

#### **ENVIRONMENTAL SERVICES COMMITTEE**

Notice of Meeting on **Wednesday, October 1, 2014, at 11:30 am**Board Room, 6th Floor, 625 Fisgard Street, Victoria, BC

N. Jensen (Chair)

J. Mendum (Vice-Chair)

D. Blackwell

J. Brownoff

V. Derman

B. Desjardins

C. Hamilton

B. Isitt

W. McIntyre

A. Bryson (Board Chair, ex-officio)

#### **AGENDA**

- 1. Approval of Agenda
- 2. Adoption of Minutes of June 25, 2014
- 3. Adoption of Minutes of June 24, 2014, Integrated Solid Waste Resource Management Plan Workshop
- 4. Chair's Remarks
- 5. Presentations/Delegations
- 6. Service Plans Review Process (EHQ 14-42)
- 7. Regional Kitchen Scraps Processing Capacity (ERM 14-41)
- 8. Information Item
  - a) Letter to CRD Board Chair Alastair Bryson from Regional District of Fraser-Fort George re Changes to Provincial Recycling Regulation (July 23, 2014)
- 9. Update and Previous Minutes from Roundtable on the Environment
- 10. New Business
- 11. Motion to close the meeting in accordance with the Community Charter, Part 4, Division 3, 90(1)(i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.
- 12. Adjournment

Next Meeting: October 22, 2014

[This page deliberately blank]



### Minutes of a Meeting of the Environmental Services Committee Held Wednesday, June 25, 2014, in the Board Room, 625 Fisgard St., Victoria, BC

Present: Directors: N. Jensen (Chair), J. Mendum (Vice Chair), D. Blackwell, J. Brownoff, V. Derman, B. Desjardins, J. Cullington (for C. Hamilton), B. Isitt, W. McIntyre, A. Bryson (Board Chair, ex officio)

**Staff:** R. Lapham, Chief Administrative Officer; L. Hutcheson, General Manager, Parks and Environmental Services; G. Harris, Senior Manager, Environmental Protection; R. Smith, Senior Manager, Environmental Resource Management; J. Frederick, Environmental Engineering; Signe Bagh, Senior Manager, Regional Planning; S. Norton, Deputy Corporate Officer; B. Parnell, Committee Clerk (recorder)

The meeting was called to order at 9:30 am

### 1. Approval of Agenda

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

CARRIED

### 2. Adoption of Minutes

**MOVED** by Director Derman, **SECONDED** by Director McIntyre, That the minutes of the May 28, 2014 meeting be adopted as previously circulated.

CARRIED

### 3. Chair's Remarks:

The Chair thanked L. Hutcheson and staff for the "Hartland Happening" event he attended on the weekend designed to educate the public on the landfill site. He remarked on the thoughtful and well-designed program provided.

### 4. Presentations/Delegations

- 1) Beth Burton-Krahn re: Agenda Item 5
  Ms. Burton-Krahn presented her views on the importance of moving forward on this item and not to defer to further studies. A copy of the presentation is filed with Legislative and Information Services.
- Bryan Gilbert re: Agenda Item 5
   Mr. Gilbert presented his views requesting the Committee to move ahead on this proposal immediately. A copy of the presentation is filed with Legislative and Information Services.
- Carole Witter re: Agenda Item 5
   Ms. Witter spoke to the item urging Committee to support this amendment.
- 4) Ms. Marsha Henderson Withdrawn

### 5. Flood Hazard Area Land Use Management Guidelines Amendment (EEP 14-32)

Discussion took place regarding this item and the following points were raised:

- The reason for this report to be presented to Environmental Services Committee and not Planning Transportation and Protective Services
- · Several municipalities have initiated their own Flood Plain Management mapping strategies
- The impact of compensation and liability to homeowners and municipalities
- Multi-jurisdictional issue and more time needed for consultation
- Mapping exercise with Saanich and Victoria, Tides Canada, Natural Resources Canada and CRD has been completed and is ready to be shared with local governments pending a bylaw to be considered
- What would constitute an appropriate time for consultation
- While this is led by the Province, CRD consultation must include the Islands Trust and First Nations
- Review of concerns arising from consultation need to be reviewed in October

### MOVED by Director Isitt, SECONDED by Alternate Director Cullington,

That staff be directed to further review and report back by July 2014 on the technical, legal and financial implications of the Provincial Flood Hazard Area Land Use Management Guidelines Amendment; and,

That it be recommended to the Capital Regional District Board:

That the Capital Regional District Board Chair issue a letter to the Province of British Columbia recommending the consultation process and timeline be broadened.

### MOVED by Director Desjardins, SECONDED by Director Derman,

That the motion be amended to add the following:

That the Environmental Services Committee recommend to the Capital Regional District Board to support the Provincial Flood Hazard Area Land Use Management Guidelines amendment in principle.

Chair Jensen ruled that this was not an amendment and should be put forward as a separate motion.

MOVED by Director Desjardins, SECONDED by Director Derman, That the ruling of the Chair be challenged.

The question was called:

Shall the Chair be sustained?

CARRIED

Cullington, Derman, Desjardins OPPOSED

Discussion continued on the motion, particularly related to the liability issue.

The question on the motion was called, as follows.

That staff be directed to further review and report back by July 2014 on the technical, legal and financial implications of the Provincial Flood Hazard Area Land Use Management Guidelines Amendment; and,

That it be recommended to the Capital Regional District Board:

That the Capital Regional District Board Chair issue a letter to the Province of British Columbia recommending the consultation process and timeline be broadened.

CARRIED

Derman, Desjardins OPPOSED

MOVED by Director Desjardins, SECONDED by Director Derman

That it be recommended to the Capital Regional District Board:

That the Flood Hazard Area Land Use Management Guidelines Amendment be accepted in principle, and, that we move forward with the work that needs to be done while recognizing the concerns regarding consultation identified by staff.

DEFEATED

Blackwell, Bryson, Isitt, Jensen, McIntyre OPPOSED

### 6. Interim and Long-Term In-Region Kitchen Scraps Processing Options (ERM 14-33)

Discussion ensued regarding costs and tonnage. R. Smith explained that the preprocessing of the feedstock, such as separating out contaminants in order to provide an end-use product suitable for food crops, is quite labor intensive and requires considerable capital investment.

MOVED by Director Blackwell, SECONDED by Director Bryson,

That it be recommended to the Capital Regional District Board:

That staff be directed to initiate and report back to the Environmental Services Committee, at its October 1, 2014 meeting, the development of a Request for Proposals (RFP) for a long-term regional kitchen scraps processing facility by

- a) working with the Province to amend the Capital Regional District's Solid Waste Management Plan to allow for a wider variety of processing technology and ownership structures should the facility be sited at Hartland; and
- b) developing a draft RFP structure that, when issued and evaluated, would result in a CRD Board preferred regional kitchen scraps processing solution being offered to municipalities, electoral areas and private industry to which they can consider committing tonnage.

CARRIED

### 7. Hartland Landfill Kitchen Scraps Disposal Ban (ERM 14-34)

Discussion took place regarding delaying the ban in order to have a clearer understanding of the RFP. However, it was noted that to delay would have significant implications for the businesses and municipalities who have already made considerable investment in preparation of the ban.

**MOVED** by Director Bryson, **SECONDED** by Director Isitt, That it be recommended to the Capital Regional District Board

That the landfill disposal ban on kitchen scraps beginning January 1, 2015 be confirmed and that staff be directed to bring forward the appropriate amendments to Bylaw No. 3917, Hartland Landfill Tipping Fee and Regulation Bylaw No. 6, 2013, in November 2014.

