#### CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE

Notice of a Meeting on **Wednesday**, **June 11**, **2014**, **at 9:30 am**Board Room, 6<sup>th</sup> Floor, 625 Fisgard Street, Victoria, BC

G. Young (Chair) D. Blackwell (Vice-Chair) M. Alto S. Brice
J. Brownoff V. Derman B. Desjardins D. Fortin

C. Hamilton G. Hill B. Isitt N. Jensen (J. Herbert)

F. Leonard (V. Sanders) L. Seaton L. Wergeland

### **AGENDA**

- 1. Approval of Agenda
- 2. Adoption of Minutes of May 14, 2014 (to be sent under separate cover)
- 3. Chair's Remarks
- 4. Presentations/Delegations
- 5. 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 board considers that disclosure could reasonably be expected to harm the interests of the regional district; and (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.
- 6. Macaulay and Clover Points Application for Transitional Authorization to Discharge Deleterious Substances under the Federal Wastewater Systems Effluent Regulations
- 7. Implications of the Minister's Decision on the Seaterra Program
- 8. Alternative Approaches to Address the Ministers' Decision on the McLoughlin Rezoning
- 9. Seaterra Program and Budget Update No. 12
- 10. Notice of Motion
  - a) Seaterra Program and Core Area Liquid Waste Management Plan: Director Desjardins

THEREFORE BE IT RESOLVED that: The Core Area Liquid Waste Management Plan, as pertains to the Seaterra Project, be suspended until January 2015, allowing the CRD Board and participant municipalities an opportunity to explore possible directions going forward and for a complete and fully independent review of such options;

AND THAT Termination of all current Seaterra Program and Projects occur and be completed before September 30, 2014 (with exception of necessary system maintenance)

AND THAT The CRD submit a request to the Ministry of Environment for an extension of the construction and funding deadline to 2020, to ensure that the participants meet the federal deadline.

- 11. New Business
- 12. Adjournment



# REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE MEETING OF WEDNESDAY, JUNE 11, 2014

#### SUBJECT

MACAULAY AND CLOVER POINTS - APPLICATION FOR TRANSITIONAL AUTHORIZATION TO DISCHARGE DELETERIOUS SUBSTANCES UNDER THE FEDERAL WASTEWATER SYSTEMS EFFLUENT REGULATIONS

### **ISSUE**

The Capital Regional District (CRD) is subject to requirements in the new federal Wastewater Systems Effluent Regulations and must apply by June 30, 2014 for a transitional authorization for Macaulay and Clover Point facilities to remain in compliance with the federal wastewater regulatory framework.

### BACKGROUND

The Canadian Council of Ministers of the Environment developed and endorsed a Canada-wide Strategy for the Management of Municipal Wastewater Effluent in February 2009. This strategy provided a framework for managing the effluents from the more than 3,500 wastewater facilities across the country, along with setting effluent quality performance standards to ensure protection of human health and the environment. The standards require final effluent quality from all municipal wastewater systems to be equivalent to secondary treatment, or better, and include limits on the average effluent concentrations of carbonaceous biochemical oxygen demand (CBOD), total suspended solids (TSS), total residual chlorine, and the maximum concentration of un-ionized ammonia. Any facilities with effluent discharges that do not meet the standards would be considered non-compliant (i.e., with discharges of "deleterious substances" under the *Fisheries Act*). Approximately 75% of the facilities are in compliance with the regulations; the regulatory framework is focused on achieving compliance for the remaining 25%.

The federal government released the Wastewater Systems Effluent Regulations on July 18, 2012, which came into effect on January 1, 2013 with requirements for all facilities to monitor their effluent for one year to determine the risk ranking of each discharge. The CRD has fulfilled its monitoring requirements and completed risk rankings for its facilities. The Regulation also addresses the requirement to reduce effects associated with combined sewer overflows (CSOs).

The outfalls at Macaulay and Clover Points currently do not meet the effluent quality performance standards and will be considered to be discharging deleterious substances when this section of the regulation comes into force on January 1, 2015. Under the Regulation, the CRD must submit a request for "transitional authorizations" to continue discharging effluent until treatment is installed and the standards can be met. The applications for these authorizations are due to Environment Canada by June 30, 2014. The applications must include a plan and timeline for meeting the regulatory requirements, and include provisions to address any existing combined sewer overflows. The information must also be factual and known to be true and the federal authorization officer must refuse to issue the transitional authorization if they have reasonable grounds to believe that the information contained in, or provided in support of, the

Core Area Liquid Waste Management Committee – June 11, 2014

Macaulay and Clover Points – Application for Transitional Authorization to Discharge
Deleterious Substances Under the Federal Wastewater Systems Effluent Regulations 2

application is false or misleading in a material respect. The compliance plan may change during the transition period; however the operator must then submit an amended plan as soon as possible.

The Clover Point outfall system includes two CSOs located at the CRD's Humber and Rutland pump stations. The District of Oak Bay is responsible for these CSOs, which result from Oak Bay's municipal system flows. Oak Bay has planned to eliminate the CSO's in 2015, under Amendment No. 8 of the Core Area Liquid Waste Management Plan. The Macaulay Point outfall system does not have any CSOs.

The regulations include deadlines for upgrades that depend upon the effluent flow volume, effluent quality, receiving environment and presence of combined sewer overflow points of each facility. The applications for temporary authorization consider these factors in determining the dates by which facilities must upgrade. Higher risk facilities must be upgraded by December 31, 2020, while the deadlines for medium and low risk facilities are December 31, 2030 and December 31, 2040, respectively.

Based on the relatively high wastewater flow volumes and concentrations of CBOD and TSS in Macaulay and Clover points effluent, these two facilities will be considered higher risk facilities. The temporary authorizations under the regulation will allow the CRD to continue discharging at the current level of treatment from January 1, 2015 until the December 31, 2020 compliance deadline.

### **ALTERNATIVES**

That the Core Area Liquid Waste Management Committee recommend to the Board:

- That staff be directed to complete the request for a transitional authorization, prior to June 30, 2014, based on the existing approved Core Area Liquid Waste Management Plan and indicate in the application that an amendment may be submitted if a revised Core Area Liquid Waste Management Plan is approved.
- That an alternate application be made as directed by the Board.

### **ENVIRONMENTAL IMPLICATIONS**

Federal regulations are designed to protect human health and the environment. The Macaulay and Clover Point outfalls will be out of compliance for discharging municipal wastewaters to the marine environment under the new federal regulations, effective January 1, 2015. The transitional authorization allows the CRD to continue discharging wastewater effluent without fear of non-compliance.

### **ECONOMIC IMPLICATIONS**

There are no direct cost implications of filing the application; however, not applying is not responsible and will imminently subject the operations (e.g., individuals and/or local governments) to heavy fines and penalties under the federal *Fisheries Act* for non-compliance.

Core Area Liquid Waste Management Committee – June 11, 2014

Macaulay and Clover Points – Application for Transitional Authorization to Discharge
Deleterious Substances Under the Federal Wastewater Systems Effluent Regulations 3

### LEGAL IMPLICATIONS

The plan submitted with the request for the transitional authorization must specify the modifications to be made to the wastewater system, including process changes, in addition to a schedule to implement the plan. Staff have no alternative but to file the existing CALWMP consistent with the provincial ministers recent correspondence, which states the CRD is expected to fully comply with its Liquid Waste Management Plan (LWMP). An amendment to the CALWMP is recommended to the committee under a separate report on this agenda to further specify and supplement the information in the approved Plan for the McLoughlin facility.

If the applications for the temporary authorization to discharge are not received by the June 30, 2014 deadline, or if the temporary authorization is not granted by January 1, 2015, the CRD will be considered out of compliance with the *Fisheries Act* as of January 1, 2015. If the CRD does not apply for a transitional authorization by June 30, 2014, there is no explicit mechanism for the federal government to accept an application afterwards. The CRD will also be out of compliance with the *Fisheries Act* if sufficient additional treatment is not in place for Macaulay Point and Clover Point by December 31, 2020.

Under the *Fisheries Act*, any officer, director, or agent of the corporation who directed, authorized, assented to, acquiesced in or participated in the commission of the offence is party to and guilty of the offence and is, therefore, liable on conviction to the punishment provided for the offence, whether or not the corporation has been prosecuted. Escalating penalties include fines of up to \$500,000 and/or imprisonment for a term up to two years per offence under the Fisheries Act. Each day the violation occurs constitutes a separate offence.

### CONCLUSION

Applications for temporary authorization to discharge deleterious substances through the Macaulay and Clover Points outfalls, and address the Humber and Rutland combined sewer overflows, must be made to the federal government to remain in compliance with the requirements of the Wastewater Systems Effluent Regulations under the *Fisheries Act*. These applications are due by June 30, 2014. The installation of secondary treatment that results in significantly better effluent quality must proceed to bring these outfalls into compliance with the regulations by the December 31, 2020 deadline.

### RECOMMENDATION

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

That staff be directed to complete the request for a transitional authorization, prior to June 30, 2014, based on the existing approved Core Area Liquid Waste Management Plan and indicate in the application that an amendment may be submitted if a revised Core Area Liquid Waste Management Plan is approved.

Core Area Liquid Waste Management Committee – June 11, 2014

Macaulay and Clover Points – Application for Transitional Authorization to Discharge
Deleterious Substances Under the Federal Wastewater Systems Effluent Regulations 4

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Senior Manager, Environmental Protection

Larisa Hutcheson, P.Eng.

General Manager

Parks & Environmental Services

Concurrence

Ted Robbins, B.So., C.Tech.

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**Integrated Water Services** 

Concurrence

Robert Lapham, MCIP, RPP Chief Administrative Officer

Concurrence

CL:cam



# REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE MEETING OF WEDNESDAY, JUNE 11, 2014

### <u>SUBJECT</u> IMPLICATIONS OF THE MINISTERS' DECISION ON THE SEATERRA PROGRAM

### **ISSUE**

In response to the Capital Regional District's (CRD) request for intervention by the Province on the impasse between Esquimalt and the CRD in the rezoning of McLoughlin Point, the Minister of Environment and the Minister of Community, Sport and Cultural Development have indicated that the Province will not intervene and restated the requirement for the CRD to comply with its Core Area Liquid Waste Management Plan (CALWMP) and with the federal and provincial regulations for implementation of secondary sewage treatment. The Ministers' letter is attached as Appendix A.

### **BACKGROUND**

Following the Township of Esquimalt's rejection of the CRD's revised rezoning application, the CRD wrote to the Minister of Environment requesting intervention to enable the facility at McLoughlin Point to proceed.

The CRD also requested direction from the Province on how to move forward with the Seaterra Program in the event that the Province was unwilling to suspend the operation of provisions of the existing zoning bylaw.

In response the Ministers' stated that the Province will not attempt to override the zoning decisions of the duly elected Esquimalt Council. The Ministers' further state that the CRD is expected to fully comply with its CALWMP. The Minister has also stated that if the CRD does not meet the implementation timelines, the federal and provincial funding will be at risk. The Ministers did not provide direction to the CRD on how to move forward with the project.

The refusal of the Province to intervene puts the CRD in the position of having the responsibility for implementation of the CALWMP but not the authority to discharge those responsibilities.

