

CORE AREA WASTEWATER TREATMENT PROJECT BOARD

Executive Summary

BACKGROUND

The seven municipalities that make up the Core Area of the Capital Regional District discharge untreated sewage into the Strait of Juan de Fuca. Federal law now requires the region's sewage undergo secondary treatment by December 31, 2020. If the sewage is not treated by then, the region faces regulatory enforcement action. To date, regional efforts to finalize a plan to comply with the law have not been successful.

The federal and provincial governments had agreed to help to fund CRD sewage treatment to reduce the cost to CRD taxpayers. Several times over recent years, as the process to find a plan has become protracted, the federal government renewed and extended its funding commitment. The most recent extension was to September 30, 2016. Canada has advised the Province and the CRD that its funding commitments will not be extended beyond September 30, 2016.

In late May 2016, the CRD established the Core Area Wastewater Treatment Project Board. It asked the Board to review the wastewater treatment issues and, by September 2016, recommend to the CRD and senior levels of government a plan to comply with the law and to preserve the senior government funding.

The Project Board's Terms of Reference describe the following goals:

- Comply with federal law for secondary treatment by December 31, 2020
- Minimize cost to regional taxpayers (life cycle costs), including preserving the senior government funding
- Optimize opportunities to recover resources from waste as part of an integrated waste management approach
- Minimize greenhouse gas emissions
- Add value to the surrounding community and enhance livability of neighbourhoods

Over the past three months the Project Board has met regularly. At their meetings they heard delegations and presentations from the public, industry professionals, and a CRD Director. The Project Board Chair and Vice Chair also met with staff from the CRD and all of the Core Area municipalities, and with Esquimalt and Songhees Nations representatives.

The Project Board reviewed the previous technical work and extensive public commentary and developed a methodology to review and evaluate all options. This methodology included evaluation of a large number of options to identify a short list that best addressed the project goals. The short list was described in the Project Board's *Core Area Wastewater Treatment Project - Interim Report* (August 26, 2016).

The Project Board developed detailed cost estimates for the short-listed options, ranked the short list using triple bottom line (economic, social and environmental) criteria, and identified the best option. This option is the basis of the Project Board's recommendation for a Project plan. The Board believes the plan meets the goals described above and provides a sensible, cost effective way forward that is consistent with the views expressed by CRD residents.

RECOMMENDATION

The recommended proposal responds to the needs of the region by providing tertiary sewage treatment for the Core Area by 2020, with a revised design that is intended to be responsive to the interests of the surrounding community and neighbourhoods. The plan includes a process to develop an integrated resource management solution for the region's waste. It also includes a commitment to advance studies for a wastewater treatment proposal in Colwood.

Specifically, the Project Board recommends as follows:

1. A single 108 megalitre/day plant (the Plant) for the tertiary treatment of wastewater at McLoughlin Point in Esquimalt, based on a revised design, to be in operation by December 31, 2020; the Plant will be operated by the CRD.
2. A construction laydown area for the Plant at Rock Bay in Victoria, under lease from the Songhees and Esquimalt First Nations to enable barging of materials.
3. Upgrades to the collection system, including improvements to the building and surrounding site at the Macaulay Point pump station in Esquimalt.
4. A conveyancing system for the residual solids to be transported by pipe to the Hartland landfill in Saanich.
5. A plant for the treatment of residual solids at Hartland landfill to produce Class A biosolids, and interim storage of biosolids, pending the introduction of an integrated resource management solution for all waste streams. This plant would be procured using a Design-Build-Finance-Operate (DBFO) model.
6. A process to create an integrated resource management solution for waste in the CRD.
7. A commitment to advance studies for a wastewater treatment proposal in Colwood, including up to \$2 million to complete the required technical studies and environmental impact assessments.
8. The development of a multi-year plan to improve CRD sewage facilities to mitigate their impacts on host communities.