CARRIED

Blackwell, Desjardins, OPPOSED

8. Hartland Landfill – Landfill Air Space/Aggregate Production 2014/2015 – Award of Contract 14-1791 (EEE 14-31)

**MOVED** by Director Derman, **SECONDED** by Director Blackwell, That it be recommended to the Capital Regional District Board: That Contract 14-1791, Hartland Landfill – Landfill Air Space/Aggregate Production 2014/2015, be awarded to W.E. Stone Ltd. in the amount of \$1,591,506 (including GST) and that a construction contingency of \$75,000 (plus GST) be approved.

CARRIED

- 9. Information Item
  - (a) Capital Region Invasive Species Partnership Meeting Minutes March 26, 2014

**MOVED** by Director Derman, **SECONDED** by Director Blackwell, That the minutes be received for information.

CARRIED

10. Update and Previous Minutes from Roundtable on the Environment

**MOVED** by Director Derman, **SECONDED** by Director Mendum

That this item be deferred until the next meeting of the Environmental Services Committee.

CARRIED

- 11. Update from Solid Waste Advisory Committee (minutes not available)
- 12. Update from Public and Technical Advisory Committee, Integrated Solid Waste Resource Management Plan (minutes not available)

Director Mendum advised that there is no update as the two advisory committees have not met.

**MOVED** by Director Mendum, **SECONDED** by Director Bryson That the oral report be received for information

CARRIED

13. New Business: There was no new business.

### 14. Motion to Close the Meeting

**MOVED** by Director Bryson, **SECONDED** by Director Desjardins, Motion to close the meeting in accordance with the *Community Charter*, Part 4, Division 3, 90(1)(c) labour relations or other employee relations; and Section 90(1)(k) negotiations and related discussions respecting the proposed provision of a regional service that are at their preliminary stages and that, in the view of the Capital Regional District Board, could reasonably be expected to harm the interests of the regional district if they were held in public.

CARRIED

The Committee moved to the closed session at 11:23 am.
The Committee rose from the closed session at 11:34 am without report.

### 15. Adjournment

**MOVED** by Director Mendum, **SECONDED** by Director Bryson, That the meeting be adjourned at 11:34 am.

CARRIED

CHAIR	
COMMITTEE CLERK	

[This page deliberately blank]



# Notes of a Special Meeting of the Environmental Service Committee Held June 24, 2014 in the Board Room, 625 Fisgard St., Victoria, BC

PRESENT: Directors: N. Jensen (Chair), J. Mendum (Vice Chair), D. Blackwell,

J. Brownoff, V. Derman, B. Desjardins, J. Cullington (for C. Hamilton), B. Isitt,

A. Bryson (Board Chair, ex officio)

Guests: Capital Regional District Board: S. Brice, C. Coleman, B. Garminga, M. Hicks, G. Hill, D. Howe, L. Seaton, L. Wergeland, W. Milne, G. Young, Maura Walker and Associates: Maura Walker, Morrison Hershfield:

Konrad Fichtner

**Staff:** B. Lapham, CAO, Capital Regional District; L. Hutcheson, General Manager, Parks & Environmental Services; R. Smith, Senior Manager, Environmental Resource Management (ERM); T. Watkins, Manager, Policy & Planning, ERM; A. Bergner, Planner, ERM; W. Dunn, Program Coordinator,

ERM; D. Dionne (Recorder)

**ABSENT:** 

Director: W. McIntyre

The meeting was called to order at 1:35 p.m.

### 1. Approval of Agenda

The agenda was approved on consensus.

#### 2. Chair's Remarks

Chair Jensen welcomed everyone and made introductory remarks. The goal of the workshop is to inform the Committee on the status of the solid waste management planning process, present key assumptions which summarize findings in waste management areas and obtain confirmation of direction for the development of strategies for the Integrated Solid Waste and Resource Management Plan (ISWRMP).

**3.** Presentations/Delegations: There were none.

### 4. Solid Waste Management Plan Workshop

Chair Jensen introduced the workshop facilitators, Maura Walker from Maura Walker and Associates and Konrad Fichtner from Morrison Hershfield. Ms Walker outlined the workshop objectives, provided background on the planning process to date and advised that they would present each topic and its assumptions for discussion and confirmation.

### Reduce, Reuse and Extended Producer Responsibility (EPR)

Assumption: There is general support for education and EPR programs.

#### Discussion:

- Existing Capital Regional District (CRD) programs don't go far enough
- A weakness with EPR programs is that they are not market-driven
- PPP program lacks ability to reduce packaging. How much influence does a regional district have to reduce packaging?
- The province has limited tools to ensure compliance with recovery goals

- How will we measure success and environmental progress and the benefit to the public in the new plan?
- There needs to be reference to climate change
- Polluters should pay
- How will we tackle contaminated soft plastics?
- Education is often perceived as education for everyone else but me
- Strategies need to clearly define the CRD's role: direct, indirect, advocacy
- Consumer behavior is influenced by education, incentives, convenience, regulations

The Committee supported the assumption.

### The 3<sup>rd</sup> R: Recycling – Collection and End Uses

#### Assumptions:

- The CRD will not get involved in garbage collection in the region
- There is a general shift of recycling programs to EPR
- A long-term kitchen scraps processing strategy will be in place by 2015

#### Discussion:

- What is the rationale for blue box service in some areas and not others (like Port Renfrew)?
- There should be no cross-subsidization of blue box costs by multi-family residents

The Committee supported the assumptions.

### Construction and Demolition (C&D)

Assumption: The private sector will continue to play a major role in construction and demolition waste diversion.

CRD and municipal role focuses on developing policies and regulations

#### Discussion:

- Include a full economic analysis of public service options
- C&D waste has been a driver for industry in our region and should continue to be managed by the private sector as it is working well right now
- C&D waste is regulated by the province and should not become a local government responsibility
- C&D waste is not a lesser level of diversion.
- Add education and incentives to the assumption for the CRD and municipal role
- CRD offered incentives in the 1990's through the Diversion Council but they were not enough
- Illegally dumped C&D waste is an issue in Juan de Fuca EA. Could CRD sponsor one day to pick up C&D waste?
- Victoria is seeing garbage from other municipalities in their public bins
- There will always be some illegal dumping

The Committee supported the assumptions.

#### Residual Management

#### Assumptions:

- The goal is to never have another landfill in the region
- There is support in principle to expand Hartland landfill as required

#### Discussion:

- Assumption is supportable by adding "within the context of diversion goals" after "expanding"
- 50 to 60 years of landfill life are ok we could start mining it in 50 years to extract valuables like metals.
- Do we need to expand?
- A better description may be "greatest use" or "change in design" of Hartland landfill
- There are other possible sites for a landfill (for example, in Juan de Fuca area)
- What is in the remaining 30% how do we plan for zero waste?

The Committee supported the assumptions, with the inclusion of the suggested above wording revisions.

### Resource Recovery

### Assumptions:

- Prerequisite for waste-to-energy (WTE) is 70% diversion, which is a proposed CRD goal by 2020
- WTE will only be considered conceptually in this ISWRMP

#### Discussion:

- Wait to see how other technologies are introduced and function
- The first bullet is not an assumption, but rather a regulation
- The assumption should provide an opportunity to consider viable emerging technologies
- Keep an open mind by not precluding other technologies
- Technologies should be leading edge, not bleeding edge we need proven technology
- Could the plan differentiate between a business case for reducing waste versus a business case for capturing resources?
- We are missing an assumption to optimize landfill gas recovery to 100%
- What is the problem with incineration? (Consultant answer: Banana Build absolutely nothing anywhere near anyone)
- CBC is running a program on emotion versus rational?
- We need to use consistent life expectancy numbers for various scenarios.