The CALWMP Amendment No. 8 approved by the Province in August 2010, includes approval of McLoughlin Point as the location of the wastewater treatment plant and Hartland as the location of the resource recovery centre and required the CRD to comply with the CALWMP by the end of 2016. With the delays in funding approvals, the CRD has requested an extension until the end of 2018 (Amendment No. 9). The funding agreements have been negotiated with consideration of this revised completion date.

Under the *Wastewater Systems Effluent Regulations* (WSER), unless the CRD applies for and obtains a transitional authorization, it would be obliged to comply with the WSER by January 1, 2015. Under the regulation, the CRD has until June 30, 2014, to apply for a transitional authorization to deposit effluent that contains deleterious substances (as defined by the regulation). The application must include 'a plan for modifications to be made to the wastewater system, including a description of the modifications to be made to its processes, so that the effluent deposited via its final discharge point is not acutely lethal and meets the conditions for authorization set out in paragraph 6(1) (a) and (b) (25 mg/L CBOD, 25 mg/L SS) along with a schedule for implementation of the plan.'

Failure to submit a plan would mean that the CRD must comply with the Wastewater Systems Effluent Regulations (WSER) by January 1, 2015, i.e. have secondary sewage treatment in place. If the CRD does not comply, it is subject to prosecution and potentially to fines under the *Fisheries Act*.

Staff has an obligation to recommend the actions that are the ones most likely to enable the Board to comply with Federal and Provincial regulations and to advise the Board of the potential financial implications of not proceeding according to an approved CALWMP. Accordingly, this report recommends a course of action that allows the current funding agreement to be preserved, that follows the approved CALWMP and for the CRD to apply to Federal and Provincial authorities by the June 30, 2014 deadline, with the option to modify the current plan at a later date as necessary.

#### **ALTERNATIVES**

- 1) That the Core Area Liquid Waste Management Committee recommend to the Capital Regional District Board:
  - a. The Capital Regional District respond to the Province's letter of May 27, 2014 as detailed in the closed report on today's agenda.
  - b. The Capital Regional District submit a request for an amendment to the CALWMP including the details of the McLoughlin Sewage Treatment Plant, such that the Minister of Environment has the full information in order to consider the result of the procurement process approved and/or delegated by the Board.
- 2) That the Capital Regional District respond to the Ministers' letter of May 27, 2014 as detailed in the closed report.

#### FINANCIAL IMPLICATIONS

The Esquimalt decision not to rezone the McLoughlin Point property has significant implications for the funding agreements and Program schedule. All four funding agreements will have to be renegotiated (for details refer to the section 'Intergovernmental Implications). Optimistically, even if a new site for a central treatment plant could be selected after public consultation, the necessary environmental assessments completed, the CALWMP amended and approved by the MOE and the site rezoned by June 2015, the current completion dates cannot be met.

As clearly stated by the Minister, the ongoing delays to proceeding with the Program will place the \$501 million senior level funding at risk. If the funding is withdrawn, the implications for a typical household will vary in each jurisdiction based on the results of the CRD's earlier review. The following table provides an estimate only on the range of how the sample annual charges might vary with or without the grant funding. These sample charges are based on the current capital cost estimate of \$788.5 million. The sample charges for the 6 plant distributed option is based on a capital cost of \$1.54 billion and the 12 plant option is based on a capital cost of \$1.85 billion. The table below should be read as follows – if a household was expected to pay \$200 per year under the proposed Seaterra Program they would have to pay \$440 per year if the provincial and federal funding was lost and \$802 or \$950 per year if a one of the two distributed systems were implemented.

Sample Annual C	osts per Household (\$)		
Current Plan (Cer	ntralized System)	Decentralized System Opti	ons Previous Reviewed
with funding	without funding	6 plant system - option 2	12 plant system - option 3
200	440	802	950
250	550	1,002	1,188
300	660	1,203	1,425
350	770	1,403	1,662
400	880	1,604	1,900

The operating and maintenance cost for the current plan irrespective of grant funding remains unchanged. For the distributed system options the operating and maintenance costs would however increase significantly and the relative increase in operating cost is not included in the numbers above.

Suspending or cancelling the current Program has significant consequences and liabilities for the CRD. The exposure of the CRD to potential liabilities is estimated at \$27 million. These are summarized in the closed report to the Committee.

### **INTERGOVERNMENTAL IMPLICATIONS**

A change in location of the treatment plant site from McLoughlin Point will require renegotiations of the funding agreements. The changes that would be required are summarized below:

Funding Agreement		Change Required
PPP Canada	(Resource	Replace references to the McLoughlin WWTP
Recovery Centre)		
		Revise clause - RFP for McLoughlin Wastewater Treatment
		Plant to be issued by November, 2013
		Revise date - Financial Agreement by March 31, 2015
		Update Key Projected Project Milestone dates
		Update Schedule B – Project Costs

Funding Agreement	Change Required
Building Canada Fund -	Replace references to the McLoughlin WWTP and Victoria
McLoughlin Treatment Plant and	Harbour Crossing with new site
Marine Outfall	
	Update dates where applicable:
	- Project Completion Date (January 31, 2019)
	- Duration of Agreement (March 31, 2019)
	- Time limit for claims (January 31, 2019)
	Update Schedule B - Project Components, Timeline and
	Cost Breakdown

Funding Agreement	Change Required
Green Infrastructure Fund -	Update dates where applicable:
Conveyance System Project	- Project Completion Date (January 31, 2019)
	- Duration of Agreement (March 31, 2019)
	- Time limit for claims (January 31, 2019)
	Update Schedule B - Project Scope, Project Components,
	Timeline and Cost Breakdown
Funding Agreement	Change Required
Province of BC	Update Schedule A, if applicable - reference to heat reuse
	in Esquimalt and Victoria
	Update dates where applicable:
-	- Project Completion Date (March 31, 2019)
	- No payment after March 31, 2020

### CONCLUSION

In order to comply with Federal and Provincial regulations and the current funding agreements it is necessary that the CRD follow an approved CALWMP. The Minister has made it clear that the CRD is fully expected to comply with the plan however has not provided any direction to the CRD on how to move forward with the project despite the decision not to attempt to override the zoning decisions of the duly elected Esquimalt Council. This report recommends a course of action that allows the current funding agreements to be preserved and for the CRD to apply to Federal and Provincial authorities by the June 30, 2014 deadline, with the option to modify the current plan at a later date as necessary.

The Federal Wastewater Systems Effluent Regulations (WSER) require the CRD to apply for a transitional authorization by June 30, 2014 and to submit an acceptable plan outlining proposed sewage treatment infrastructure. Failure to submit a plan would make the CRD subject to fines under the Fisheries Act in January 2015.

### **RECOMMENDATIONS**

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

- a. That the Capital Regional District respond to the Ministers' letter of May 27, 2014 as detailed in the closed report on today's agenda.
- b. That the Capital Regional District submit a request for an amendment to the Core Area Liquid Waste Management Plan including the details of the McLoughlin Sewage Treatment Plant such that the Minister of Environment has the full information in order to consider the result of the procurement process approved and/or delegated by the Board.

Albert Sweetnam, P. Eng

Program Director Seaterra Program Ted Robbins, B. Sc. Tech

General Manager, Integrated Water Services

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General Manager Parks Environmental Services

Robert Lapham, MCIP, RPP Chief Administrative Officer

Capital Regional District

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Attachments: 1

Appendix A: Letter from Minister Polak May 27, 2014

### CRD EXICUTIVE CFFICE

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Chair

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Communications

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Corresp. for Board / Committee meeting

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May 27, 2014

Alastair Bryson, Chair and Directors Capital Regional District 625 Fisgard Street PO Box 1000 Victoria BC V8W 2S6

Dear Chair Bryson and Directors:

Further to your letter of April 10, 2014, the Province has considered your request for the Provincial Cabinet to issue an order under Section 37(6) of the *Environmental Management Act* to suspend the operation of those provisions of the existing rezoning bylaw (as amended by Bylaw No. 2806) of the Township of Esquimalt.

After giving careful consideration to your request, the Province will not attempt to override the zoning decisions of the duly elected Esquimalt Council. How locally elected municipal officials in the Capital Region achieve consensus on sewage treatment logistics is not something for the provincial government to dictate. Even if the Province were willing to intervene, the facts at this time do not provide a strong basis for intervention using the provisions of the *Environmental Management Act*.

While we fully appreciate the timelines the Capital Regional District (CRD) is working under to implement secondary sewage treatment in order to comply with the requirements of both the federal and provincial governments, the CRD is expected to fully comply with its Liquid Waste Management Plan (LWMP).

With respect to your request to approve Core Liquid Waste Management Plan Amendment No. 9, that decision will follow in a separate letter that you will be receiving shortly.

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As you continue with your efforts, provincial staff are available to assist the CRD in achieving compliance with its LWMP. In the meantime, please feel free to contact Deputy Minister Wes Shoemaker, at 250 387-5429 or at <a href="Wes.Shoemaker@gov.bc.ca">Wes.Shoemaker@gov.bc.ca</a>, should you have any questions regarding this matter.

Sincerely,

Mary Polak

Minister of Environment

Coralee Oakes

Minister of Community, Sport and Cultural

Development



# REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE MEETING OF WEDNESDAY, JUNE 11, 2014

# SUBJECT ALTERNATIVE APPROACHES TO ADDRESS THE MINISTERS' DECISION ON THE MCLOUGHLIN REZONING

### <u>ISSUE</u>

Alternative approaches to move forward with sewage treatment for the Core Area need to be considered should the Minister of Environment reject any further request to amend the CALWMP to allow the construction of the McLoughlin Treatment Plant.

### **BACKGROUND**

A complementary staff report 'Implications of the Ministers' Decision on the Seaterra Program' included on this agenda recommends that the CRD submit an amendment to the CALWMP to allow the Minister of Environment to have full information and consider the result of the procurement process for McLoughlin Point. Concurrently, alternative approaches have been developed to provide options to move forward with sewage treatment in consideration of Federal and Provincial regulatory obligations.

While the Ministers of Environment and Community Sport and Culture have indicated that the Province will not attempt to override the zoning decisions of the duly elected Esquimalt Council they have also stated that the CRD is expected to fully comply with its Liquid Waste Management Plan (LWMP).

Although it would appear that the major concerns that were raised by the public during the McLoughlin rezoning process have been addressed (Attachment 1), the current situation is that the required zoning for McLoughlin has been rejected by Esquimalt and their council have passed, at first and second readings, bylaws that would prohibit the construction of a waste water treatment plant at McLoughlin.

#### **ALTERNATIVES**

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

- 1. That the Capital Regional District reengages the Province.
- 2. That the Capital Regional District reengages with the Township of Esquimalt.
- 3. That the Capital Regional District recommence a siting process for a centralized wastewater treatment plant site through a municipal/First Nations competition
- 4. That the Capital Regional District concurrently with Alternative No. 3 above and in consultation with the public, conduct a new pricing exercise for a decentralized system.



### **Alternatives for Moving Forward with Sewage Treatment**

### 1. Reengaging the Province (refer to Attachment 2) – Possible approaches

### a. Provincial Project

Given Esquimalt's rejection of the rezoning of the McLoughlin site, the CRD could request, as the Province has given the CRD the responsibility to implement the liquid waste management plan but not the authority, that the Province make the Seaterra Program a provincial Project and take over responsibility for implementation of the Seaterra Program. The CRD would contribute its part of the funding and the Program could then proceed as currently planned without further delay, as the Province could proceed without rezoning the McLoughlin Point property.