In the proposed plan:

1. The treated sewage will meet the legal requirement for secondary treatment by 2020; the wastewater will also receive tertiary treatment.
2. The wastewater plant design has been significantly revised from earlier designs – it has a smaller footprint, is set back from the shoreline, provides for a walkway between the building and the shore, has a multi-level green roof irrigated with treated water, landscaping, and a multi-use space. The building will be built to a high standard in consideration of climate change, geotechnical and environmental conditions. The design refinements are intended to align with existing zoning and design guidelines and reflect concerns expressed by the residents of Esquimalt.
3. The budget includes an additional allowance of \$5 million to pay for further refinements to the exterior of the Plant and landscaping to address design panel and other input as part of the development permit process in Esquimalt.
4. The site design, construction, provision of public space and off-site improvements, including road and infrastructure improvements, responds to Esquimalt’s design guidelines and includes an annual payment to Esquimalt of \$55,000 or equivalent value.
5. There is a proposal for the region to engage in a comprehensive planning and consultation process to develop a waste management policy, including management of its solid and biosolid waste streams as part of an integrated resource management plan. This process will culminate in an integrated resource management program. The plan will be submitted to the Ministry of Environment. The proposed process includes market input through a Request for Expression of Interest, and could include pilot projects to test the benefits of emerging technology, minimizing risk to CRD taxpayers.

The capital cost of the recommended proposal is approximately \$765 million. This is significantly less expensive than previous plans. Assuming the senior government contributions are in place, based on the methodology used by the CRD to allocate costs, the cost per CRD household ranges from about \$146 per year per household in Colwood to \$344 per year per household in Oak Bay.

If the senior government contributions are not available, the cost to CRD taxpayers will be significantly more.

DUE DILIGENCE PANEL

A Due Diligence Panel was established to review the Project Board methodology to select the recommended solution for the wastewater and residual solids treatment plants. The Project Board will provide the Due Diligence report together with this report to the CRD.

NEXT STEPS

The proposal is based on a business case (Appendix 1 to this report) which describes the proposal and implementation strategy and includes a detailed project budget. At the CRD meeting on September 14, 2016 the Project Board will ask the CRD to consider this report, receive it for information, and approve the business case. If approved, the provincial and federal governments will consider confirmation of their funding by September 30, 2016.

CORE AREA WASTEWATER TREATMENT PROJECT BOARD

Final Report

September 7, 2016

BACKGROUND

The seven municipalities that make up the Core Area of the Capital Regional District discharge untreated sewage into the Strait of Juan de Fuca. Federal law now requires the region's sewage undergo secondary treatment by December 31, 2020. If the sewage is not treated by then, the region faces regulatory enforcement action. To date, regional efforts to finalize a plan to comply with the law have not been successful.

The federal and provincial governments had agreed to help to fund CRD sewage treatment to reduce the cost to CRD taxpayers. Several times over recent years, as the process to find a plan has become protracted, the federal government renewed and extended its funding commitment. The most recent extension was to September 30, 2016. Canada has advised the Province and the CRD that its funding commitments will not be extended beyond September 30, 2016.

On May 25, 2016 (Bylaw 4109, the *CRD Core Area Wastewater Treatment Project Board Bylaw No. 1, 2016*), the CRD established the Core Area Wastewater Treatment Project Board (Project Board) for the purposes of administering the Core Area Wastewater Treatment Project and adopted Terms of Reference for the Project Board. The staff report describes the work of the Project Board as follows: the Project Board is *"charged with preparing and submitting a project proposal and business case to the [CRD] Board for submission to the Provincial Treasury Board by September 30, 2016. This timing also coincides with the funding extension from P3 Canada and the expectations of the provincial and federal governments in relation to securing funding. Once a business case is approved the Project Board would complete the procurement process and the implementation of the Project"*.

The following report describes the Project Board's recommended proposal and business case.

RECOMMENDATION

The recommended proposal responds to the needs of the region by providing tertiary sewage treatment for the Core Area by 2020, with a revised design that is intended to be responsive to the interests of the surrounding community and neighbourhoods. The plan includes a process to develop an integrated resource management solution for the region's waste. It also includes a commitment to advance studies for a wastewater treatment proposal in Colwood.

Wastewater Treatment

1. The CRD build a single 108 megalitre/day plant (Plant) for the secondary and tertiary treatment of wastewater on the site owned by the CRD at McLoughlin Point in Esquimalt, and submit for approval to the Ministry of Environment an amendment to the Liquid Waste Management Plan to that effect.
2. The CRD proceed with the procurement of the Plant on the basis of a revised design from the developer identified in the competitive procurement process of 2013; the revised design aligns with existing zoning and design guidelines and is responsive to what the Project Board understands to be the concerns of Esquimalt. The schedule anticipates reaching a final agreement with the developer by January 2017. The agreement would include a schedule for the Plant to be in operation by December 2020 to comply with federal law.
3. The CRD operate the Plant, as it does other wastewater treatment facilities in the CRD.
4. The developer participate in the municipal development permit process and an allowance of \$5 million be included in the Project budget to accommodate any recommendations to alter the exterior of the Plant building or landscaping that may arise during the permit process.
5. The CRD enter into an agreement to lease Rock Bay in Victoria from the Esquimalt and Songhees First Nations for use by the contractor during construction for a laydown area, to facilitate barging to the Plant site, reducing the impact of construction in Esquimalt.
6. The project incorporate amenities valued at approximately \$20 million, including an annual payment to Esquimalt of \$55,000 or equivalent value.
7. The CRD commit to advance studies for a wastewater treatment proposal in Colwood, including up to \$2 million to complete the required technical studies and environmental impact assessments.