The Committee supported the assumptions.

Regulatory and Community Issues - (Post Meeting Note: Appendix B, Page 6 of the Workshop Agenda package, under "Topics" should read "Regulation of Waste Flow" not "Regulation of Haulers".)

Assumption: Waste Flow Management will be considered as part of the ISWRMP planning process.

Allows for potential future implementation

#### Discussion:

- Waste flow management will create unrest and raises red flags among industry
- Extensive consultation would be required
- Create incentives to keep waste in-region (like Put or Pay system in Winnipeg)
- Control over waste flow is a way of funding the waste management system you cannot tax material that leaves the region
- Waste flow management does not allow industry to show innovation
- Assumption is consistent with Regional Sustainability Plan
- Waste flow management would provide needed data for true diversion rate calculation
- It is difficult to implement kitchen scraps processing in the region without committed tonnages
- By having the assumption in the SWMP it allows the discussion to begin
- Halifax is considering removing waste flow management because of its impact on small business and their concern about proprietary information
- We need more information ask staff to put forward more detailed pros and cons
- There is room for more conversation

The Committee did not fully support the assumption for this revision of the SWMP.

### Financial Management

Assumption: New sustainable financial model for the solid waste function is required

Need to find new funding mechanisms (revenues/expenses)

The Committee supported the assumption.

#### 5. Adjournment

The	meeting	Was	adjourned	l at	3.58	n m
1110	meemu	was	auluulliet	ıaı	J.JU	W.III.

u=====================================	1	
CHAIR		
OOLUNTTEE OLEDIK		
COMMITTEE CLERK		



# REPORT TO ENVIRONMENTAL SERVICES COMMITTEE MEETING OF WEDNESDAY, OCTOBER 1, 2014

### SUBJECT SERVICE PLANS REVIEW PROCESS

### **ISSUE**

The Capital Regional District (CRD) embarked on a three year budget and service planning cycle in 2012. 2015 represents the last year of the current three year planning cycle (2013-2015). This report is developed to provide information on the overall service plans and budget review process.

#### **BACKGROUND**

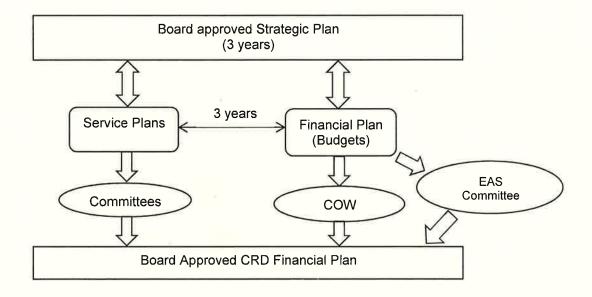
Service plans are primarily developed to describe core service information including key service drivers such as trends, service levels and performance measures. These plans also highlight divisional initiatives and implications for the overall work program for a specific area.

Three year service plans (2013-2015) were specifically developed to provide for continuity of service delivery priorities through the election cycle and to ensure alignment with Board strategic priorities. These plans also provide the CRD with a tool to communicate with stakeholders on service delivery priorities and related outcomes.

The 2013-2015 plans were developed in 2012 for Committee consideration. The plans have now been updated to reflect the 2014 work program results and highlight key changes for 2015. To assist the Committee review process, a one page service plan summary has also been developed to summarize the key points.

#### Approval Process

The following figure identifies the structure for service plan and budget approvals.



The presentation of service plans to the appropriate committee permits the more detailed assessment and knowledge of service delivery and programs. The service plans are intended to provide the committees with information on each division. This update provides committees the opportunity to review the work program and make service amendments as necessary. This iterative process is intended to provide staff with an effective planning tool to deliver their work efficiently.

Under Board direction, the presentation of budgets is segregated between the Electoral Area Services Committee (EASC) or service commissions with delegated authority and the Committee of the Whole. The EASC and/or the service commissions are responsible for reviewing and recommending approval to the Board for electoral area-only service budgets while regional and sub-regional service budgets are presented to the Committee of the Whole. Ultimately, the Board is responsible for approval of all of the service budgets.

### FINANCIAL IMPLICATIONS

2015 Financial Plan estimates are being worked on and will be presented for review and approval at the Committee of the Whole and the EASC meetings in October. The Financial Plan will reflect the results of the Committee review of service plans.

### CONCLUSION

Departments have prepared service plans for presentation to the appropriate standing committee to provide a more detailed assessment and knowledge of service delivery and programs. These service summaries highlight the 2014 results and focus on key changes for 2015.

#### RECOMMENDATION

That the Environmental Services Committee approve the attached service plans.

Rajat Sharma, MBA, CPA, CMA

Senior Manager, Financial Services

Diana E. Lokken, CPA, CMA

General Manager, Finance & Technology

Concurrence

General Manager Parks & Environmental Services Chief Administrative Officer

Concurrence

Robert Lapham, MCIP, RPP

Concurrence

Attachment: Service Plans



### **COMMITTEE - SERVICE PLAN UPDATE SUMMARY- 2015**

**SERVICE NAME:** Environmental Engineering

Changes in assumptions, trends, and other issues since 2014: (linked to section 1.4, 2.6 of the detailed service plan)

All assumptions, trends and other issues identified in the 2013-2015 service delivery plan remain current and relevant. The total value capital projects actively managed will significantly increase with addition of the Hillside Care Facility project for the Capital Regional Hospital District.

### Overall 2014 budget performance:

2014 revenues are on track to meet budget expectations.

Any surplus that may occur by yearend will result in Engineering's hourly chargeout rates being reduced and corresponding credits being transferred back into the appropriate project budgets.

No significant changes are anticipated for 2015.

**New division initiatives:** (service plans have been updated accordingly; linked to section 3 of the detailed service plan)

Increased project activity at Hartland landfill resulting from the kitchen scraps composting initiative and the Seaterra RRC project, and the Hillside Care Facility project is expected 2015.

Proposed changes to staffing levels: (linked to section 2.3 of the detailed service plan)

One 3-year term position in project management will be added in 2015 to meet the increased workload.

#### KEY PERFORMANCE INDICATORS (linked to section 4 of the detailed service plan)

Indicator Name	2013 Planned	2013 Actual	2014 Actual	2015 projected
Financial: Chargeout rates to remain comparable with private consultants	On target	On target	On target	On target
Customers: Project sponsor satisfaction	Very satisfied	Very satisfied	Very satisfied	Very satisfied
Business Process: Project completion on budget	100%	100%	100%	100%

[This page deliberately blank]

# Service Plan for Environmental Engineering

2013-2015 Updated September 15, 2014

Capital Regional District

Capital Regional District / Parks & Environmental Services Department Environmental Engineering Division
625 Fisgard Street, Victoria, BC V8W 2S6
T: 250.360.3078 www.crd.bc.ca



### **Table of Contents**

1	Ove	rview	1
	1.1	Scope	1
	1.2	Primary Contact	1
	1.3	Organization Chart	2
	1.4	Key Trends and Issues	2
	1.5	Summary of 2014 Expenditures and Capital	. 3
2	Serv	rices	4
	2.1	Core Services	4
	2.2	Service Levels	5
	2.3	Workforce Considerations	., 5
	2.4	Customers and Governance	<b>5</b>
	2.5	Delivery Strategy	6
	2.6	Assumptions and Risks	6
3	Divis	sional Initiatives	
4	Perf	ormance Monitoring	8

### 1 Overview

### 1.1 Scope

The Environmental Engineering Division is responsible for providing professional engineering services to the P&ES Department and other CRD departments as needed as well as ensuring that CRD engineering standards are maintained throughout the organization.