#### b. Arbitration

The CRD request the Province to mandate binding arbitration with the Township of Esquimalt in the form of 'final proposal arbitration' which would be far quicker, less costly and more likely to result in the CRD obtaining what it needs to construct the project, as the CRD's presentation would be based upon the negotiated set of agreements and conditions that were close to being acceptable to Esquimalt staff, that are workable and manageable within the context of the CRD's authority and resources; and that are driven by the practical and engineering necessities of the approved site for the WWTP. Given the clear position of the Township of Esquimalt against arbitration this approach is unlikely to be successful.

### c. Empowered Commission

Under this approach the CRD would request the Province to establish an independent Commission with the responsibility and authority to implement sewage treatment for the core area municipalities. The powers delegated to the Commission would be similar to the those given to the Greater Vancouver Regional District under the Greater Vancouver Sewerage and Drainage District Act, specifically 'Section 7 (1) (b) that states the Regional District may acquire, hold, and use any property of any nature whatsoever within or without its area for any of the purposes of its objects;' Given the Province's refusal to exercise its powers under Section 37 of the *Environmental Management Act* it is unlikely to establish such a commission.

# d. Amend the LWMP to Permit Individual Municipalities to Take Responsibility for Sewage Treatment

Currently core area sewage treatment is the responsibility of the CRD under the LWMP. For individual municipalities to take responsibility for sewage treatment the Board would have determine that it is unable or unwilling to proceed pursuant to section 10 of CALW Establishment Bylaw This would require the approval of the

service participants and agreements between the CRD and individual municipalities. Alternatively, a bylaw repealing the liquid waste function could be considered. This would require the consent of two-thirds of the participants (i.e., 5 of the 7 core area participants) and, most importantly, would require the approval of the Inspector of Municipalities. The dissolution of the Liquid Waste Management Service for the core area would only be approved by the Inspector if the Province were completely satisfied that adequate provision had been made to provide for sewage treatment for the various core area municipalities, either acting alone or in concert with one another, and only if the LWMP had first been amended to ensure that the Capital Regional District itself as a corporation was not going to be exposed to any legal vulnerability for failing to comply with the LWMP.

With respect to infrastructure, assuming that optimal use was made of existing infrastructure in order to minimize the cost, eight plants would be required. For example, most of the sewage from Oak Bay is pumped from Currie Road Pump Station, so a plant in Windsor Park would minimize the cost. Using this approach the plants could be located as presented in Table 1:

**Table 1**Possible Wastewater Treatment Plant Locations and Capacity (Average Dry Weather Flow (ADWF))

Municipality	Location	ADWF Capacity (ML/d)
Saanich	Haro Woods	9.2
Saanich	Marigold	23.7
Oak Bay	Windsor Park	6.6
Victoria	Clover Point	38.3
Esquimalt	Town Centre	9.5
View Royal, First Nations	Thetis Cove	4.3
Colwood	Juan de Fuca Rec Centre	4.7
Langford	TBD	14.1

The actual capacity and location of each plant would be determined following detailed engineering analysis and municipal/public consultation. Under current Ministry of Environment (MOE) requirements, each plant would have to have access to a marine outfall as discharge to local creeks is not permitted. More plants could be considered; however, this would entail additional modifications to sewage collection and trunk systems in the form of additional pipelines and pump stations. This approach is not recommended as it has been previously established that this is a much more costly approach that for a centralized system. In addition the zoning requirements for 8 plants would be very difficult to achieve.

e. Update the Liquid Waste Management Plan to incorporate the winning proponent's design

The Seaterra Program implemented a very successful procurement process for the McLoughlin wastewater treatment plant that provided the CRD with a very innovative and economical design that would meet the needs of the CRD to 2065. It is important that the details of this design be incorporated into the LWMP as there is currently only a generic description of the McLoughlin facility in the plan. This would result in more elements of the LWMP being determined and approved. This alternative is specifically addressed in a separate staff report titled "Implications of the Ministers' Decision on the Seaterra Program".

### 2. Reengage with Esquimalt (refer to Attachment 3)

### a. Renegotiate with Esquimalt

The significant increases (\$60 to \$100M) related to moving to a different central site (if one could be found and rezoned) may allow the CRD to consider increasing the amenities offered to Esquimalt. The CRD could also propose a lump sum payment for an amenity and mitigation fund that could be utilized by Esquimalt as they wished. Alternatively, cost sharing could be altered to change the funding formula so as to reduce the cost allocation resulting in the citizens of Esquimalt having to pay a significantly reduced amount for their sewage service. However, given the unanimous and decisive rejection of the CRD's rezoning application and the Council decision to move forward with the process to rescind the zoning bylaw amendment (Bylaw No. 2806) that included sewage treatment as a permitted use and to downzone the property to exclude sewage treatment as a permitted use, it is unlikely that a publically and politically acceptable agreement could be reached with Esquimalt.

### b. Comply with Bylaw No. 2806

By reducing the footprint of the McLoughlin plant and lowering the height of the facility it may be possible to comply with the existing zoning bylaw. It would mean that the treatment process could no longer be a gravity only system and the size of the plant would have to be reduced to comply with the setback and height requirements. The unit cost of construction would be significantly higher given the smaller capacity, greater depth of excavation to comply with the height restrictions, requirement to pump, intrusion into the contaminated soils and the risk of seawater infiltration during construction. It is unlikely that this approach would be acceptable to the Township of Esquimalt as the Esquimalt council has already approved first and second readings to bylaws that prohibit a wastewater treatment plant from being constructed at McLoughlin Point.

### c. Comply with the Agreement Reached with Esquimalt in October 2013

With a mandate from Esquimalt Council, Esquimalt staff and CRD staff, with Ministry of Community Sports and Cultural Development staff as observers, negotiated agreements that Esquimalt staff were prepared to support to Council. The CALWMC directed CRD staff to reject and renegotiate. Esquimalt staff made it clear that they had no mandate to renegotiate and would not necessarily support changes to Council. Complying with the October agreements would require redesign of the plant and would increase the construction costs because the plant would have to be lowered increasing excavation costs. Encroachment into the 7.5 m setback zone would be eliminated. Given the passage of time and ensuing events, it is unlikely that an acceptable agreement could be reached with Esquimalt.

### d. Comply with Proposed Bylaws No. 2829 and No. 2830

Following the denial of the CRD's amended rezoning application Esquimalt initiated the process to amend its OCP and the existing zoning which if approved would make it impossible to construct the wastewater treatment plant at McLoughlin Point. Compliance with these bylaws would make it impossible to build a wastewater treatment plant at McLoughlin Point.

### 3. New Site(s) (refer to Attachment 3)

### a. Municipalities to Identify Potential Sites

While as part of the planning process the CRD undertook an exhaustive search for possible sites for sewage treatment facilities there may be sites that were not offered up at that time but could now be an option, for example, municipally owned property. In order to expedite the search for alternative sites for a central facility, the CRD could conduct a 'competition' among the participating and non-participating municipalities and First Nations requesting that they identify potential sites and indicate the amenity package that would be acceptable to their council if the CRD selects their site. The sites could be privately or municipally owned property such as parks, golf courses, recreation facilities etc. The sites proposed would be evaluated based on costs of additional conveyance infrastructure and proposed amenity packages. The selected site would then be rezoned and used for developing a revised LWMP and implementation strategy.

### b. Distributed Treatment Systems

Opponents of a centralized treatment system have advocated that a decentralized, tertiary treatment system with multiple plants could be constructed at significantly less cost than the current plan despite the loss of the economies of scale with smaller plants. The CRD had a previous consultant prepare a cost estimate for multiple plant systems which concluded that as the number of plants increased so

did capital and operating costs. While no verifiable information has been presented to substantiate the claim of a lower cost distributed treatment system, and in order to finally resolve this issue to the satisfaction of the public, the CRD could, in consultation with the public, prepare terms of reference for a study to estimate the cost of tertiary treatment plants and fund the three (or the winning) international consortia selected to prepare proposals for the McLoughlin plant to estimate the cost of a small (~ 3 ML/d) medium (~ 14 ML/d) and large (~30 ML/d) sized tertiary treatment plant. Specific site conditions would not be considered, however, the requirement for an outfall or enhanced nutrient removal to potentially allow discharge to fresh water bodies, would need to be addressed. As land application is not permitted by the CRD, options for residual solids disposal would also be included in the scope of work. This study could be conducted in parallel to the siting exercise for a centralized plant with no commitment being made to a centralized solution before the results of this pricing exercise were known. Without a parallel process the 2020 deadline could not be met.

With a distributed, tertiary treatment system each treatment plant would require facilities for collecting and transporting screenings from the raw sewage, and which may include truck tanker loading facilities to transport residual solids to a central processing/treatment facility.

### **FINANCIAL IMPLICATIONS**

The Esquimalt decision not to rezone the McLoughlin Point property has significant implications for the Seaterra Program budget and schedule. The extent of the financial implications cannot be determined until the CRD Board decides on the path forward and until the chosen path forward is developed, finalized and priced. The bid validity for the winning proposal for the McLoughlin plant expires on July 26, 2014. It may be possible to negotiate an extension, but if possible it would be measured in weeks not months as the pricing provided was very competitive.

### CONCLUSION

It is unlikely that reengaging with Esquimalt will result in allowing the CRD to proceed with the current plan at McLoughlin Point (Attachment 3). If this is agreed as the likely outcome, then the viable options open to the CRD are to reengage the Province and look for a new site for a central treatment plant while concurrently conducting a pricing exercise for a decentralized system to finally resolve the issue of which is the lower cost option, centralized or decentralized (Attachment 2 and 4). This is the recommended approach unless it is believed that the Township of Esquimalt will change their present position.

In order to comply with federal and provincial regulations and the current funding agreements it is necessary that the CRD follow the approved LWMP. The Minister has made it clear that the CRD is fully expected to comply with this plan however has not provided any direction to the CRD on how to move forward with the project despite the decision to not intercede to override the zoning decisions of the duly elected Esquimalt Council.

Given the Minister's comment on the potential loss of funding if the timelines are not met, it should be noted that the centralized plan option with a new site (Attachment 4) pushes the Program completion to December 2020. The decentralized option would further elongate the schedule to 2023 and therefore invalidating the funding agreement. The option of the municipalities going on their own also would invalidate the funding agreement. Any change to the current plan will also require an amendment to the LWMP that needs to be approved by the Minister after public consultation.

### RECOMMENDATIONS

The recommendations associated with reengaging the Province are provided as part of a separate staff report titled "Implications of the Ministers' Decision on the Seaterra Program". The recommendations associated with the alternatives in this report are presented below.

The Core Area Liquid Waste Management Committee recommend to the Capital Regional District Board that:

- 1. The Capital Regional District recommences a siting process for a centralized wastewater treatment plant site through a municipal/First Nations competition.
- 2. The Capital Regional District concurrently with recommendation No. 1 above and in consultation with the public, conduct a new pricing exercise for a decentralized system.