Conveyance

8. The collection system be upgraded, including improvements to the existing building and landscaping at the Macaulay Point pump station; a conveyance system consistent with previous plans be used to pipe residual solids from the wastewater plant to Hartland landfill.

Treatment of Residual Solids

9. The CRD start a new procurement for a new facility at Hartland landfill using a Design-Build-Finance-Operate (DBFO) model, such facility to be in place to receive residual solids by December 2020; the contract will be performance based, with payment tied to the production of treated biosolids that meet regulatory thresholds for Class A biosolids.
10. The CRD store the class A biosolids at Hartland on an interim basis, recover and treat leachate and recover biogas.
11. The CRD engage in a comprehensive planning and consultation process to develop a waste policy, including management of its solid and biosolid waste streams as part of an integrated resource management plan. This process would culminate in a submission to the Ministry of Environment of an integrated resource management program by 2020; it may include an amendment to the CRD Solid Waste Management Plan.
12. In parallel the CRD issue a Request for Expressions of Interest for the processing of waste (including solid waste and biosolids) to determine the level of interest on the part of developers and investors. The RFEOI would specifically request input on the integrated resource management policy and regulations required to support their prospective investment. This will inform the planning process and policy.

Other

13. The CRD review its sewage collection and treatment facilities and develop a plan to implement improvements to the appearance of the facilities to mitigate their impacts on the host municipalities.

OBJECTIVES

The Terms of Reference for the Project Board contain specific goals. The proposal meets those goals, as follows:

Goal	Measure
Meet federal requirements for secondary treatment by 2020	Exceeded - wastewater will have tertiary treatment
Minimize costs to residents	The capital cost of the proposal is approximately \$765 million; it is less expensive than previous plans and less expensive than the other short listed options (\$920 million for Rock Bay and \$1,010 million for a two plant solution at Rock Bay and McLoughlin Point); the proposal meets the deadline for federal funding, minimizing the risk of losing senior government funding
Optimize opportunities for resource recovery	The plan includes a smaller investment than prior plans in the treatment of residual solids and supports future investment in integrated resource management, following a planning and consultation process and ongoing assessment of market interest
Reduce greenhouse gas emissions	The plan reduces greenhouse gas emissions by 5-10 per cent, when compared with previous plans which included driers, pelletizing of biosolids, and hauling pellets to cement plants and other end users, who would be paid to take the product
Add value to the surrounding community and enhance livability of neighbourhoods	<p>The plan recognizes that the wastewater and biosolids treatment facilities have external impacts:</p> <ul style="list-style-type: none"> ▪ rather than co-locating the facilities, they are separated: one in Esquimalt; one in Saanich, and the impacts of conveyancing are shared ▪ the impact of construction is distributed; a laydown area is in Rock Bay, Victoria, to facilitate barging to the site, reducing truck traffic in Esquimalt ▪ the plan includes significant revisions to the wastewater plant design in response to public commentary and to align with existing zoning, and includes an allowance for further design revisions ▪ the plan includes neighbourhood amenities including a walkway, road improvements and a recreational area ▪ the plan recommends a program to improve the appearance of CRD sewage collection and treatment facilities, mitigating their impact on the host communities

FINANCIAL OVERVIEW – COST TO CRD RESIDENTS

Following a review of 28 options for wastewater treatment and 21 options for the treatment of residual solids (see *Wastewater Treatment and Treatment of Residual Solids*, below), the Project Board established a short list of options. The short list was described in the Project Board’s *Core Area Wastewater Treatment Project - Interim Report* (August 26, 2016):

- A single plant at McLoughlin Point in Esquimalt
- A single plant at Rock Bay in Victoria
- Two plants: one at McLoughlin Point and one at Rock Bay.

Each option included the same recommended residual solids treatment option at Hartland.