Environmental Engineering provides leadership, engineering and construction management support to corporate projects, integrated waste management and resource recovery plans, landfill projects and emerging green environmentally valuable projects/opportunities.

Environmental Engineering is also responsible for the preparation and management of the CRD liquid waste management plans and ensuring the implementation of the commitments made under the plans.

Environmental Engineering administrative and contract management staff provide administrative, financial and clerical support to all division functions.

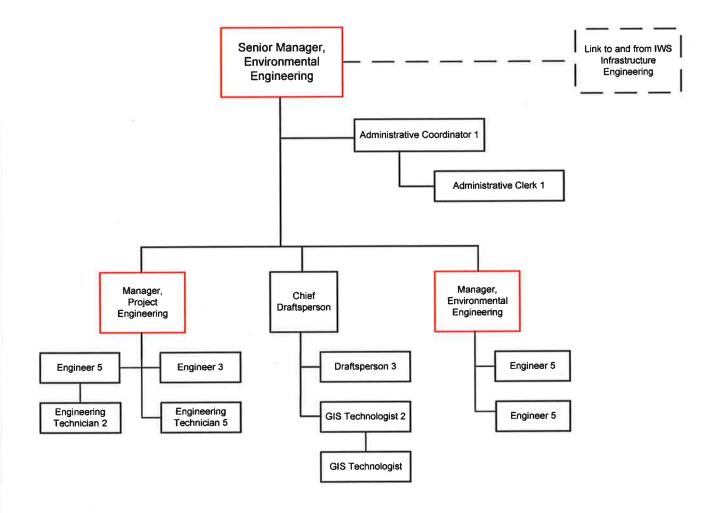
### 1.2 Primary Contact

Name: Dan Telford

Title: Senior Manager, Environmental Engineering Division

Contact Information: Tel: 250-360-3064 Email: dtelford@crd.bc.ca

### 1.3 Organization Chart



### 1.4 Key Trends and Issues

### Implementation of a Regional Thermal Energy Recovery System

- This new energy recovery system will be based on the development of a series of district energy systems (DES) along major regional water and wastewater trunk mains that recover available thermal energy to displace natural gas usage for heating public facilities across the region. The systems may also be used to provide cooling to the facilities served. Emergence of municipal and private developer systems will need to be managed to not adversely impact on the operation of the potable water and wastewater core infrastructure systems.
- It is anticipated that Environmental Engineering will be performing a key role in the implementation of the proposed DES to be developed as part of the Seaterra Program.

### Integration of Resource Recovery with Liquid and Solid Waste Management at Hartland Landfill

 The location of the Seaterra Resource Recovery Centre (RRC) at Hartland presents opportunities for utilizing surplus landfill gas, rainfall runoff storage for RRC process water and the centrate pipeline system for thermal energy conveyance to district energy systems.

### Core Area Wastewater Treatment Program (Seaterra)

 It is anticipated that Environmental Engineering staff will be involved in this project providing design input and support from an environmental engineering and operational perspective in the early phases and to the eventual commissioning and operation of the new facilities in the completion phases.

#### Regional Parks Projects

• It is anticipated that Environmental Engineering will provide engineering support to a number of Parks projects over the long term.

#### Project Stewardship Pilot

 It is anticipated that Environmental Engineering will be performing a key role in the implementation of the Project Stewardship Initiative.

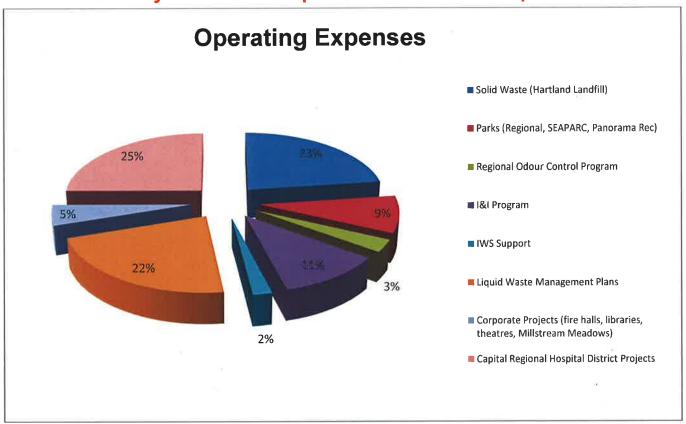
#### Corporate Facility Projects

• It is anticipated that Environmental Engineering will provide engineering support to an increasing number of Corporate projects over the long term.

### Capital Regional Hospital District Projects

 It is anticipated that Environmental Engineering will provide engineering and project management support to a number of Capital Regional Hospital District (CRHD) projects over the long term, including the new Hillside Care Facility project.

### 1.5 Summary of 2014 Expenditures and Capital



Environmental Engineering	2014 Budget
Total Operating Expenses	\$2,253,485

# 2 Services

### 2.1 Core Services

Service	Scope
Environmental Engineering Service	Regional service: Provides engineering support services to all CRD departments. Helps develop new initiatives related to CRD Core functions.

EE Service/Function	Description of Service/Function
Engineering Design and Construction Management Services	Provide engineering feasibility studies, detailed design, tendering, construction management and commissioning services for Parks & Environmental Services Department capital projects.
Hartland Landfill Operations	Provide engineering feasibility studies, detailed design, tendering, construction management and commissioning services for Hartland Landfill Operations.
Regional Parks	Assist with implementation of capital plan projects.
Regional Odour Management Program	Develop and implement odour control strategies to eliminate odours originating from sewer trunk system and treatment plants throughout the region.
Inflow & Infiltration Program	Develop and implement strategies to reduce I&I into sewers to minimize conveyance, treatment and disposal costs to provide reliable sewer service for the community in compliance with regulations related to sewer overflows.
Core Area Liquid Waste Management Plan	Ensure implementation of the commitments set out in the Core Area Liquid Waste Management Plan.
Saanich Peninsula Liquid Waste Management Plan	Ensure implementation of the commitments as set out in the Saanich Peninsula Liquid Waste Management Plan.
Project Management Services for Corporate Projects	Provide overall project management services including engineering feasibility studies, detailed design, tendering, construction management and commissioning services for other CRD departments' capital projects.
Thermal Energy Recovery Initiatives and District Energy Systems	Develop and implement a new thermal energy recovery utility based on DES systems utilizing waste heat recovered from regional treated wastewater effluent, raw sewage and potable water systems.
CRD Project Stewardship Program	Develop and implement CRD-wide project stewardship program to standardize how all CRD departments manage their projects.
Core Area Wastewater Treatment Program	Provide engineering support to this project on an as required basis.
Transportation	Provide engineering and project management support for regional transportation projects development.
Project Management Services for Capital Regional Hospital District Projects	Provide overall project management services including engineering feasibility studies, detailed design, tendering, construction management and commissioning services for CRHD capital projects.

### 2.2 Service Levels

	Service Level Adjustments			
Service	Base year 2012	Year 1 (2013)	Year 2 (2014)	Year 3 (2015)
Manage Capital Projects	\$33 million	\$36 million  The additional workload will be supported by a 3-year term employee.	\$37 million	\$112 million  The additional workload will be supported by a new 3-year term employee.

### 2.3 Workforce Considerations

	Workforce (FTEs)				
Service		Year 1 (2013)		Yans 3 (2015)	
Environmental Engineering Division	13	13	13	13	

A 3-year term position in project management was required starting in 2014 to meet the increased workload associated with the implementation of the regional thermal energy recovery system, Regional Parks Projects, Project Stewardship Initiative, addition of operating contract management at the Hartland landfill and an overall growth in the number of corporate capital projects.

