Gibbs for assistance with goals and timelines. The aim now is to have an expedited sewage plan in place in a year or less.

4. Presentations/Delegations - None

5. Facilitated Planning and Strategy Session Regarding Public Consultation

Ms. Amanda Gibbs, who has been retained to assist the Eastside Select Committee with public consultation, facilitated a session regarding the goals and timelines of the Eastside Wastewater Treatment and Resource Recovery project.

The session will be summarized by Ms. Gibbs for distribution to the Committee members.

6. New Business - None

Director Hamilton left the meeting at 3:40 pm.

7. Motion to Close the Meeting

MOVED by Director Brice, SECONDED by Director Plant,

That the Eastside Wastewater Treatment and Resource Recovery Select Committee close the meeting in accordance with the Community Charter, Part 4, Division 3, 90 (1) (a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the regional district.

CARRIED

8. Adjournment

9. Next Meeting: March 18, 2015

Chair

Recorder

BRIEFING NOTE: EASTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE SESSION, MARCH 4 2015

Summary:

Through a brief dialogue held during the March 4 committee meeting, directors emerged with general principles and priorities for both public consultation and the development of solutions. There was a high level of resonance on the following themes:

- Identifying priority sites
- Ensuring public engagement is focused, meaningful and pragmatic
- Restoring public confidence in the process and outcomes
- Ensuring efficiency and maximizing available public funding
- Seeking a clear mechanism for identification and selection of technical options
- Support for rapid consultation beginning with striking advisory committee in March and public consultation complete by late June or July.

Key Considerations:

The following considerations and points of information emerged during the session that may helpfully inform the development of an effective public consultation framework:

- Must be able to explain to public how this process has been improved
- City of Victoria will present a site identification report at the next Eastside Committee Meeting (in closed session)
- Support for municipalities to bring forward possible sites in the coming six weeks.
- Discussion re: finding common criteria for selection of sites (i.e., congruent with OCP and conveyances, as well as CRD standards)
- Ensure public are not being asked to weigh in on technical solutions how will subject matter experts be involved in the consultation process?
- How will technical solutions / sites be assessed and by whom?

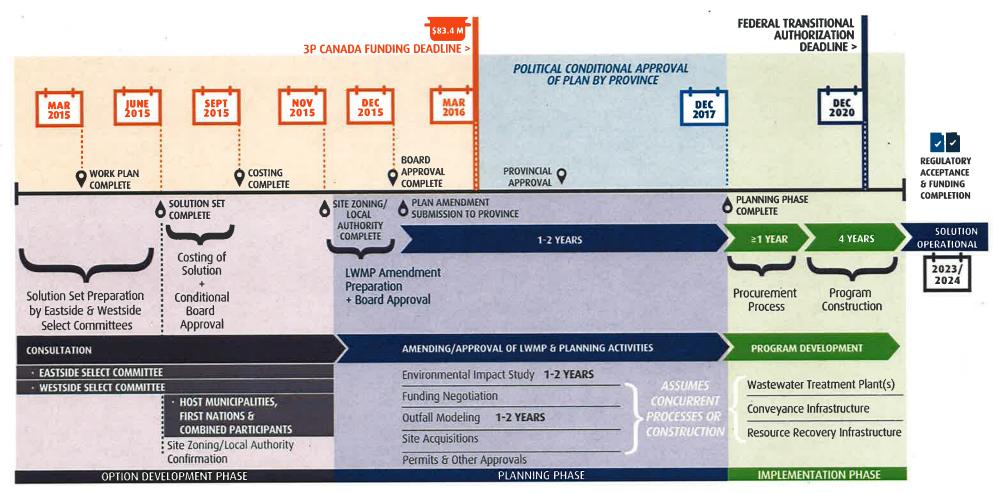
Public Consultation Timelines:

- Need to work within a timeframe that allows for meaningful input but that leaves the door open for existing funding
- Complete by June/ July
- May need to run technical work and consultation in parallel
- Desire to keep public in the loop beyond the initial process, keeping citizens meaningfully engaged through in-person, digital platforms, and ongoing two-way communications.

EASTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE facilitated session notes/ decision points March 4, 2015

Proposed Work Plan Overlay 3P CANADA FUNDING CONSIDERATIONS

OPTION DEVELOPMENT, PLANNING & IMPLEMENTATION PHASES



Agenda Item

N



EASTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE

Notice of Meeting on **Wednesday, April 01, 2015 at 2:30 pm** Board Room, 6th floor, 625 Fisgard Street, Victoria, BC

AGENDA

- 1. Approval of Agenda
- 2. Adoption of Minutes of March 18, 2015
- 3. Chair's Remarks
- 4. Presentations
 - Eastside Public Advisory Committee Update
- 5. Delegations
- 6. Public Consultation Framework (EHQ 15-34)
- 7. Westside Select Committee Verbal Update
- 8. New Business
- 9. Motion to close the meeting in accordance with the Community Charter, Part 4, Division 3, 90 (1) (e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the regional district.
- 10. Adjournment
- 11. Next Meeting: April 15, 2015



Minutes of a Meeting of the Eastside Wastewater Treatment and Resource Recovery Select Committee

Held Wednesday, March 18, 2015, in the Board Room, 625 Fisgard Street, Victoria, BC

Present: L. Helps (Chair); V. Derman (Vice-Chair); M. Alto, R. Atwell; J. Brownoff; G. Young; J. Loveday (for B. Isitt); D. Murdock (for C. Plant), K. Murdoch (for N. Jensen); L. Wergeland (for S. Brice)
 Staff: L. Hutcheson, General Manager, Parks & Environmental Services, A. Orr, Senior Manager, Corporate Communications; K. Quayle, Communications Coordinator, Corporate Communications; M. Reilly (recorder)
 Also Present: Director B. Desjardins, Westside Select Committee; A. Gibbs, Public Assembly

Chair Helps called the meeting to order at 2:32 pm.

1. Approval of Agenda

MOVED by Director Atwell, **SECONDED** by Director Alto, That the agenda and supplementary agenda be approved as circulated.

CARRIED

2. Adoption of Minutes of March 4, 2015

MOVED by Director Brownoff, **SECONDED** by Director Atwell, That the minutes of March 4, 2015 meeting be adopted as circulated.

CARRIED

3. Chair's Remarks

Chair Helps commented on the ambitious nature of the timeline that requires engagement with the public and provision of options to the Core Area Liquid Waste Management Committee and the Board by June 2015.

4. Presentations

Eastside Public Advisory Committee Update

Chair Helps reported on the first meeting of the Eastside Public Advisory Committee (EPAC) which took place earlier today. Discussion included how to engage those who had not previously had their voices heard; norms for working as a group such as trust, transparency, quality and balance of information; and what a successful outcome would look like for the EPAC. The meeting schedule will be changed to facilitate connection with the Eastside Select Committee meeting times. The flip chart information and notes from the EPAC meeting will be circulated to the Eastside Select Committee.

5. Delegations

(a) David Langley, re agenda item 7 – he provided a handout to the committee on the Work Plan Overlay from which he made his presentation.

6. Review Summary of March 4 Facilitated Planning and Strategy Session Regarding Public Consultation.

MOVED by Director Alto, **SECONDED** by Alt. Director Loveday,

That the Briefing Notes from the Eastside Wastewater Treatment and Resource Recovery Select Committee Session of March 4, 2015 be adopted as the working document for this committee.

MOVED by Director Derman, **SECONDED** by Director Atwell,

That the Briefing Notes be amended above the point "Identifying priority sites" to include "Maximizing response to climate change by maximizing resource recovery and minimizing life cycle cost."

Ensuing discussion included the following points:

- the principles and priorities already include all of these factors but the objectives must be weighed against affordability and one objective cannot be made to take priority over all
- in order to regain public confidence, the committee must not present confusion but must find consensus
- a list of objectives from a 2007 letter from the Minister of Environment on the subject of wastewater treatment was read; this letter used "optimize" in relation to objectives
- it was agreed that "optimize" is a better word than "maximize" and the motion was restated

MOVED by Director Derman, **SECONDED** by Director Atwell,

That the amendment be amended by replacing the word "maximizing" in both instances to "optimizing".

CARRIED

MOVED by Director Derman, SECONDED by Director Atwell,

That the Briefing Notes from the Eastside Wastewater Treatment and Resource Recovery Select Committee Session of March 4, 2015 be further amended below the point "Ensuring efficiency and maximizing available public funding" to include "Ensuring efficiency by including life cycle costs in the consideration of total costs."

CARRIED

Question was then called on the main motion, as amended as follows:

- i) above the point "Identifying priority sites" to include "Optimizing response to climate change by optimizing resource recovery and minimizing life cycle cost."; and
- ii) below the point "Ensuring efficiency and maximizing available public funding" to include "Ensuring efficiency by including life cycle costs in the consideration of total costs."

CARRIED

7. Review Proposed Work Plan Overlay – 3P Canada Funding Considerations

Ms Amanda Gibbs led a discussion of the timeline for sewage treatment. She suggested that 4 to 6 public meetings will be needed and these should start late April. She recommended setting the stage with workshops, conversations and online information that provides concrete information and lets the public know the areas to which they may contribute.