Detailed capital cost estimates were prepared for the three options, as follows:

	Single Plant	Single Plant	Two Plants
	McLoughlin Point	Rock Bay	McLoughlin Point & Rock Bay
Cost (\$ 2016)	\$765 million	\$920 million	\$1,010 million

The cost differences are material. In addition, the risk to the CRD associated with the construction of a facility is materially different on the two sites.

McLoughlin Point is well studied and the site conditions are known. Following a competitive procurement undertaken by Seaterra, a preferred proponent and proposal were selected for that site. The proposal was fixed price, with the majority of the design and construction risk residing with the proponent. The proposal price has been adjusted to reflect the passage of time, the incorporation of tertiary treatment, and changes to address the existing zoning and development guidelines. The cost in the table above and in the business case incorporates the revised price.

The conditions at Rock Bay, in particular geotechnical conditions, are less well understood, and present cost and schedule risks.

The Project Board has a high level of confidence in the cost estimates and completion schedule for the recommended project. Specifically, the cost and schedule estimates for the wastewater treatment plant at McLoughlin are based on an updated proposal that the Project Board has received from Harbour Resource Partners (HRP), the preferred proponent from the prior 2014 procurement. The updated proposal will be incorporated into a Project Agreement upon approval of the business case by the CRD and confirmation of funding.

The Project Board is satisfied that the process of re engaging with HRP and reaching a satisfactory Project Agreement with HRP is legally acceptable and consistent with public sector procurement policies.

Budget

The business case includes a detailed project budget of \$765 million. A summary budget follows:

Cost Centre	Capital Cost (\$ 2016)
Tertiary Wastewater Treatment Plant (McLoughlin Point)	\$381 million
Collection and Conveyancing System	\$192 million
Residual Solids Treatment Plant (Hartland)	\$188 million
Macaulay Improvements and Colwood Studies	\$4 million
Total	\$765 million

Sources of Funds

The expected senior government and CRD contributions are noted in the table below.

Agreement	Eligible Amount
Building Canada Fund - Major Infrastructure Component	\$120 million
Canada - Green Infrastructure Fund Conveyance System Project	\$50 million
Federal - PPP Canada Biosolids	\$36 million
Provincial - Contribution Agreement	\$248 million
CRD	\$311 million
Total	\$765 million

The CRD also funds operating and maintenance costs over the life of the wastewater and biosolids treatment plants.

CRD Contribution by Household

Based on the CRD capital, operating and maintenance funding, and using the CRD allocation methodology, the average annual contribution per household is as follows:

Municipality/Township	Annual Estimated Cost Per Household
Oak Bay	\$344
Saanich	\$208
Victoria	\$296
Esquimalt	\$258
View Royal	\$248
Colwood	\$146
Langford	\$239
Average Annual Cost Per Household	\$245

KEY THEMES

Since its formation in late May, the Project Board has worked to understand the views of CRD residents. At their meetings they received correspondence and had presentations from residents, industry professionals, and a CRD Director. The Project Board Chair and Vice Chair also met with staff from the CRD and all of the Core Area municipalities, and with Esquimalt and Songhees Nations representatives. The Project Board also reviewed extensive public commentary from years of past discussion. They identified the following key concerns related to the wastewater treatment facility, in particular the site at McLoughlin Point, identified during previous phases:

- Overall cost of the facility and cost to CRD taxpayers
- The appearance of the facility/proximity to the shoreline/setbacks/integration into surrounding public space
- Long-term planning and constraints of the site for future growth
- Construction impacts and traffic management
- Request for resource recovery/new technologies to be integrated in the facility
- Odour/air quality

For the treatment of residual solids, in particular at the existing CRD landfill at Hartland, construction impacts and odour are important for Saanich and the Juan de Fuca Electoral Area, including residents of Willis Point and other neighbourhoods near the landfill.

Public commentary and presentations to the Project Board also highlighted the following technical themes or issues:

- Flow and Load (plant capacity)
- Outfall Permitting
- Regulatory Requirements
- Microplastics
- Gasification

The Project Board researched these topics. The research informed the range of options and the development of the criteria to evaluate them. The results of the research are in separate papers in the business case.

WASTEWATER TREATMENT

Plant

Following a review of past technical work and research into the key themes noted above, the Project Board and its advisors developed a methodology to assess 29 options to treat wastewater and recommend a preferred option. The options involved various sites and technologies. The Project Board developed a set of screening criteria based on the Project goals and applied the criteria to arrive at a short list of options. They developed cost estimates for those options and used a triple bottom line approach to rate the options based on timing, economic, social and environmental considerations. The methodology, evaluation worksheets, and results are included in the business case.