An additional 3-year term position in project management is required starting in 2015 to meet the significantly increased workload associated with the implementation of the new Hillside Care Facility project for the Capital Regional Hospital District.

### 2.4 Customers and Governance

Service	External Customers	Internal Customers	Reviewing Commissions & Committees
Environmental Engineering	Ministry of Transportation and Infrastructure	All CRD Departments, Seaterra and CRHD	Environmental Services Committee
Services	School Districts Vancouver Island Health Authority		Core Area Liquid Waste Management Committee (Standing)
	Salt Spring Island Public Library Association Galiano Library Society		Saanich Peninsula Wastewater Commission (Standing)
	Municipal Partners		Regional Water Supply Commission (Standing)
			Capital Regional Hospital District Board

### 2.5 Delivery Strategy

Service	Delivery Strategy	Funding	Legislative Authority
Project Management, Engineering Design and Construction Management for P&ES, various CRD Departments and CRHD	CRD resources Consultants	Tax requisition fees for services senior government grants	Bylaw 2312 Bylaw 2388
Odour Management; Inflow & Infiltration Programs	CRD resources Consultants	Budget allocation from Sewer function	Bylaw 2312 Bylaw 2388
Liquid Waste Management Plans	CRD resources Consultants	Budget allocation from Sewer function	Bylaw 2312 Bylaw 2388
New Initiatives	CRD resources Consultants	Fee for services, Project partners funding transfers, Senior government grants	New bylaws Community Charter, i.e., Climate Action Charter

### 2.6 Assumptions and Risks

Service	Key Assumptions	Risks
Project Management, Engineering Design and Construction Management for P&ES, various CRD departments and CRHD	Services requisitions are steady as projected.  Referendum is approved on some projects.	No risks anticipated.
Odour Management; Inflow & Infiltration Programs	Services requisitions are steady as projected.	No risks anticipated
Liquid Waste Management Plans	Services requisitions are steady as projected.	No risks anticipated.
New Initiatives	Services requisitions increased as projected.	Staff time available is not able to handle the additional services required.

There are five main initiatives that Environmental Engineering is currently fostering, namely Thermal Energy Recovery Initiatives; CRD Project Stewardship; Transportation; supporting the Core Area Wastewater Treatment Program; and CRHD projects.

The current staffing level is not able to handle this additional workload without the additional staffing support requested.

# 3 Divisional Initiatives

This section highlights divisional Strategic Plan initiatives for 2013-2015 and CRD Strategic Plan priorities.

### **Environmental Engineering Initiatives**

Core Initiatives	Description	Budget Implications
2013		
Regional Thermal Energy Recovery Utility	Develop and implement new regional thermal energy recovery system based on a series of district energy systems along major regional water and sewer trunks that recover thermal heat and displace natural gas usage in public facilities across the region.	TBD
Corporate	Environmental Engineering will be an active participant in the design, construction and commissioning of new corporate projects.	TBD
Regional Parks	Environmental Engineering will be an active participant in the design, construction and commissioning of Parks capital projects.	TBD
2014		
Regional Thermal Energy Recovery Utility	Develop and implement new regional thermal energy recovery system based on a series of district energy systems along major regional water and sewer trunks that recover thermal heat and displace natural gas usage in public facilities across the region.	TBD
Corporate	Environmental Engineering will be an active participant in the design, construction and commissioning of new corporate projects.	TBD
Regional Parks	Environmental Engineering will be an active participant in the design, construction and commissioning of Parks capital projects.	TBD
2015		
Regional Thermal Energy Recovery Utility	Develop and implement new regional thermal energy recovery system based on a series of district energy systems along major regional water and sewer trunks that recover thermal heat and displace natural gas usage in public facilities across the region.	TBD
Corporate	Environmental Engineering will be an active participant in the design, construction and commissioning of new CRD corporate projects.	TBD
Regional Parks and Recreation	Environmental Engineering will be an active participant in the design, construction and commissioning of Regional Parks and Recreation capital projects.	TBD
Capital Regional Hospital District	Environmental Engineering will be an active participant in the project management of the new Hillside Care Facility and future projects.	TBD

### CRD Strategic Priorities 2013-2015

CRD Strategic Priority	Corporate Goal (per Strategic Plan)	Strategic Initiatives	Description	Budget Implications
Regional Transportation & Planning	Improved pedestrian and cycling facilities	Regional Transportation	Environmental Engineering will be an active participant in these initiatives.	TBD
Regional Infrastructure	Increase infrastructure resilience and emergency preparedness for natural disasters and the impacts associated with climate change	Seaterra Program	Environmental Engineering will be a participant in the design, construction and commissioning of the new facilities, on an as required basis.	TBD

# 4 Performance Monitoring

Indicator	2013 Planned	(2013) (actual)	(2014) (actual)	(2015) (projected)
Hourly chargeout rates for professional staff to be comparable with private consulting firm fees	On target	On target	On target	On target
Customers				
Wastewater system odour complaints <5/system	4 (Core Area) 1 (Saanich Pen)	<5/system	<5/system	<5/system
Project Sponsor: Satisfaction with deliverables		Very satisfied	Very satisfied	Very satisfied
Business Processes	Current year	Year 1	Year 2	Year 3
Complete 98% of planned workload annually	90%	98%	98%	99%
Complete projects on budget	100%	100%	100%	100%

**SERVICE NAME:** Environmental Partnerships

Changes in assumptions, trends, and other issues since 2014: (linked to section 1.4, 2.6 of the detailed service plan)

Assumptions, trends and other issues will remain unchanged for 2015.

The division continues with developing and implementing a departmental approach with outreach. The results of the Green 365 pilot will be used to inform future campaigns in 2015.

### Overall 2014 budget performance:

Cross Connection Control – a shortfall of \$21,000 is anticipated due to increased labour costs of developing and implementing the digital form.

Senior budget surplus will be diverted to multi-year departmental outreach initiatives, equipment replacement fund and/or returned to programs.

**New division initiatives:** (service plans have been updated accordingly; linked to section 3 of the detailed service plan)

There are no new, unfunded division initiatives for 2015.

**Proposed changes to staffing levels:** (linked to section 2.3 of the detailed service plan) All services – no change.

### **KEY PERFORMANCE INDICATORS** (linked to section 4 of the detailed service plan)

Indicator Name	2013 Planned	2013 Actual	2014 Actual	2015 Projected
RSCP proper waste treatment	90%	91%	90%	90%
RSCP inspection targets	100%	100%	100%	100%
Demand Management budget reductions	100%	100%	100%	100%

[This page deliberately blank]

# Service Plan for Environmental Partnerships

2013-2015 Updated September 15, 2014

Capital Regional District

Capital Regional District / Parks & Environmental Services Department Environmental Partnerships Division
625 Fisgard Street, Victoria, BC V8W 2S6
T: 250.360.3078 www.crd.bc.ca



### **Table of Contents**

1	Ove	view	ee: 1
	1.1	Scope	1
	1.2	Primary Contact	1
	1.3	Organization Chart	2
	1.4	Key Trends and Issues	2
	1.5	Summary of 2014 Expenditures and Capital	
2	Serv	rices	
	2.1	Core Services	4
	2.2	Service Levels	4
	2.3	Workforce Considerations	,,,,, 5
	2.4	Customers and Governance	6
	2.5	Delivery Strategy	7
	2.6	Assumptions and Risks	7
3	Divi	sional Initiatives	8
4	Perf	ormance Monitoring	g