Albert Sweetnam, P.Eng

Program Director Seaterra Program Ted Robbins, B.Sc. CTech

General Manager, Integrated Water Services

Larisa Hutcheson, P.Eng

General Manager,

Parks & Environmental Services

Robert Lapham, MCIP, RPP Chief Administrative Officer

Capital Regional District

AS:hr

Attachments: 4

### Reasons for Rejection of Revised Rezoning Application for McLoughlin Point

During the public hearing process for the revised rezoning application for McLoughlin Point site, the public presented to Council a number of grounds for rejection of the application. These were taken into consideration in Esquimalt Council's rejection of the application. The main concerns expressed were addressed as detailed below:

### Plant Aesthetics

Because of the competitive design-build procurement process the Seaterra Program (the Program) was unable to make public the architectural designs as part of the public hearing process. The public perception was that the plant would be an eyesore at the entrance to the harbour. This was a consideration despite the Esquimalt's Design Review Committee's opinion that the designs met the intent of the design guidelines. The winning design shows a building with a glass front, a green roof, public walkway and 'an airy feeling that would stand up well alongside any other building in the harbour'. Given the response to the design since its release, the public fears about an 'eyesore' at the harbour entrance would appear to be unfounded.

### Outdated Technology

Many members of the public commented that secondary treatment was outdated technology and that tertiary treatment with membrane technology was the latest technology and should be employed to address concerns with antibiotic resistant bacteria and substances of emerging concern (discussed in the next section). Secondary and tertiary treatment are standards of treatment, not technologies. Membrane technology was developed in the early 1990's and over the years has been improved and membrane costs have come down, but represent less than 10% of the cost of a membrane treatment plant. The indicative design for McLoughlin Point was based on biological aerated filter (BAF) technology also developed in the early 1990's. This too has undergone refinements and performance improvements since initial development. Throughout the competitive procurement process, the preferred proponent has used innovation and state of the art technology to design a facility that will produce an effluent that will be better than the regulatory standard that the CRD must meet. The public concerns about outdated technology are unfounded.

### Substances of Emerging Concern and Antibiotic Resistant Bacteria

Tertiary treatment using membrane technology was promoted as necessary to address substances of emerging concern (SOEC) and antibiotic resistant bacteria 'superbugs'. While tertiary treatment using membrane bioreactor (MBR) technology will produce an effluent with lower SOEC's it will not be significantly lower than with BAF secondary technology. MBR technology will not address the concerns expressed at the public hearings. While MBR technology will reduce the level of 'superbugs' in the effluent it will not entirely eliminate them. Studies have shown that even with well-run tertiary treatment plants, occurrence of superbugs downstream of outfalls is greater than upstream. With MBR technology the superbugs are not destroyed but end up in the residual solids and are only destroyed as part of the subsequent treatment of the residual solids. With the inclusion of advance oxidation (ozone and hydrogen peroxide) in the plant design, as recently approved by the CRD Board, the treatment process will provide a higher level of destruction of substances of emerging concern and 'superbugs'

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than tertiary treatment using membrane technology. The winning design addresses the concerns raised by the public.

### McLoughlin Point Site Too Small

Many commented that the McLoughlin Point site was too small to accommodate the wastewater treatment plant. The capacity of the plant design (124 ML/d) by the winning proponent will provide capacity until 2065, deferring the need for a \$150 million treatment plant on the Westshore for decades. While a treatment facility at Macaulay/McLoughlin Points was identified early in the planning process, the CRD did conduct an exhaustive search for alternative sites. All possible sites away from the Macaulay/McLoughlin area involved significant additional costs for conveyance of sewage to the alternative location. As the CRD was focused on the least cost to the local taxpayers and senior government funding partners, McLoughlin Point was confirmed as the site for the central treatment facility. As the planning process proceeded the capacity at McLoughlin Point increased from 84 ML/d to 91 Ml/d under Amendment No. 7 and to 107.8 ML/d under Amendment No. 8.

### Cost Over-runs

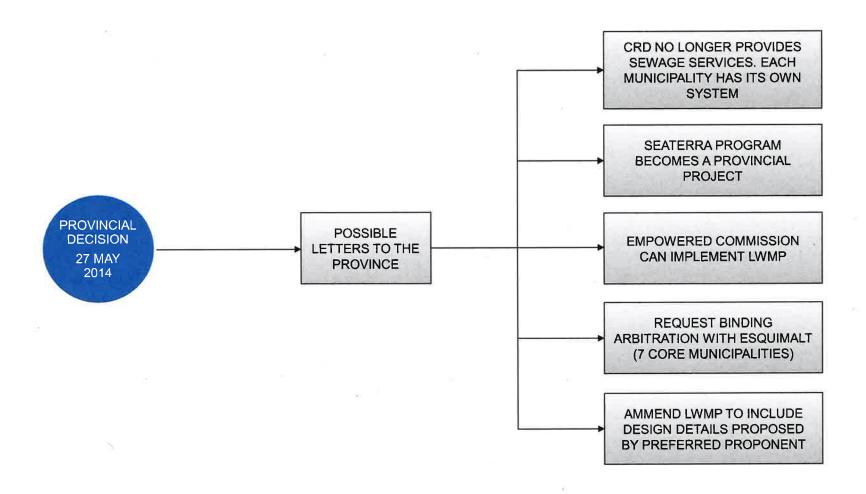
Many expressed the opinion that projects of this nature typically exceeded allocated budgets. As the senior government grants are fixed, local taxpayers are responsible for all cost over-runs. The first construction contract tendered, Craigflower Pump Station, came in under budget and the financial proposal by the winning proponent for the McLoughlin Plant, at \$179M for a 124 ML/d plant is below the established affordability ceiling for the treatment plant, in other words, below budget. The overall Program continues to be within the approved budget which was prepared in 2010.

### Tsunami Protection

Concerns were expressed that the CRD was improperly using the tsunami report prepared by AECOM for establishing the elevation of the tsunami wall at the McLoughlin plant. This was despite the fact that the terms of reference were amended to include higher resolution analysis at McLoughlin Point and that Bylaw No. 2804 Section 4(2) (c) (x) requires 'Any proposed buildings or structures must incorporate the findings of the "Modelling of Potential Tsunami Inundation Limits and Run-up' for the Capital Regional District's Local Government Emergency Program Advisory Commission. In order to dispel these fears the CRD commissioned and paid for an independent expert to conduct a review of the previous report. The use of 6.1 m as the height of the tsunami wall was confirmed to be appropriate and conservative.

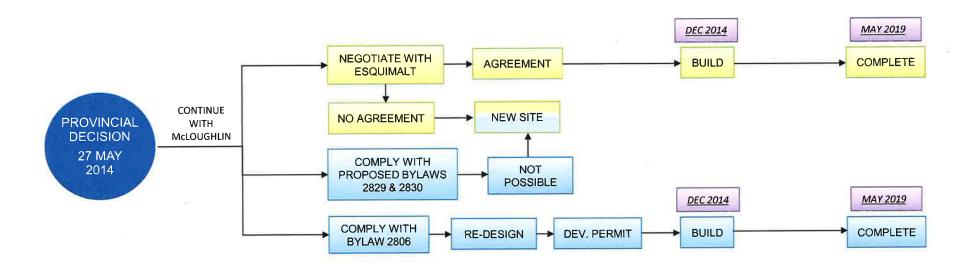
# CALWMP Decision Tree Path 2 June 11, 2014

# 2 – Re-engage Province



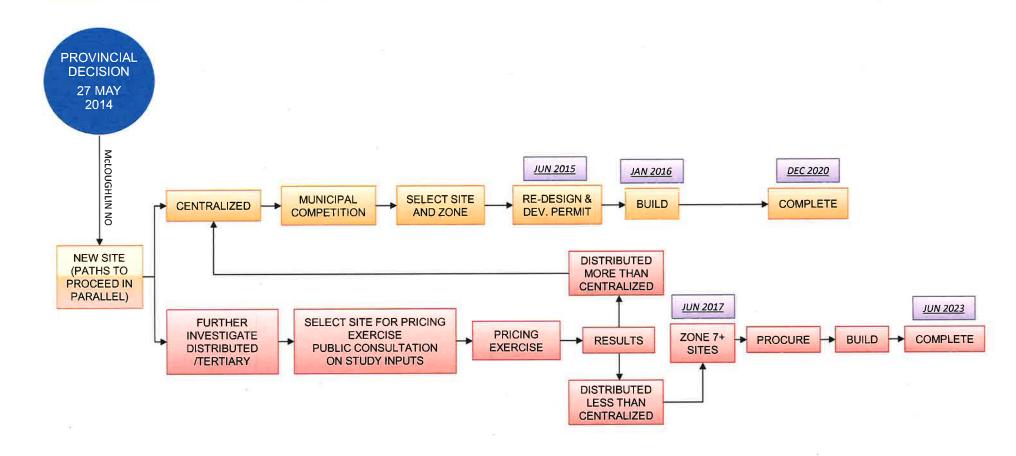
# CALWMP Decision Tree Path 3 June 11, 2014

# 3 – Re-engage Township of Esquimalt



# CALWMP Decision Tree Path 4 June 11, 2014

# 4 - Find an Alternate Site





# REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE MEETING OF WEDNESDAY, JUNE 11, 2014

#### SUBJECT SEATERRA PR

### SEATERRA PROGRAM AND BUDGET UPDATE No.12

### **ISSUE**

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

### BACKGROUND

Attached is a monthly financial update for the Seaterra Program (Schedule A) year-to-date for April 2014. The 2014 Seaterra Financial Plan (Schedule B) is also attached for Committee information. The report reflects actuals and commitments to the end of April 30, 2014. Also attached is the Seaterra monthly program progress report No. 12.

#### **ALTERNATIVES**

- 1. That the Core Area Liquid Waste Management Committee receive this report for information.
- 2. That the Core Area Liquid Waste Management Committee request additional financial information.

#### FINANCIAL IMPLICATIONS

The 2014 program expenditures are within the approved 2014 Financial Plan. This report is current as at April 30, 2014 and does not reflect any new developments including the recent decision by the Province relating to the rezoning of the McLoughlin site.

#### CONCLUSION

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

### RECOMMENDATION

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

That the Seaterra Program and Budget Update be received for information.

Rajat Sharma, MBA, CMA

Senior Manager, Financial Services

Diana E. Lokken, CPA, CMA

General Manager, Finance and Technology Dept.