The recommended option is a 108 megalitre/day tertiary wastewater treatment plant at McLoughlin Point in Esquimalt. A review of the public commentary, media reports and discussions with staff at the Township of Esquimalt confirmed that Esquimalt did not support the McLoughlin site. Moreover, they did not like the proposed design of the facility. They thought it was the “wrong plan” for the site, and that due consideration had not been given to the impact of the facility on the Township. McLoughlin Point is at the entrance to the harbour and is highly valued by Esquimalt residents.

The new facility has been redesigned and better aligns with the existing zoning requirements and design guidelines. It has a smaller footprint, is set back from the foreshore, and includes a multilevel green roof and landscaping.



Proposed revised design at McLoughlin Point

Tertiary Treatment

The recommendations include tertiary treatment using disc filters, which is the first step toward obtaining an effluent quality that will meet regulatory requirements for waste reuse. These filters will also remove most non-soluble compounds of emerging concern.

This level of treatment is not required by the federal and provincial regulations – those regulations require secondary treatment only. Also, there is a view in the scientific community that given the treated water will flow through the outflows into the Salish Sea, tertiary treatment is of limited value.

However, the Project Board concluded that there is benefit to tertiary treatment as the region moves to a water reuse program in the future, and tertiary treatment removes many compounds of emerging concern. Finally, the region places a high value on the environment and the public commentary suggests a widespread desire to do as much as is reasonably possible to treat the effluent, while recognizing cost implications.

Liquid Waste Management Plan

CRD Liquid Waste Management Plan has been revised (Amendment #11) to reflect the recommendation and submitted in draft to the Ministry of Environment.

Development Permit Process and Amenities

Under British Columbia law land use is within the jurisdiction of municipalities. To mitigate the risk associated with municipal site development processes, the revised Plant design better aligns with the existing zoning requirements. With respect to the municipal Development Permit process, the Project Board has confirmed that HRP will participate. The input of the Esquimalt Design Panel will be considered as part of this process. An allowance of \$5 million is included in the Project budget to pay for further changes to the design or landscaping that may arise during the process.

Colwood Proposal

The Project Board received a presentation from a representative of the proponents of the Colwood proposal. The Board engaged in a further review of the proposal including meeting with the proponent team in a closed meeting. As the Project Board understands it, the proposal is a wastewater treatment plant to collect and treat the wastewater from residents of Colwood and Langford. The proposed treatment plant would treat the wastewater to a quality which the proponents believe would be acceptable for discharge to the ground and reuse. The proposal does not include treatment of residual solids. Residual solids would be trucked to Hartland landfill for treatment.

The proponents describe the proposal as a “concept and cost estimate”. As is usually the case at the concept stage of development, there are a number of outstanding issues. These issues include the requirement for detailed studies of hydro geological conditions to develop accurate cost estimates and to evaluate the impacts of reuse and recharge on the water balance, water supply and stream flows. In addition, issues related to plant capacity, reliability and redundancy will need to be addressed. Environmental impact assessments have not yet been completed.

There has been an interest in the region for decentralized wastewater treatment. This proposal is consistent with this interest and may work. The Project Board recommends funding the next stage of development which includes environmental impact assessments.

The Project Board considered whether the proposal, given the stage of its development, affects the recommendations for a wastewater treatment plant at McLoughlin and residual solids treatment at Hartland. The proposal does not affect the Hartland recommendation, because the concept assumes residual solids from the Colwood plant would be treated at Hartland. Nor does it affect the conveyancing recommendation; the Colwood proposal assumes full integration with the upgraded collection system.

The remaining consideration is the Plant, and whether it should be reduced in size, because existing and future wastewater from Colwood and Langford would be treated at Colwood. The Project Board has concluded it should not, for the following reasons:

1. The Colwood proposal is a concept. There is considerable risk that the technology of ground disposal for reuse and recharge may not be approved by the Ministry of Environment. Or, the approved process including required studies may take considerable time, pushing project completion beyond the federal regulatory deadline. It is also possible that the outcome of these studies or the conditions of approval result in materially increased costs. If these risks materialize, and the proposal does not proceed, Colwood and Langford will need to rely on the regional plant.
2. If, on the other hand, the risks do not materialize, and if the Colwood proposal is the lowest cost option for future regional growth, and it proceeds, then the plant at McLoughlin will have treatment capacity to allow for growth well into the future. This outcome is far preferable than building McLoughlin at lower capacity today and having to expand it at significantly higher costs in the future. It would also potentially allow for the entire cost at Colwood to be funded by new development.