## 1 Overview

### 1.1 Scope

Environmental Partnerships Division is responsible for identifying partnerships and outreach opportunities to deliver services that foster sustainable environmental behaviour. The division uses a comprehensive tool box approach, including social marketing, education and environmental compliance to provide services and resources that inform, motivate and engage citizens, businesses and local government partners. The division delivers services in five main areas:

- Demand Management
- Regional Source Control
- Cross Connection Control
- Onsite Systems Management
- Outreach and Education

### 1.2 Primary Contact

Name:

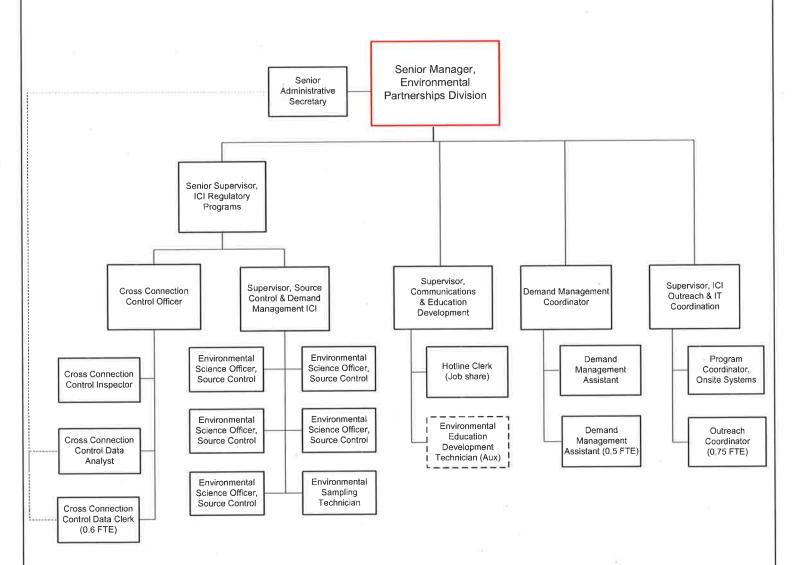
Heidi Gibson

Title:

Senior Manager

Contact information: Tel: 250-360-3307 Email: hgibson@crd.bc.ca

# 1.3 Organization Chart



### 1.4 Key Trends and Issues

The Environmental Partnerships Division is continuing with implementation of a "one-window" approach of integrating regulatory compliance with outreach to encourage sustainable environmental behavior in the region. A key trend in coordinated and integrated outreach will be an ongoing shift into promoting waste reduction for residential and industrial, commercial, and institutional (ICI) sectors. Regional source control inspectors will assist in reaching the business sector to promote the kitchen scraps program. Other key divisional trends include development of department-wide outreach and education initiatives and evaluating internal business processes to identify and implement efficiencies.

Program specific trends include:

**Cross Connection Control** – The Cross Connection Control (CCC) Program follows a five-year facility inspection cycle that includes tracking and monitoring of backflow prevention devices. The program supports the critical role of preventing potential backflow of contaminants into the potable water supply. A substantial number of new installations and the continued monitoring of existing devices have contributed to a data entry backlog. Attention will now be focused on the technology and resources required to reduce the backlog and thereafter support the program for future years.

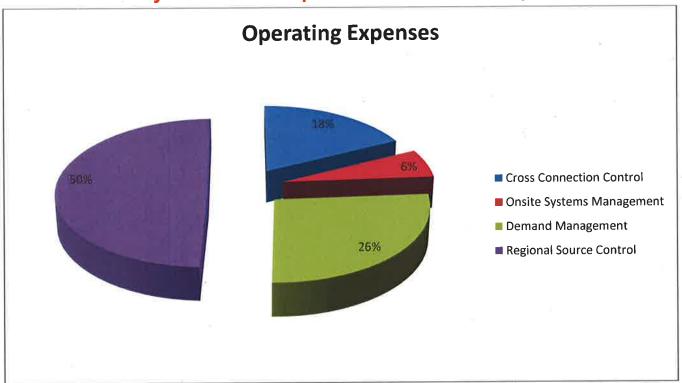
**Regional Source Control** – The Regional Source Control Program (RSCP) continues to drive pollution prevention initiatives for residential, businesses, institutions and industry through integrated approaches of education and outreach, inspection and enforcement. High levels of business compliance with regulations have resulted in significant contaminant reductions. However, increasing trends in certain emerging contaminants that are more difficult to control will present challenges for the program in future years.

**Demand Management** – The Demand Management (DM) Program is responsible for developing water conservation strategies for the region. Overall water use trends in the region are continuing to decline in part due to the success of the program in both the residential and ICI sectors. As a result in declining water consumption, the Demand Management Program funding is reduced by 25% to reflect this trend.

Onsite Systems Management – The Onsite Management Program (OMP) administers the Onsite Sewage System Maintenance Bylaw No. 3479. It is in the second year of regulating maintenance of onsite systems in the four participating municipalities. OMP encourages voluntary bylaw compliance coupled with a bylaw support plan in order to sustain high compliance rates.

**Outreach and Education** – The Outreach and Education Program areas engage and educate students, residents and businesses in the region to foster environmental behavior change and promote departmental campaigns, initiatives and services. Ongoing engagement and education is critical for promoting sustainable behavior and improving the capacity for citizens to understand and address regional environmental issues.

### 1.5 Summary of 2014 Expenditures and Capital



2014 Budget	
\$2,789,689	

# 2 Services

## 2.1 Core Services

Service	Scope
Demand Management	The primary target is to defer the expansion of the drinking water supply system for at least 50 years. Activities include promoting the wise and efficient use of water to both the residential and ICI sectors through education (school learning resources) and public awareness programs, community outreach, administration of CRD Water Conservation Bylaw No. 3061, ICI water audits and grants, research and data analysis.
Regional Source Control	Service to 10 municipalities, 3 electoral areas, 4 First Nations and 2 federal institutions — all with connections to CRD sewage facilities. This service controls the amount of contaminants discharged to sanitary sewers to protect sewage collection and treatment facilities, public health and safety, and the marine receiving environment. Activities include business inspection, monitoring, bylaw enforcement and outreach to businesses and the public.
Cross Connection Control	Service protects the Greater Victoria drinking water supply system against the possibility of contamination by removing or isolating sources that may backflow in the system – protecting public health throughout the region. Activities include facility audits, device tracking, annual testing notification and database management.
Onsite Systems Management	Sub-regional service to 4 municipalities participating in a regulatory bylaw and 10 municipalities and 1 electoral area participating in an outreach program. The Onsite Management Program protects human and environmental health from failing onsite systems by working with industry and systems owners to ensure systems are regularly pumped out. Activities include tracking pump outs and direct mail communication. The outreach program reduces systems failures by educating owners on how their system works and what can impact it.
Outreach and Education	Responsible for coordinating and implementing comprehensive and integrated outreach and education services to internal and external stakeholders, on behalf of the department.

### 2.2 Service Levels

	Service Level Adjustments			
Service	Base year 2012	Year 1 (2013)	Year 2 (2014)	Year 3 (2015)
Demand Management	<ul> <li>Administers water conservation bylaw</li> <li>Coordinates 30 community outreach events per year</li> <li>Education through delivery of 31 workshops, 15 public speaking engagements per year</li> <li>Conducts 10 ICI water audits per year</li> </ul>	25% budget reduction which will result in .3 FTE cut to DM staff, 3 summer students, printing, advertising, and education curriculum. Resources will be reallocated to support departmental-wide outreach initiatives.	No change	Elimination of "once- through-cooling water" rebates to businesses will result in a further 2% budget reduction from current year. Elimination of rebates is delayed until Year 3 to allow time to notify local businesses of pending program reduction.