Robert Lapham, MCIP, RPP Chief Administrative Officer

Concurrence

Attachments: Schedu

Schedule A – 2014 Program Summary Report

Schedule B – Program Financial Plan Program Monthly Progress Report No. 12

### 2014 Program Summary Report Year to Date 30-April-2014

	2014 Budget	Year to Date Actuals	Commitments Unpaid (CU)	Total YTD Actuals + CU	Forecast Actuals 2014	Variance Budget - Forecast	Projected CU Dec 31 2014	
WASTEWATER TREATMENT - MCLOUGHLIN	14,166,000	519,706	1,717,798	2,237,504	14,166,000	0	200,000,000	
CONVEYANCING PIPES AND PUMPSTATIONS	19,875,000	1,391,520	9,585,016	10,976,536	19,875,000	0	41,000,000	
RESOURCE RECOVERY CENTRE	4,734,000	1,105,152	3,424,484	4,529,636	4,734,000	0	2,000,000	
COMMON COSTS	8,302,000	1,306,758	5,023,311	6,330,069	8,302,000	0	1,100,000	
INTERIM FINANCING	435,000	0	0	0	435,000	0	0	
PROGRAM CONTINGENCY	6,399,000	0	0	0	6,399,000	0	0	
TOTAL	53,911,000	4,323,136	19,750,609	24,073,745	53,911,000	0	244,100,000	

Seaterra
Program Management Expenditure Report
Year to Date 30-April-2014

	2014 Budget	Year to Date Actuals	Budget Remaining	Commitments (Note 1)
CAPITALIZED COSTS			8	
Salaries and Wages	2,305,000	535,179	1,769,821	
Consultants	4,261,000	532,226	3,728,775	4,767,612
Allocations - Finance	34,000	11,333	22,667	
Allocations - IT	57,000	18,810	38,190	
Allocations - Human Resources	57,000	7,333	49,667	
Allocations - Other (OutReach, Admin)	42,000	12,590	29,410	
Rentals and Leases	372,000	77,968	294,032	173,891
Operating - Other Costs	829,000	47,837	781,163	81,804
TOTAL	7,957,000	1,243,276	6,713,724	5,023,307

Note 1: Includes multi year commitments

# Seaterra Commission Expenditure Report Year to Date 30-April-2014

	2014 Budget	Year to Date Actuals	Budget Remaining	Commitments
CAPITALIZED COSTS				
Honoraria	243,000	39,375	203,625	0
Travel	40,000	1,768	38,232	0
Operating - Other Costs	62,000	21,979	40,021	0
			( <u>)</u>	
TOTAL	345,000	63,122	281,878	0

# Seaterra Program Financial Plan

	Estimated Costs to Date Dec 2013	2014	2015	2016	2017	2018	Total
WASTEWATER TREATMENT - MCLOUGHLIN	9,612,000	14,166,000	72,460,000	141,844,000	39,926,000	553,000	278,561,000
CONVEYANCING PIPES & PUMP STATIONS	6,264,000	19,875,000	53,672,000	39,907,000	6,962,000	106,000	126,786,000
RESOURCE RECOVERY CENTRE	3,233,000	4,734,000	31,388,000	166,958,000	48,072,000	291,000	254,676,000
COMMON COSTS	4,786,000	8,302,000	9,460,000	9,593,000	11,234,000	6,962,000	50,337,000
INTERIM FINANCING	37,000	435,000	2,211,000	7,116,000	14,906,000	6,696,000	31,401,000
PROGRAM CONTINGENCY	0	6,399,000	9,560,000	19,944,000	4,922,000	100,000	40,925,000
TOTAL	23,932,000	53,911,000	178,751,000	385,362,000	126,022,000	14,708,000	782,686,000
SOURCES OF FUNDING							
Government of Canada	0	35,492,000	72,808,000	61,700,000	0	74,600,000	244,600,000
Province of BC	0	0	0	0	0	248,000,000	248,000,000
CRD debt	1,932,000	6,965,000	52,633,000	183,426,000	101,021,000	(277,891,000)	68,086,000
Proponent financing	0	1,454,000	38,310,000	120,236,000	0	(60,000,000)	100,000,000
Requisition	5,000,000	10,000,000	15,000,000	20,000,000	25,000,000	30,000,000	105,000,000
CRD Capital	17,000,000	0	0	0	0	0	17,000,000
	23,932,000	53,911,000	178,751,000	385,362,000	126,021,000	14,709,000	782,686,000

Note 1: Actual proponent financing will be determined at contract finalization

Note 2: The budget for 2014 does not include contract amounts committed in 2014 which will be paid in 2015-2018

Note 3: Costs to date reflect Seaterra implementation costs. Costs to date do not include CAWTP Program planning costs from 2006-2013.

Note 4: The PPP Canada grant is less than the maximum funding level of \$83,400,000 by \$8,800,000. Assumes \$35,000,000 of risk costs will not be incurred.



April 30, 2014
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.

### **Table of Contents**

### Program Matrix – Summary Major Program Components Progress Map

### 1.0 Executive Summary

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

### 2.0 Activities - McLoughlin Point Wastewater Treatment Plant

- 2.1 Design/Engineering Status
- 2.2 Procurement Status
- 2.3 Construction Status
- 2.4 Status of Approvals
- 2.5 Major Commitments This Period
- 2.6 Schedule
- 2.7 Significant Issues/Decisions Pending

### 3.0 Activities – Resource Recovery Centre

- 3.1 Design/Engineering Status
- 3.2 Procurement Status
- 3.3 Status of Approvals
- 3.4 Major Commitments This Period
- 3.5 Schedule
- 3.6 Significant Issues/Decisions Pending

### 4.0 Activities - Macaulay Pump Station

4.1 Design/Engineering Status

### 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

- 6.1 Design/Engineering Status
- 6.2 Procurement Status
- 6.3 Status of Approvals
- 6.4 Major Commitments This Period
- 6.5 Schedule
- 6.6 Significant Issues/Decisions Pending

### 7.0 Activities - Currie Pump Station

### 7.1 Design/Engineering Status

#### 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

- 9.1 Design/Engineering Status
- 9.2 Procurement Status
- 9.3 Status of Approvals
- 9.4 Major Commitments This Period
- 9.5 Schedule
- 9.5 Significant Issues/Decisions Pending

#### 10.0 Activities - Currie Forcemain

10.1 Design/Engineering Status

### 11.0 Activities - ECI/Trent Twinning

11.1 Design/Engineering Status

### 12.0 Activities - Macaulay Forcemain

12.1 Design/Engineering Status

### 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 Planning/Design/Engineering
- 13.6 Environmental
- 13.7 Safety

#### 14.0 Communications

14.1 Communications Activities

### 15.0 Environmental

15.1 Environmental Activities

### 16.0 Program Financing

- 16.1 Federal Agreement Management Committee16.2 Intergovernmental Coordination Committee16.3 Status of Funding Received

Monthly Program Cost Report Appendix A Program Schedule Extracts Appendix B

# **Overall Program**

Key

Issues:

schedule.



oril	2014 Project Status		
	SAFETY	Financial Summary	(\$M)
•	■No Lost Time Incidents in the previous 3 months.	Financial Summary	(ΨΙ <b>ν</b> Ι)
	COST	Budget	782.6
	■Program on budget - <20% Program Contingency Committed.	- Commitment To Date	48.7
	SCHEDULE	- Forecast at Completion	782.6
	Procurement of McLoughlin DBF Contract delayed by 3.5 months.	Variance	
)	<ul> <li>Uncertainty on approval of Esquimalt bylaw continues to threaten the Program schedule</li> </ul>	Schedule Key Dates	Target
	QUALITY	McLoughlin Pt, Outfall, Harbou	ır Crossing
	■No critical NCR's recorded.	DBF Awarded	Q2 2014
	ENVIRONMENT	Construction Complete	Q4 2017
9	<ul> <li>No incidents or breach in regulatory compliance recorded.</li> </ul>	Commissioning Complete	Q2 2018
	RISK		_
	<ul> <li>Mitigation strategies in place for most high probability high impact risks.</li> </ul>	Resource Recovery Centre & F	ripeline
	<ul> <li>Uncertainty on approval of Esquimalt bylaw continues to threaten the Program</li> </ul>	DBFO Awarded	Q1 2015
	schedule.	Construction Complete	Q4 2017
	COMMUNITY	Commissioning Complete	Q4 2018
	<ul><li>Public &amp; Municipal engagement ongoing.</li></ul>	Conveyance Pump & Pipeline	
	• Uncertainty on approval of Esquimalt bylaw continues to threaten the Program	Macaulay PS DB Awarded	Q4 2015



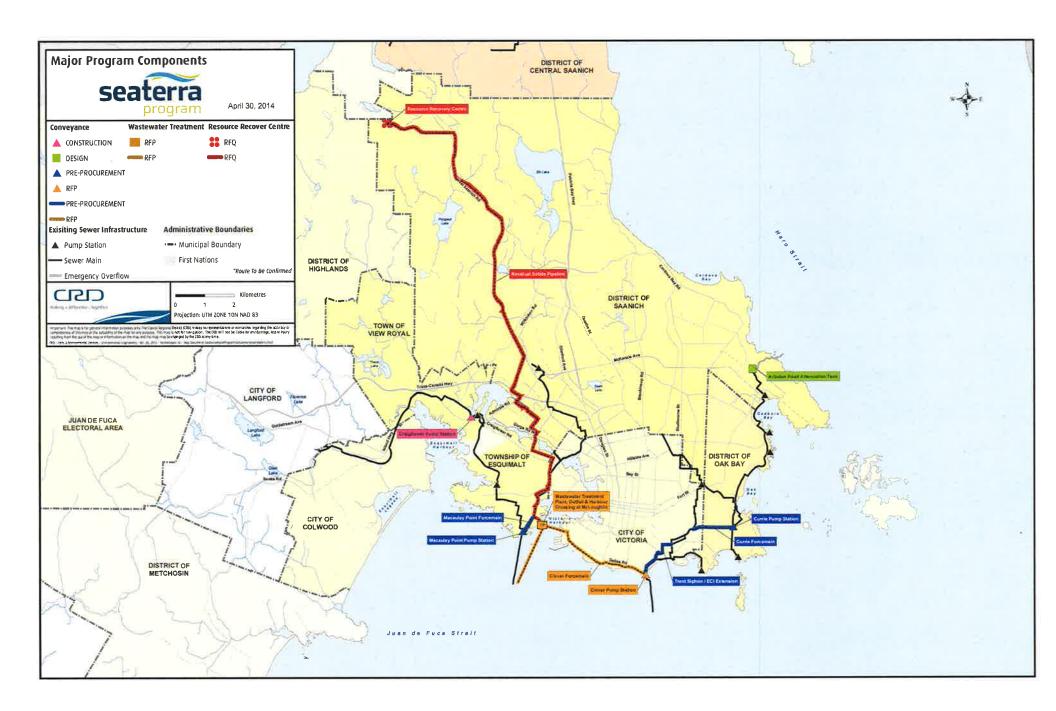
Uncertainty on approval of Esquimalt bylaw continues to threaten the Program

Q2 2014

Q3 2017

Clover PS DB Awarded

All Conveyance Complete



### 1. Executive Summary

### 1.1 Seaterra Program

- 1.1.1 Costs this period are \$1,548,936 for a total cost to date of \$28,921,751 which is trending within budget and the projected Seaterra Program (Program) cash flows.
- 1.1.2 Commitments this period are \$459,911 for a total commitment to date of \$48,672,360 (approximately 6.2% of the Program budget).
- 1.1.3 Work is proceeding in accordance with the Program Schedule for completion in 2018. Construction and commissioning of the McLoughlin Point Wastewater Treatment Plant (WWTP) and the Resource Recovery Centre (RRC) continues to drive the Program critical path.
- 1.1.4 Evaluation of all of the McLoughlin Design-Build-Finance (DBF) proponent's technical submissions and financial proposals was completed and a staff report with a recommendation for a preferred proponent was prepared for the Commission for their consideration at the May 2, 2014 Commission meeting.
- 1.1.5 Throughout April 2014 the Clover Pump Station DB Proponents requested updates and information through the Request for Information (RFI) Process. Approximately 65 RFI's have been received and closed.
- 1.1.6 Evaluation of all of the Request for Qualifications (RFQ) submissions for Clover Forcemain (Conveyance Pipe) Design Consulting Services was completed and the Request for Proposals (RFP) issued to a shortlist of 3 preferred proponents. The RFP is scheduled to close May 16, 2014.
- 1.1.7 Construction related activities continued on the Craigflower Pump Station project. The foundation slab and pump room floor were completed and forming of the pump station walls commenced.
- 1.1.8 Design continued on the Arbutus Road Attenuation Tank.
- 1.1.9 Public Open Houses were held in Esquimalt and Saanich (Prospect Lake) to receive input on the selected alignment and pump station locations for the Residual Solids Conveyance Pipe.
- 1.1.10 Evaluation of the submissions for the RFP for the Residual Solids Conveyance Pipe Geotechnical Investigation Services was completed. Ryzuk Geotechnical was selected as the preferred proponent and will be awarded a contract for the services.
- 1.1.11 The RFP for Residual Solids Conveyance Pipe Surveying Services closed on April 17, 2014. Evaluation of the submissions was completed. Focus Corporation (Section 1) and Kerr Wood Leidal Associates (Sections 2 and 3) were selected as the preferred proponents and will be awarded contracts for the services.