CONVEYANCE

The project includes:

- upgrades to the sewage collection system consistent with previous plans, including an attenuation tank in Saanich East, improvements to various pump stations and to the headworks at Macaulay Point and Clover Point
- a new treated water outfall at McLoughlin Point and wet weather outfalls at Clover Point and Macaulay point
- residual solids conveyance system, consisting of a pipeline and pump stations from the wastewater treatment plant to Hartland landfill in Saanich

Macaulay Point Pump Station

The work on the regional sewage collection system includes an upgrade to the Macaulay Point pump station. There will be a new building and alterations to the existing building. The Project Board is aware that the existing building and works yard are unattractive and conditions of the site are not consistent with its location on the waterfront. The scope of the pump station upgrade project now includes significant improvements.

TREATMENT OF RESIDUAL SOLIDS

The Project Board evaluated 21 options for treatment of residual solids. It used the same methodology that it used for the wastewater treatment plant evaluation. The methodology, evaluation worksheets, and results are included in the business case.

The recommendations are as follows:

- a plant at Hartland landfill to treat residual solids to produce, with anaerobic digestion, Class A biosolids which would qualify for beneficial use, as defined by the Ministry of Environment
- the CRD store the Class A biosolids at Hartland landfill on an interim basis in a bio-cell; biogas and leachate will be recovered

There has been a longstanding interest in the region to move to integrated resource management. This means integrating biosolids, organics and municipal solid waste. However, the CRD does not control the vast majority of its waste. It does control biosolids from the plants it operates, but biosolids represent less than 10 per cent of the total waste stream. In order to have an effective integrated resource management plan the region must implement policies and bylaws to control the flow and processing of the majority of its waste. The development of these policies will require analysis and extensive consultation with member municipalities, technology providers, existing private sector waste haulers and processors, other stakeholders and the broader public.

Therefore, the Project Board recommends an interim storage solution for its treated Class A biosolids, within the requirements of the CRD Solid Waste Management Plan.

The Project Board recommends the CRD undertake a public process, with the participation of the affected municipalities and First Nations, to review its regional waste management policy to determine a long-term option at Hartland that optimizes the opportunity for integrated resource management and beneficial use of the biosolids. This process would culminate in a submission to the Ministry of Environment by 2020 or sooner with a long-term option and may include an amendment to the CRD Solid Waste Management Plan. While this process is underway, CRD would report periodically to the Ministry to keep it apprised of the progress.

The Project Board recommends the CRD issue a Request for Expressions of Interest for the processing of waste (including solid waste, organics and biosolids) to determine the level of interest on the part of developers and investors. The RFEOI would specifically request input on the integrated resource management policy and regulations required to support their prospective investment. This will inform the planning process and policy.

IMPROVE CRD SEWAGE TREATMENT FACILITIES

The Project Board has concluded, based on its discussions with the municipalities, that the CRD must review the impact of its sewage assets on host communities. The Project Board recommends that the CRD develop a plan to mitigate the impact of CRD sewage facilities on host communities.

KEY RISKS TO THE CRD

There are risks to starting the project and risks to completing the project.

Risks to starting the project include:

- Confirmation of zoning compliance and development permit approval in a timely manner
- Finalizing funding agreements with senior levels of government
- Acceptance of the Amendment #11 to the Liquid Waste Management Plan
- Reaching a satisfactory agreement with HRP
- Successful and timely completion of the procurements for the biosolids treatment plant and the balance of the conveyance system upgrades

Risks to completing the Project include:

- Cost overrun and schedule risk not transferred to the proponents; these risks remain with the CRD – senior government funding is capped
- Other risks typical of a large construction project

DUE DILIGENCE PANEL

A Due Diligence Panel was established to review the Project Board methodology to select the recommended solution for the wastewater and residual solids treatment plants. The Project Board will provide the Due Diligence report together with this report to the CRD.

NEXT STEPS

The proposal is based on a Business Case (Appendix 1 to this report) which describes the proposal and implementation strategy and includes a detailed project budget. At the CRD meeting on September 14, 2016 the Project Board will ask the CRD to consider this report; receive it for information, and approve the business case. If approved, the federal and provincial governments will consider confirmation of their funding by September 30, 2016.

Appendix 1: Business Case