	<u> </u>			
Regional Source Control	<ul> <li>Outreach, inspections, monitoring and enforcement for 2,000 businesses on sanitary sewers</li> <li>Over 500 coordinated site inspections per year</li> <li>Over 150 sampling events per year</li> </ul>	1 student (shifted from the Demand Management Program)	No change	No change
Cross Connection Control	Complete approximately 250 audits per year     Record keeping and data entry of results for annual testing of 14,000 currently installed backflow prevention devices	No change	No change	No change
Onsite Systems	<ul> <li>Outreach to approximately 27,000 households with onsite sewage systems</li> <li>Monitoring the compliance of approximately 10,000 systems regulated by bylaw</li> </ul>	No change	No change	No change
Outreach and Education	Delivers outreach and education through participation in 19 community presentations, 12 community tours, responding to 55,000 hotline telephone enquiries, 40 facility tours, workshops, and 59 school presentations in 13 municipalities and 3 electoral areas	1 student (shifted from the Demand Management Program)	No change	No change

### 2.3 Workforce Considerations

	Workforce (FTEs)			
Service		Year 1 (2013)	Year 2 (2014)	
Senior Manager	1	1	1	1
Administration	1	1	1	1
Regional Source Control	8	8	8	8
Cross Connection Control	3.6	3.6	3.6	3.6
Education and Communication	2	2	2	2
Onsite System and ICI Outreach	2.75	2.75	2.75	2.75
Demand Management	2.5	2.5	2.5	2.5

# 2.4 Customers and Governance

Service	External Customers	Internal Customers	Reviewing Commissions & Committees
Demand Management	13 municipalities  Residential and ICI customers that are connected to the CRD drinking water supply provided by Sooke Lake Reservoir	Integrated Water Services (IWS), Parks & Environmental Services, Environmental Resource Management (ERM)	Regional Water Supply Commission (standing) Water Advisory Committee (standing)
Regional Source Control	10 municipalities 3 electoral areas 4 First Nations 2 federal facilitiesi industrial, commercial and institutional facilities throughout the region	Hartland landfill, CRD recreation centres and other CRD facilities	Environmental Services Committee (standing) Saanich Peninsula Wastewater Commission (standing) Ganges Sewer Local Service Commission (standing) Highland Water and Sewer Local Services Commission (standing) Magic Lake Estates Water and Sewer Local Services Committee (standing)
Cross Connection Control	13 municipalities 1 electoral area federal and provincial facilities certified backflow prevention testers	CRD facilities and IWS	Regional Water Supply Commission Water Advisory Committee
Onsite Systems Management	4 municipalities	CRD facilities serviced by onsite systems	Environmental Services Committee
Onsite Outreach	8 municipalities 1 electoral area	not applicable	Environmental Services Committee
Outreach and Education	4 school districts 13 municipalities 3 electoral areas senior government institutions	Environmental Protection, ERM, Environmental Engineering, Core Area Sewage Treatment, IWS and Corporate Communications	Environmental Services Committee

## 2.5 Delivery Strategy

Service	Delivery Strategy	Funding	Legislative Authority
Demand Management	CRD resources	Bulk drinking water sales revenue	BC Reg. 284/97, Sec. 5 under Capital Region Water Supply and Sooke Hills Protection Act.
			CRD Water Management Strategic Plan Bylaw No. 2739
-	, A		CRD Water Conservation Bylaw No. 3061
			Regional Water Supply Commission Bylaw No. 2539
Cross Connection Control	CRD resources	Bulk drinking water sales revenue	CRD Cross Connection Control Bylaw No. 3516
Regional Source Control	CRD resources, consultants & laboratory services	Municipal tax requisition, grants, fees and fines	Source Control Local Service Establishing Bylaw No. 3351 CRD Sewer Use Bylaw No. 2922
Onsite Systems Management	CRD resources	Municipal tax requisition, grants	Management of Onsite Sewage Systems Establishment Bylaw No. 3478
			Onsite Sewage System Maintenance Bylaw No. 3479
Onsite Outreach	CRD resources	Permits and fees for disposal of septage at regional facility	CRD Septage Disposal Bylaw No. 2827
Outreach and Education	CRD resources	Cost	Not applicable

## 2.6 Assumptions and Risks

Service	Key Assumptions	Risks
Demand Management	The refocused program adapts resources to the downward trend in water consumption and shifts departmental resources towards new mandates such as coordinated and integrated environmental community outreach.  Climate change predictions are for hotter and drier than average springs and summers.	With hotter and drier summers, water quality and quantity are potentially affected particularly during the summer months due to higher per capita of water consumption and increase in population growth.
Regional Source Control	Source control has been effective in reducing the number of significant incidents in collection systems and at CRD treatment plants. This protective role will become increasingly important with the move to enhanced sewage collection and treatment in the core area.	Introduction of new sewage treatment may counteract importance of the source control program from a public/business perspective, decreased public support and buy-in to source control initiatives

## 3 Divisional Initiatives

#### **Environmental Partnerships Initiatives**

Core Initiatives	Description	Budget
		Implications
2013		
Cross Connection Control Electronic Test Report Project (2013)	Cross Connection and ICI Outreach are currently working with IT to develop an electronic up loadable test report to reduce current backlog and find program efficiencies.	Core budget
	Expected savings will be created through speed of data entry.  As well, the form will be able to confirm the tester and test equipment's current status with regard to certification.	:
Best Practices guidebook ICI – web tool (2013-2014)	Guidebook that combines messaging for all Environmental Services programs with targets for specific sectors.	Core budget
Regional Source Control Program – 5-Year Plan (2013-2015)	Assist in delivery of Environmental Partnerships' mandate through coordinated program strategies including outreach and education, inspections and monitoring, program review and metrics, and research of emerging treatment technologies	Core budget
Strategic Partnerships (2013-2015)	Pursue strategic partnership opportunities to leverage funding and/or form linkages with community, private sector, government and other entities.	Core budget
2014		
Cross Connection Control Electronic Test Report Project (2013)	Cross Connection and ICI Outreach are currently working with IT to develop an electronic up loadable test report to reduce current backlog and find program efficiencies.	Core budget
(completed in 2014)	Expected savings will be created through speed of data entry. As well, the form will be able to confirm the tester and test equipment's current status with regard to certification.	
Best Practices guidebook ICI – web tool (2013-2014)	Online tool that combines messaging for all Parks & Environmental Services programs with targets for specific sectors.	Core budget
Regional Source Control Program – 5-Year Plan (2013- 2015)	Assist in delivery of Environmental Partnerships' mandate through coordinated program strategies, including outreach and education, inspections and monitoring, program review and metrics, and research of emerging treatment technologies	Core budget
CRD Residential Water Survey (completed in 2013)	Conduct survey of residential water users to ascertain attitudes and practices surrounding water use and to identify levels of awareness with regards to CRD water services.	Core budget
Multi-Residential Audit Manual	Update manual to assist multi-residential property owners in undertaking water audits.	Core budget
(completed in 2014) 2015	undertaking water addits.	
	Online tool that combines messaging for all Parks &	Core budget
Best Practices guidebook ICI – web tool (2013-2015)	Environmental Services programs with targets for specific sectors.	Core budget
Regional Source Control Program – 5-Year Plan (2013-2015)	Assist in delivery of Environmental Partnerships' mandate through coordinated program strategies, including outreach and education, inspections and monitoring, program review and metrics, and research of emerging treatment technologies	Core budget