Ensuing discussion included the following points:

- the work plan, public consultation and engineering information must be simultaneous
- the public must be given as much information as possible
- 4 to 6 public meetings is too many
- engineering staff must be directed to work as quickly as possible to provide possible options
- there should be 1 or 2 public meetings per region but there should also be 1 collective public meeting
- the public must be given concrete information about realistic sites and realistic technologies
- go early to the public and present principles and ask for public input
- the Westside poster boards are available for use; comments provided by the public over the course of the 6 Westside open houses can be used for improving the process
- bring only concrete information, not speculation about sites and technologies as this creates fear
- goal must be to regain the public's trust by showing serious results, timelines, and pros and cons of sites to the public
- define site parameters before going to the public
- there is a danger of repeating the previous process
- present 30 or 40 sites and let the public go through the evaluation process
- get input from the Eastside Public Advisory Committee as soon as possible
- ask Ms Gibbs to present 2 plans, 1 for public consultation with presentation of sites and 1 without sites
- the public consultations should be presented in a spirit of seeing the benefits of the proposals

8. Westside Select Committee Verbal Update

Director Desjardins reported that the Westside Select Committee has plans for an "Innovation Day" in which those who provided technical information will be invited to give presentations to which the public will be invited. A second round of public consultation meetings will be held at Royal Roads. Westside's technical committee will be bringing sites and technologies to the Westside Select Committee in April. The Westside Select Committee is working on how to analyze the technical data. Cost projections have not yet been done but some of the responses to the Request for Technical Information include cost information.

9. New Business - None

Councillor D. Murdoch left the meeting at 3:25.

10. Motion to Close the Meeting

MOVED by Director Atwell, SECONDED by Director Derman,

That the Eastside Wastewater Treatment and Resource Recovery Select Committee close the meeting in accordance with the Community Charter, Part 4, Division 3, 90 (1) (e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the regional district.

11. Adjournment

12. Next Meeting: April 1, 2015

Chair

Recorder



EHQ 15-34

REPORT TO EASTSIDE WASTEWATER TREATMENT AND RESOURCE RECOVERY SELECT COMMITTEE MEETING OF WEDNESDAY, APRIL 1, 2015

SUBJECT PUBLIC CONSULTATION FRAMEWORK

<u>ISSUE</u>

To present the public consultation framework and associated costs to the Eastside Wastewater Treatment and Resource Recovery Select Committee.

BACKGROUND

At its March 18 meeting, the Eastside Select Committee requested that the consultant, Public Assembly, develop a proposal to consult with the public in Oak Bay, Saanich and Victoria that meets the intent of the timelines presented in the Proposed Work Plan Overlay – 3P Canada Funding Considerations. In response, Public Assembly developed the Draft Eastside Consultation Framework, attached as Appendix A.

This framework outlines the goals, activities and dates of the eastside public consultation initiative.

ALTERNATIVES

That the Eastside Wastewater Treatment and Resource Recovery Select Committee:

- 1. Approve the Eastside Consultation Framework and associated costs.
- 2. Direct staff to revisit the Eastside Consultation Framework for further review.

FINANCIAL IMPLICATIONS

The costs anticipated for this public consultation initiative is estimated at \$52,500. This estimate covers location rental, professional facilitator costs, material development, subject matter expert speaker engagement, and online software support and tool development.

Services	Detail	Estimated Cost
Professional Facilitators	3 large events x 8 facilitators	\$15,000
Professional Facilitators	6-9 smaller events x 2 facilitators	\$6,000
Graphic Design	boards, maps, presentations, reports x 3	\$3,500
Printing		\$5,000
Subject Matter Expert Speaker Engagement	fee + transportation for 3 speakers	\$5,000
Location Rental	3-4 large venues + 6-8 community centres	\$3,000
Online Software Support & Tool Development	digital platform	\$15,000
Total		\$52,500

These costs will be funded under the Core Area Wastewater Treatment Program cost sharing agreement. Eastside Select Committee expenses are shared between the three Eastside municipal participants, as follows:

Oak Bay - 8.81% Saanich - 41.70% Victoria - 49.49%

CONCLUSION

The Draft Eastside Consultation Framework lays out a concentrated public consultation effort within the timelines that have been approved by the CRD Board. Following this framework, the final preferred option identified by the Eastside Select Committee will be presented to the CRD Core Area Liquid Waste Management Committee and the CRD Board by the end of June.

RECOMMENDATION

That the Eastside Wastewater Treatment and Resource Recovery Select Committee approve the Eastside Consultation Framework and associated costs.

Mul

And Vorf Senior Manager Corporate Communications

KQ:cl

Attachment: 1

Larisa Hutcheson, P.Eng. General Manager Parks & Environmental Services

DRAFT EASTSIDE CONSULTATION FRAMEWORK

Summary:

The consultation framework will outline:

- an articulation of goals for public consultation on Eastside Wastewater Treatment and Recovery including development of a problem statement;
- understanding the values and priorities of public stakeholders;
- the decision-making process to arrive at a new solution set by the Eastside Wastewater Committee;
- some of the "givens" we are being asked to work within (including timing, but can include possible sites, technologies and budget); and
- public participation objectives and proposals for specific formats to meet the goals and reach key stakeholders/ public audiences.