- 1.1.12 Evaluation of the submissions received from 6 proponents for RFQ-300 for the RRC Design- Build-Finance-Operate (DBFO) was completed in April. A staff report was prepared for presentation to the Commission at their May 2, 2014 meeting recommending a shortlist of proponents.
- 1.1.13 The Biosolids Disposal Services RFP closed April 28, 2014. Submissions were received from 4 proponents for evaluation.

### Major Issues:

#### CRD:

- At its meeting of April 7, 2014 the Township of Esquimalt unanimously voted against CRD's request for an amendment to the zoning bylaw for McLoughlin Point (Bylaw No. 2805).
- On April 9, 2014 the CRD Board approved submitting a request to the Minister of Environment to set aside the Township of Esquimalt's rejection of the CRD's rezoning application.
- Liquid Waste Management Plan (LWMP) Amendment No. 9 approved by the CRD Board and forwarded to Ministry of Environment (MOE) for approval is pending approval by the Minister.
- Clover Pump Station zoning approvals.
- Relocation of rock/gravel stockpile from the proposed site of the Resource Recovery Centre at Hartland.

#### Commission/PMO:

None to report this period.

Major Activities Planned - Next Period:

## CRD:

- Follow up with the Minister of Environment on CRD's request for intervention in the dispute with the Township of Esquimalt for rezoning of the McLoughlin Point site
- Continue with zoning approval process for the Clover Pump Station.

#### Commission/PMO:

None to report this period.

# 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 Esquimalt Council, at its meeting of April 7, 2014, unanimously voted against CRD's request for an amendment to the zoning bylaw for McLoughlin Point (Bylaw No. 2805).

# 2. Activities – McLoughlin Point Wastewater Treatment Plant Project

## 2.1 Design/Engineering Status

- 2.1.1 PMO provided review comments to Proponents for technical design submissions and evaluation model.
- 2.1.2 Regular design development meetings continued this month with the PMO and BC Hydro for the temporary and permanent power for the McLoughlin point site.

#### 2.2 Procurement Status

2.2.1 Evaluation of all of the McLoughlin Design-Build-Finance (DBF) proponent's technical submissions and financial proposals was completed and a staff report with a recommendation for a preferred proponent was prepared for the Commission for their consideration at the May 2, 2014 Commission meeting.

#### 2.3 Construction Status

2.3.1 Construction is anticipated to begin in 2014.

# 2.4 Status of 3<sup>rd</sup> Party Approvals

- 2.4.1 McLoughlin Point siting approvals Esquimalt Council rejected the revised zoning bylaw at its meeting on April 7, 2014.
- 2.4.2 Agreements with the Greater Victoria Harbour Authority (GVHA) for the utility rights-of-way and a working easement at Ogden Point were completed in April 2014.
- 2.4.3 An Environmental Approval in Principle (AIP) was prepared and submitted for the McLoughlin Point site in March 2014. It was successfully screened by CSAP and transferred to the MOE for final release in March 2014. Comments from MOE were received in April 2014 and are being reviewed.

## 2.5 Major Commitments This Period

2.5.1 \$101,417 - BC Hydro - Construction Charges (payable in advance) for McLoughlin WWTP temporary power, upstream improvements and power line upgrades on Victoria View Rd.

## 2.6 Schedule

2.6.1 The DBF procurement process is two months behind schedule. Any further delays will impact the critical path and extend the completion date of the Program.

## 2.7 Significant Issues/Decisions Pending

2.7.1 Municipal approvals for the McLoughlin Point site rezoning.

#### 3 Activities – Resource Recovery Centre (RRC)

## 3.1 Design/Engineering Status

- 3.1.1 The RFP document and performance based technical specifications have been completed. The location of the RRC plant on the Hartland site has been finalized with the CRD. CRD will provide all landfill gas for use in the RRC. CRD will discharge landfill leachate into the new centrate return line.
- 3.1.2 Following alignment assessments for the Residual Solids Conveyance Pipe and Pump Station locations in collaboration with the respective impacted municipalities an optimal routing was selected. Public Open Houses were held in Esquimalt and Saanich (Prospect Lake) to present information to the communities and to receive input on the selected alignment and pump station locations.
- 3.1.3 A geotechnical investigation of the proposed RRC plant site located at Hartland was completed.

#### 3.2 Procurement Status

- 3.2.1 Evaluation of the 6 responses received for the RRC DBFO RFQ was completed. A staff report was prepared for presentation to the Commission at their May 2, 2014 meeting with a recommended shortlist of proponents.
- 3.2.2 The Biosolids Disposal Services RFP closed April 28, 2014. Submissions were received from 4 proponents for evaluation.
- 3.2.3 Evaluation of the proposals received in response to the RFP for Residual Solids Conveyance Pipe Geotechnical Investigation Services was completed. Ryzuk Geotechnical was selected as the preferred proponent and will be awarded a contract for the services.
- 3.2.4 RFP for Residual Solids Conveyance Pipe Surveying Services closed April 17, 2014. Evaluation of the proposals received in response to the RFP was completed. Focus Corporation (Section 1) and Kerr Wood Leidal Associates (Sections 2 and 3) were selected as preferred proponents and will be awarded contracts for the services.

# 3.3 Status of 3<sup>rd</sup> Party Approvals

3.3.1 After announcement of the conveyance pipe alignment and pump station siting options, public Open Houses were held during April in Esquimalt and Saanich (Prospect Lake) to present information to the communities and to receive input on the alignment and pump station locations.

- 3.3.2 An Environmental Impact Study (EIS), geotechnical investigation, and surveying of the alignment from McLoughlin Point to the RRC at Hartland will commence in May 2014.
- 3.3.3 A Power Utility Service Application has been submitted and planning for service extension to the Hartland RRC site continues with BC Hydro.

# 3.4 Major Commitments This Period

3.4.1 None.

#### 3.5 Schedule

3.5.1 The project is proceeding on schedule in general accordance with the detailed schedule included in Appendix B

# 3.6 Significant Issues/Decisions Pending

## CRD:

- LWMP Amendment No. 9 approved by the CRD Board and forwarded to MOE for approval is pending approval by the Minister.
- RRC plant location within the North Hartland site and status of the gravel stockpile was confirmed.
- Confirm water servicing at Hartland
- Use of landfill gas at Hartland for the RRC was confirmed.
- Leachate discharge into the new centrate return line was confirmed.
- Complete EIS for RRC plant and Residual Solids Pipeline.

#### Commission/PMO:

None to report this period.

#### 4. Activities – Macaulay Pump Station

## 4.1 Design/Engineering Status

4.1.1 Development of technical specification will commence Q4 2014.

#### 5. Activities – Craigflower Pump Station

#### 5.1 Construction Status

5.1.1 Foundation slab and pump room floor complete. Forming of pump station walls commenced. Pumps will be arriving shortly and will be stored onsite until installed.

#### 5.2 Schedule

5.2.1 The completion date for the project has been adjusted and is now scheduled to be complete by the end of October 2014, with no impact to the Program critical path.

#### 5.3 Significant Issues/Decisions Pending

5.3.1 None to report this period.

# 6. Activities - Clover Pump Station

## 6.1 Design/Engineering Status

6.1.1 The Project Agreement and all supporting technical reports and schedules for the RFP were completed.

#### 6.2 Procurement Status

6.2.1 Throughout the month all of the Clover Pump Station DB Proponents requested updates and information through the Request for Information (RFI) Process. Approximately 65 RFI's have been received to date and closed. The RFP closes on June 4, 2014.

# 6.3 Status of 3<sup>rd</sup> Party Approvals

6.3.1 A rezoning application for Clover Point Pump Station has been submitted to the City of Victoria. The application was tabled by City Council on April 10, 2014. A staff report has been prepared to revisit this issue and receive 1<sup>st</sup> and 2<sup>nd</sup> reading on May 8, 2014.

## 6.4 Major Commitments This Period

6.4.1 No major commitments this period.

#### 6.5 Schedule

6.5.1 The project is proceeding on schedule in general accordance with the detailed schedule included in Appendix B.

#### 6.6 Significant Issues/Decisions Pending

6.6.1 None to report this period.

## 7. Activities - Currie Pump Station

# 7.1 Design/Engineering Status

7.1.1 Design is scheduled to commence Q3 2015.

## 8. Activities – Arbutus Road Attenuation Tank

## 8.1 Design/Engineering Status

8.1.1 Design Meeting No. 4 was held on April 11, 2014. KWL is preparing the 50% design report. An open house, to present design information, is being planned for early June 2014.

#### 8.2 Procurement Status

8.2.1 An RFQ, to prequalify contractors, is being prepared and will be issued in May 2014.

# 8.3 Status of 3<sup>rd</sup> 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 is pending approval by the Ministry of Environment.

# 8.4 Major Commitments This Period

8.4.1 No major commitments this period.

#### 8.5 Schedule

8.5.1 The project is proceeding on schedule in general accordance with the detailed schedule included in Appendix B.

# 8.6 Significant Issues/Decisions Pending

8.6.1 None to report this period.

#### 9. Activities - Clover Forcemain

## 9.1 Design/Engineering Status

9.1.1 Design is scheduled to commence in Q2 2014.

## 9.2 Procurement Status

9.2.1 Evaluation of all of the RFQ submissions for Clover Forcemain (Conveyance Pipe) Design Consulting Services was completed and the RFP was issued to a shortlist of 3 preferred proponents. The RFP is scheduled to close on May 16, 2014.

# 9.3 Status of 3<sup>rd</sup> Party Approvals

- 9.3.1 A License Agreement for Clover Forcemain has been submitted to the City of Victoria.
- 9.3.2 Collaboration with the City of Victoria and First Nations is ongoing for the establishment of a reburial site at Beacon Hill Park, should historical remains be discovered during the work on this project and require reburial.