Context:

- The Capital Regional District is going back to municipalities in 2015 to develop a renewed wastewater recovery plan.
- The former plan was rejected by the host municipality.
- Federal funding deadlines have been extended by one-year, which gives an opportunity to retain the current funding while seeking solutions that are supportable by all stakeholders – the public, municipal councils, federal and provincial government, and the CRD.
- We must provide trusted technical recommendations and viable sites, proposed by all three municipalities, to public audiences for input and feedback.

Public Participation Goal:

To engage the public and organizational stakeholders within Eastside municipalities (Saanich, Victoria, Oak Bay) in a decision-oriented process that gains their direction and feedback on analysis, potential sites and related energy recovery / technology decisions.

16925 BUBLIC ASSEMBLY

Decision-making Process:

DEFINE THE PROBLEM/ OPPORTUNITY AND DECISION TO BE MADE

Clear understanding of what's in sewage, why we need to treat it, and the the scope of the decision

GATHER INFORMATION

Identify full range of objective information about the issue to be addressed

ESTABLISH DECISION CRITERIA

Clear understanding of the criteria by which the options will be evaluated

DEVELOP OPTIONS

Balanced alternatives that include stakeholder issues and concerns

EVALUATE ALTERNATIVES

Clear comparisions and trade-offs are provided

MAKE DECISION

Clear understanding of who made the decision and how stakeholder issues were considered.

General Timeline/ Activities:



Public Participation Objectives:

- 1. Gather information about public priorities and values using recent OCP processes, stakeholder interviews, polling and surveys. *Proposed Activities:*
 - o stakeholder interviews
 - o surveys to determine priorities
 - work with planning teams to identify public values from recent / current planning processes. March – April 2015
- 2. Define the problem and ensure there is clear, accessible and technically rigorous information available to the public *Proposed Activities:*
 - Make educational resources like briefing notes, videos and discussion guides vetted by technical experts available. April 2015
- 3. Inform the public re: the process, opportunities/ challenges and involve them in developing criteria for decision-making. *Proposed Activities:*
 - o launch Eastside Wastewater Dialogue digitally
 - host an initial public briefing event/ workshop at a large, central public venue
 - Inform the public about what has changed, share the decision-making process (briefing from member of EPAC/ Eastside Committee Chair)
 - Preliminary technical briefing
 - Using table facilitators, involve the participants in the development of criteria for choosing sites, technologies and approaches - use base maps as a guide.
 - Host three "coffee chats" daytime conversations in municipal community centres or local coffee shops.

PUBLIC ASSEMBLY

3

- Set up a structured conversation over coffee as well as a station so residents can learn, share ideas and offer their criteria as they come and go over a day.
- Reflect back findings online and in briefing notes create an Eastside Wastewater Process charter of values, criteria and public priorities. Date range: April 20 - May 8, 2015

4. Develop site options using criteria and take to the public for review over a two-day workshop.

Proposed Activities:

- Using detailed site maps overlaid with key criteria, we can work with an identified engineer/ planning group to present a series of possible sites and walk citizens through a rotating set of criteria-based stations where they can learn about sites and how they meet/ do not meet various conditions.
- Participants can offer ideas, feedback and comments. We will administer questionnaires, harvest qualitative input through table facilitation and recording, as well as hosting the same conversation online on a digital platform that highlights each option allowing those who cannot make it in person to register their feedback.
- We will compile the results and come back with a more refined group of options based on public input. Date range: **May 11-15, 2015**

5. Return to the Public with an options workshop that combines public input with technical analysis.

Proposed Activities:

- This workshop could offer a much smaller range of options based on transparent public and technical assessments using the project charter.
- This workshop will offer a clear set of trade-offs (site, cost, technical benefits accrued by proximity, impact on community, etc.)
- We could offer an abbreviated version of the workshop at three municipal community centres.
- The options could be presented on a digital engagement platform, which offers the public an opportunity to vote on options and assess trade-offs. Date range: May 28, 2015
- 6. Return to public first with report in early June and then again with Eastside option based on public/ technical input and with rationale from decision-making process. This session could combine Eastside and Westside options.

Proposed Activities:

- The team will present the option to the public in an open-house format. They will explain and present the rationale for the option and continue to seek feedback.
- Discuss combining a conversation about Westside and Eastside solutions for public assessment. Date range: June 12, 2015.

7. Final option to CRD Core Committee/ Board June - July 2015

PUBLIC ASSEMBLY