# 9.4 Major Commitments This Period

9.4.1 No major commitments this period.

#### 9.5 Schedule

9.5.1 The project is proceeding on schedule in general accordance with the detailed schedule included in Appendix B.

# 9.6 Significant Issues/Decisions Pending

9.6.1 None to report this period.

## 10. Activities - Currie Forcemain

## 10.1 Design/Engineering Status

10.1.1 Design is scheduled to commence in Q1 2016.

## 11. Activities – ECI/Trent Twinning

# 11.1 Design/Engineering Status

11.1.1 Design is scheduled to commence in Q4 2014.

## 12. Activities – Macaulay Forcemain

## 12.1 Design/Engineering Status

12.1.1 Design is scheduled to commence in Q2 2015.

## 13. Program Updates

#### 13.1 Program Cost/Budget Update

- 13.1.1 This report covers the period of April 2014.
- 13.1.2 Total program budget is \$782,686,000.
- 13.1.3 Costs this period are \$1,548,936.

- 13.1.4 Costs to date are \$28,921,751(Appendix A)
- 13.1.5 Commitments to date are \$48,672,360.
- 13.1.6 Commitments this period are \$459,911.

## 13.2 Program Schedule Update

- 13.2.1 The Program is proceeding within the overall schedule. The schedule continues to support a 2018 completion of the McLoughlin Point plant, subject to rezoning approval.
- 13.2.2 The Program Schedule has been reviewed and updated based on current activities. See Program Schedule extracts in Appendix B of this report for:
  - Critical Path Schedule
  - Summary Task Schedule
  - Look-ahead Schedule to July 2014
- 13.2.3 Major activities and Milestones achieved in April include the following:
  - CRD confirmed specific site location of the RRC facility at Hartland.
  - Public engagement on the Residual Solids Conveyance Pipe Alignment and Pump Station locations commenced.
  - Evaluation of the McLoughlin WWTP DBF RFP completed
  - RFP for RRC DBFO finalized for release in May 2014.
  - Evaluation of RRC DBFO RFQ completed and recommended short list of preferred proponents determined.
- 13.2.4 Major activities and Milestones scheduled the next 90 days include the following:

#### Program:

Ministry of Environment approval of LWMP Amendment No. 9.

# McLoughlin WWTP:

- Complete rezoning process for the McLoughlin Point WWTP.
- Select McLoughlin WWTP DBF preferred vendor by beginning May 2014 and finalize contract negotiations by June 2014.
- MOE approval of Environmental AIP Q2, 2014.
- Commence Environmental Characterization of McLoughlin Point site May 2014.
- Continue with BC Hydro to develop the detailed design for temporary and permanent power for McLoughlin Point site.

## Resource Recovery Centre (RRC):

- Release RRC RFP Project Agreement and schedules to shortlisted proponents May 2014.
- Complete public engagement on the Residual Solids Conveyance Pipe Alignment and Pump Station locations in May 2014.

- Commence Residual Solids Conveyance Pipe Geotechnical Investigation May 2014.
- Commence Residual Solids Conveyance Pipe Surveying May 2014.
- Provide recommendation to the Commission on the Biosolids Disposal Services RFP contract June 27, 2014.

## Conveyance Infrastructure:

- Complete 50% detailed design for Arbutus Road Tank early May 2014 and present information to the public at an open house in June 2014.
- Complete the pump station walls of Craigflower Pump Station.
- Complete rezoning for Clover Pump Station Q2 2014.
- Award Clover Point Pump Station DB contract June 27, 2014.
- Award Clover Point Forcemain design consultant contract June 27, 2014.

#### 13.3 Procurement this Period

- 13.3.1 An RFP for the Residual Solids Conveyance Pipe Surveying Services closed April 17, 2014.
- 13.3.2 The Biosolids Disposal Services RFP closed April 24, 2014.
- 13.3.3 Evaluations completed for the Resource Recovery RRC RFQ, McLoughlin Point RFP, Clover Forcemain Design Consultant RFP, Residual Solids Conveyance Pipe Geotechnical Investigation Services and Surveying Services RFP's.

## 13.4 Major Commitments This Period

13.4.1 \$101,417 - BC Hydro - Construction Charges (payable in advance) for McLoughlin WWTP temporary power, upstream improvements and power line upgrades on Victoria View Rd.

## 13.5 Project Controls

13.5.1 Program schedule continues to be developed and will be presented for approval to the Commission once the McLoughlin DBF contract is awarded.

#### 13.6 Environmental

- 13.6.1 A consolidated EIS Final Report for the complete Program, except for the RRC, is currently being updated. The RRC EIS will be completed within 4 months of final site selection of the conveyance pipe routing.
- 13.6.2 No environmental issues to report this period.

## 13.7 Safety

13.7.1 No safety incidents to report this period.

# 14. Communications/Public Engagement

#### 14.1 Activities

- 14.1.1 Education and Awareness Campaign:
  - Materials developed including updated website, householder and video.
  - Coordination with CRD IT to confirm website update.
- 14.1.2 In support of the Residual Solids Conveyance Pipe:
  - Ongoing preparation for meetings/open houses including letters, Information Sheets, FAQ's, location coordination, poster board development and ad placement.
  - Liaison with and email updates to Community Associations in Esquimalt, Victoria and Saanich).
  - Open Houses held on April 28 and 30, 2014.
- 14.1.3 Preparations for the Seaterra Spring Newsletter.
- 14.1.4 Prepare News Release for announcement of McLoughlin RFP preferred proponent selection and Resource Recovery Centre RFP Shortlist.
- 14.1.5 Media Relations and Issues Management:
  - Respond to various enquiries about current Seaterra issues.
  - Prepare news release to address polling conducted by external parties.

#### 15. Environmental

#### 15.1 Activities

- 15.1.1 Craigflower Pump Station Project environmental documentation including permit applications, environmental management plans and project activity was reviewed. Site was visited to meet with contractor and consultants and conduct an environmental site audit. No non-compliances were observed.
- 15.1.2 Program ongoing review of Program components for potential environmentally sensitive activities regarding environmental issues.

#### 16. Program Financing

# 16.1 Federal Agreement Management Committee

The federal agreement has yet to be fully executed. A governmental overview committee is expected to be appointed after execution of these agreements.

## 16.2 Intergovernmental Coordination Committee

The next meeting is scheduled for summer 2014.

# 16.3 Status of Funding Agreements:

No change from last report

Funding Partner	Status of agreement
Building Canada Fund	Approved in principle but awaiting Minister's signature
Green Infrastructure Fund	Approved in principle but awaiting Minister's signature
PPP Canada	Approved.
Province of BC	Approved

# 16.4 Status of Funding Received:

No change from last report

Funding Partner	Payments Received – Current Month	Received to Date	Grant Claims Submitted	Maximum Partner Contribution
Building Canada Fund	HO	9	(#)	\$120,000,000
Green Infrastructure Fund	<b>a</b> 0	8		\$50,000,000
PPP Canada	<b>3</b>	-	-	\$83,400,000
Province of BC	<del>-</del>	-		\$248,000,000

Appendix A

**Monthly Cost Report** 

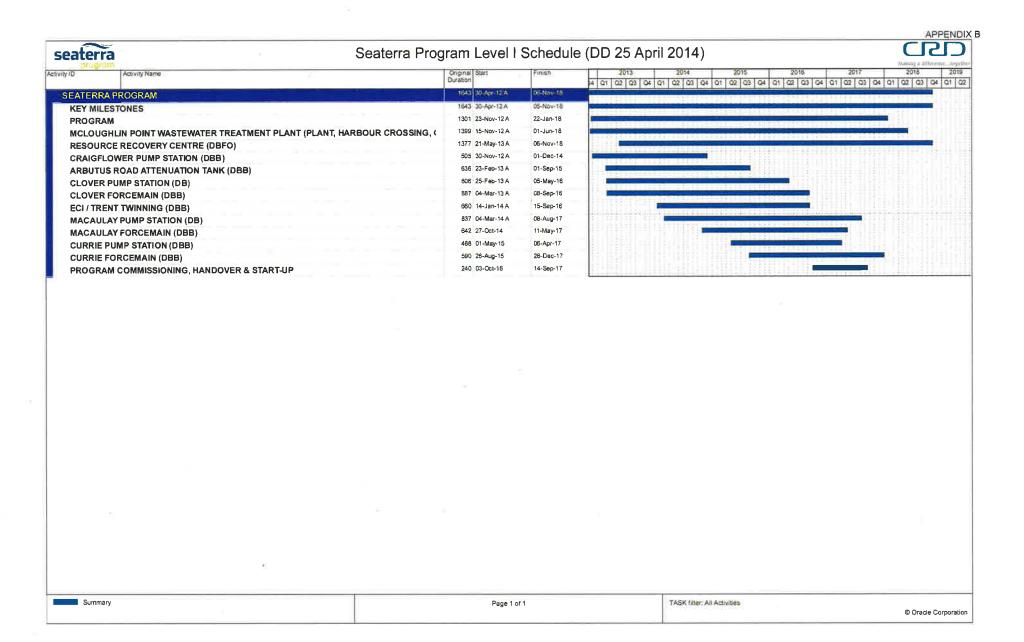


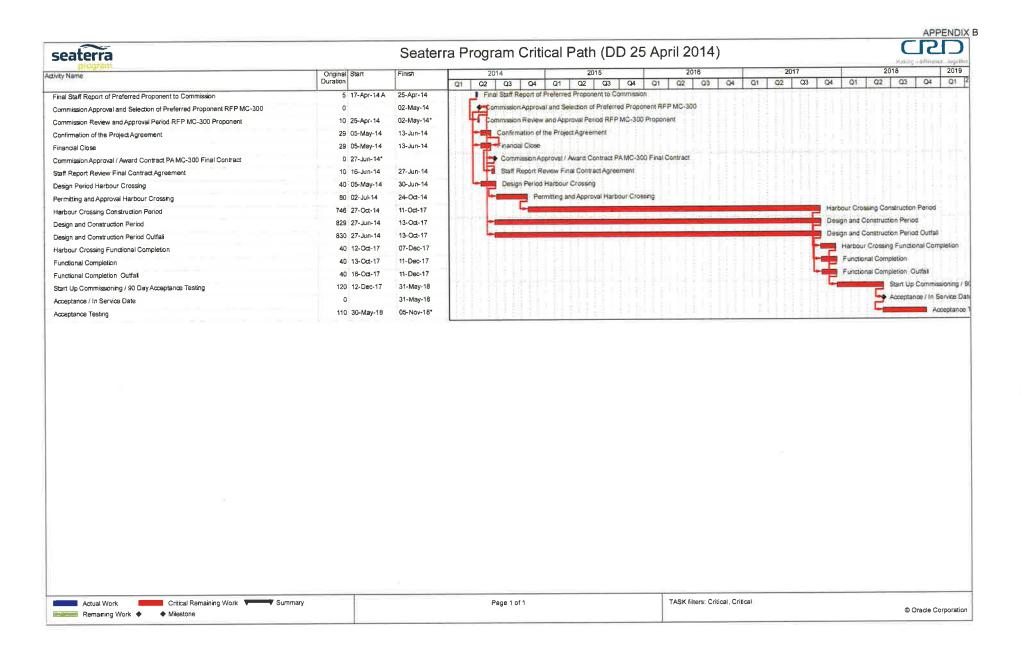
# Program Summary Report Month Ending 30-April-2014

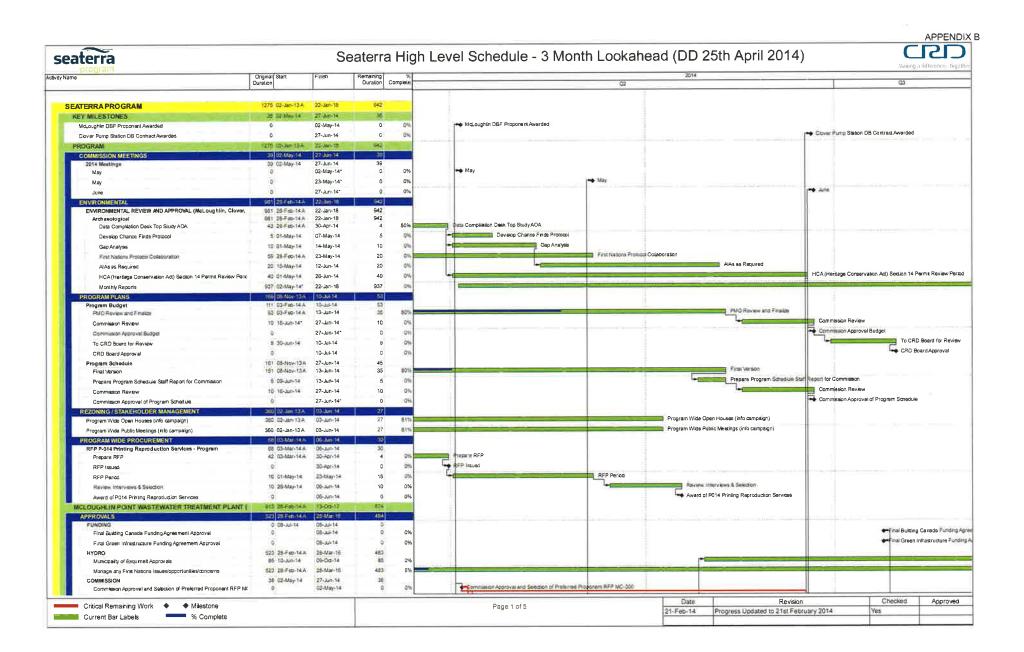
	Budget	Cost to Date	Commitments Unpaid	Total CTD + CU	Forecast to Complete	Forecast at Completion	Variance	Variance from Last Report
WASTEWATER TREATMENT - MCLOUGHLIN	278,561,192	10,233,537	1,717,798	11,951,335	266,609,857	278,561,192	0	0
CONVEYANCING -PUMP STATIONS & PIPES	126,786,364	8,287,854	9,585,016	17,872,870	108,913,494	126,786,364	0	0
RESOURCE RECOVERY CENTRE	254,675,629	4,099,588	3,424,484	7,524,072	247,151,557	254,675,629	0	0
COMMON COSTS	50,337,316	6,264,172	5,023,311	11,287,483	39,049,833	50,337,316	0	0
INTERIM FINANCING	31,400,000	36,600	0	36,600	31,363,400	31,400,000	0	0
PROGRAM CONTINGENCY	40,925,499	0	0	0	40,925,499	40,925,499	0	0
TOTAL	782,686,000	28,921,751	19,750,609	48,672,360	734,013,640	782,686,000	0	0

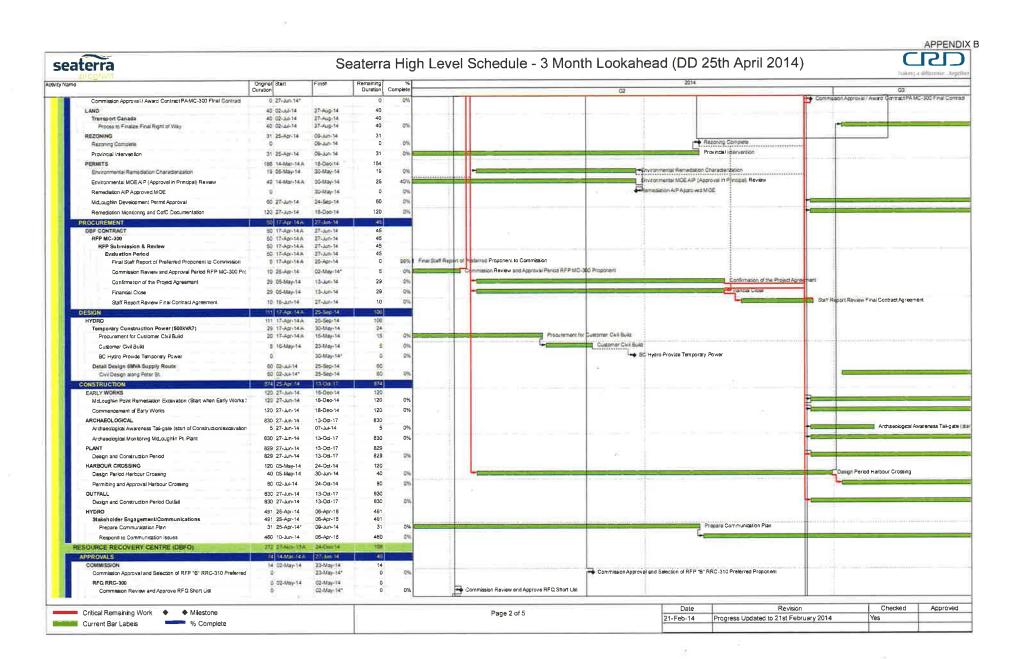
Appendix B

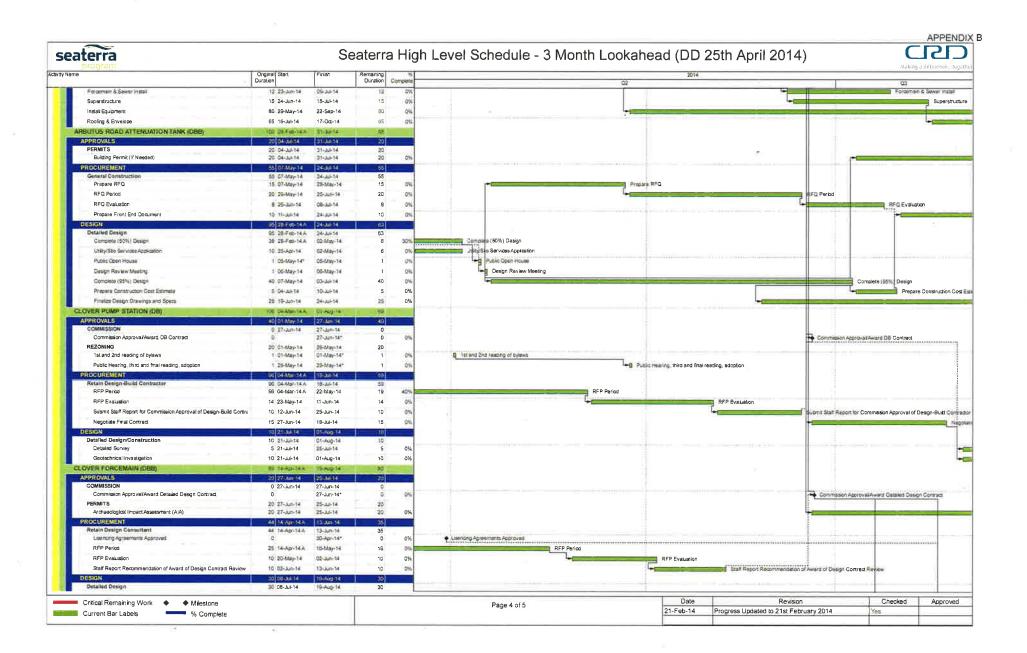
**Schedule Extracts** 

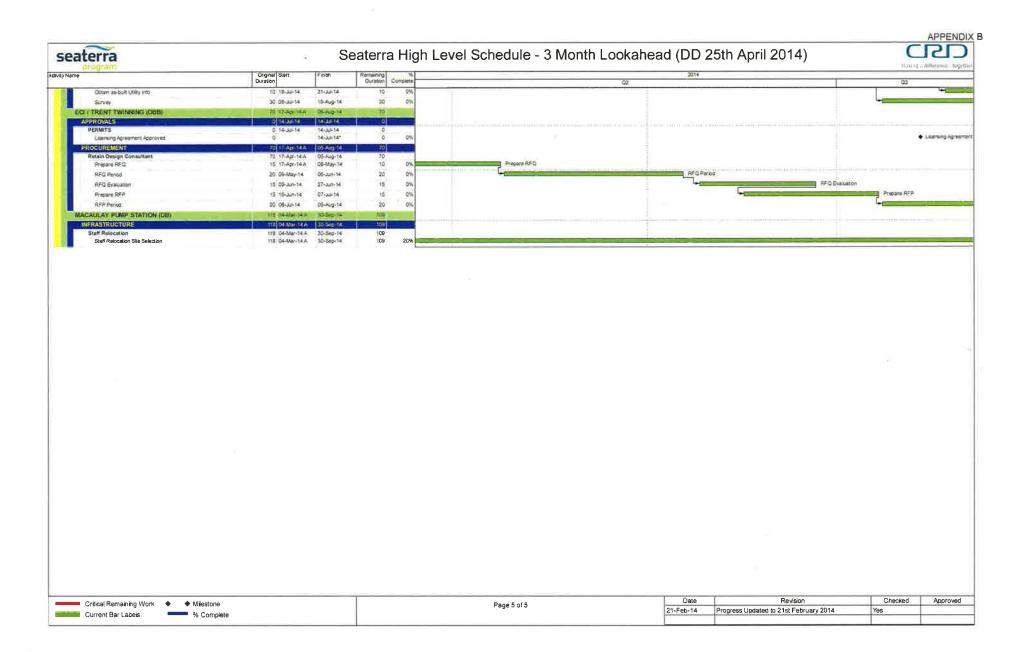












# **Notice of Motion Submitted by Director Desjardins**

## To Core Area Liquid Waste Management Committee, for Meeting of June 11, 2014

WHEREAS the Minister of Environment has stated "After giving the request due consideration, The Province will not attempt to override the zoning decisions of the duly elected Esquimalt council", thus stopping the uncertainty and the possibility of a single centralized sewage treatment plant being built on McLoughlin Point and subsequently affecting many other components of the current LWMP;

AND WHEREAS there is an urgent need to minimize all financial risk to CRD from the Seaterra Program;

AND WHEREAS alternate solutions and options need to be explored that meet senior government deadlines, public approval, and environmental and fiscal best practices:

## THEREFORE BE IT RESOLVED that:

The Core Area Liquid Waste Management Plan, as pertains to the Seaterra Project, be suspended until January 2015, allowing the CRD Board and participant municipalities an opportunity to explore possible directions going forward and for a complete and fully independent review of such options;

AND THAT Termination of all current Seaterra Program and Projects occur and be completed before September 30, 2014 (with exception of necessary system maintenance)

AND THAT The CRD submit a request to the Ministry of Environment for an extension of the construction and funding deadline to 2020, to ensure that the participants meet the federal deadline.