#### CRD Strategic Priorities 2013-2015

CRD Strategic Priority	Corporate Goal (per Strategic Plan)	Strategic Initiatives	Description	Budget Implications
Regional Environmental Stewardship (2 year term position hired)	Links to outcome statement	Coordinated environmental education program	Coordinate existing learning resources and develop new education programming for the middle, secondary and post-secondary levels	Core budget
Regional Environmental Stewardship	Links to outcome statement	"Green 365" Outreach Campaign	Departmental outreach campaign that integrates environmental messaging across programs to encourage environmentally sustainable behavior in the region	Core budget

# 4 Performance Monitoring

Indicator	2013 Planned	(2013) (actual)	(2014) (actual)	(2015) (projected)
Financial				
Implement demand management program funding reductions as per program review	100%	100%	100%	100%
Customers				
External – Industrial, Commercial, Institutions and Nonprofits, First Nations  Maintain and enhance partnerships with parties in these sectors	>2% increase in partnerships	>2% increase in partnerships	>2% increase in partnerships	>2% increase
External – Customer service improvement through coordinated inspections	500 coordinated inspections	500	500	525
External – Undertake cross connection control facility audits	300 cross connection control audits	300 audits	400 audits	400 audits
External – Coordinate the CRD information booth at community events	30 community events	30 community events	30 community events	30 community events
External – Utilized the water cart at community events	15 community events	15 community events	15 community events	15 community events
External – Deliver irrigation workshops to promote water conservation	10 workshops	10 workshops	10 workshops	10 workshops
External – Deliver native plant workshops to promote water conservation	12 workshops	12 workshops	12 workshops	12 workshops
External – Conduct water audits for ICI organizations	10 water audits	10 audits	10 audits	10 audits

Business Processes	Current year	Year 1	Year 2	Year 3
RSCP Core Area priority contaminant reductions (based on trend assessment every three years)	95% of priority contaminant loads are decreasing or stable	Not applicable	Not applicable	Not applicable
RSCP Progress on installation of Proper Waste Treatment	90% of regulated businesses have proper waste treatment installed	>90%	>90%	>90%
RSCP Inspection Targets	100% of annual code of practice sector inspection targets completed	100%	100%	100%
Assess business process review for OMIS database and implement improvements that will reduce current requirements of administrative support	25%	50%	50%	100%



#### **COMMITTEE - SERVICE PLAN UPDATE SUMMARY- 2015**

**SERVICE NAME:** Environmental Resource Management

Changes in assumptions, trends, and other issues since 2014: (linked to section 1.4, 2.6 of the detailed service plan)

Significant 2014 issues include:

- Costs continue to trend above revenue
- Transition to MMBC Blue Box / Depot funding
- Kitchen scraps collection and processing ahead of the proposed 2015 ban at Hartland
- The province has started using per capita waste disposal rates as the standard solid waste
  metric and is targeting 350 kg/capita by 2020. The CRD's current disposal rate is estimated to
  be 343 kg/capita. Potential changes to the CRD's diversion targets will be discussed as part of
  the SWMP revision process and may result in new targets being recommended to
  Environmental Services Committee for consideration.

No significant changes to service levels are anticipated for 2015

#### Overall 2014 budget performance:

Expenditures for 2014 are consistent with planned budget expectations, as are tipping fee revenues which compromise the overwhelming majority of revenues. Cost and revenue trends associated with increased waste diversion and decreased landfilling rates continue to be observed in the Environmental Resource Management budget in 2014 as they have for the past several years.

**New division initiatives:** (service plans have been updated accordingly; linked to section 3 of the detailed service plan)

- An increase aggregate storage area is required to facilitate optimization of airspace associated with current landfill filling plan.
- Annual inflationary increase to general refuse tipping fee of \$3/tonne, starting in 2015.
- RFP to be issued and for a regional kitchen scraps processing facility to provide local capacity.
- Implementation of SAP maintenance management system at Hartland landfill.
- Manhole upgrades along Hartland leachate line to better ensure system integrity.

**Proposed changes to staffing levels:** (linked to section 2.3 of the detailed service plan) No Change.

#### KEY PERFORMANCE INDICATORS (linked to section 4 of the detailed service plan)

Indicator Name	2013 Planned	2013 Actual	2014 Actual	2015 Projected
Financial				
- Net cost per tonne diverted	\$58.11	\$58.11	\$48.65	\$44.27
- Net revenue per tonne landfilled	(\$58.71)	(\$58.71)	(\$54.08)	(\$50.88)
Customers (Hotline)	50,000	55,000	45,000	40,000
Business Process				
- Disposal per capita	320 kg	320 kg	298 kg	277 kg
- Diversion from landfill	52%	52%	54%	60%
- Landfill gas capture	50%	50%	60%	65%

[This page deliberately blank]

# Service Plan for Environmental Resource Management

2013-2015 Updated September 15, 2014







#### **Table of Contents**

1	Ove	view	1
	1.1	Scope	1
	1.2	Primary Contact	1
	1.3	Organization Chart	2
	1.4	Key Trends and Issues	2
	1.5	Summary of 2014 Expenditures and Capital	2
2	Serv	rices	3
	2.1	Core Services	3
	2.2	Service Levels	4
	2.3	Workforce Considerations	4
	2.4	Customers and Governance	5
	2.5	Delivery Strategy	5
	2.6	Assumptions and Risks	6
3	Divis	sional Initiatives	
4	Perf	ormance Monitoring	9

## 1 Overview

## 1.1 Scope

Environmental Resource Management staff administer and manage all municipal solid waste disposal for the Capital Region at Hartland landfill, as well as waste reduction and recycling programs. In 2012, the division administered curbside residential recycling collection (blue box) contract services for all single-family dwellings (118,000 homes) and provided annual funding to apartment owners to assist them with recycling programs (40,000 apartment units). The majority of funding is drawn from Hartland tipping fees with additional revenues from the sale of recyclables and other sources.

Close to 52% of the solid waste generated in the region is being diverted from disposal, with the remaining waste primarily landfilled at Hartland landfill. In 2013, 123,210 tonnes of garbage was landfilled in an environmentally responsible manner. Groundwater and surface water are protected through the collection and removal of leachate, and greenhouse gases are substantially reduced through the collection of landfill gas, which contains methane produced by decaying garbage. The methane is converted into electrical energy to service about 1,600 homes in the region.

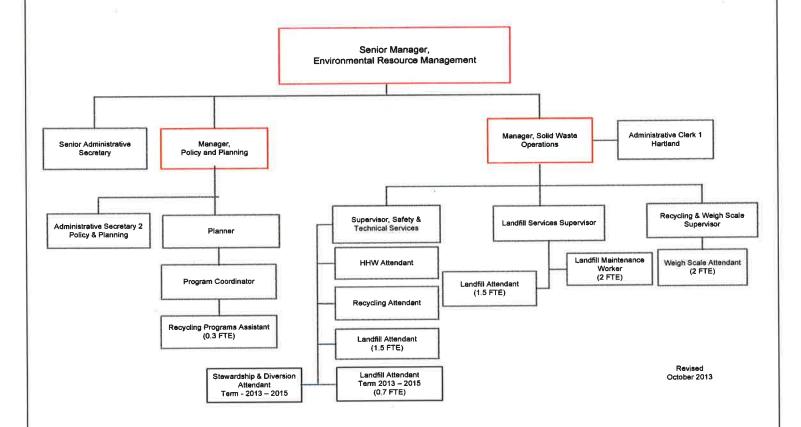
## 1.2 Primary Contact

Name: Russ Smith

Title: Senior Manager

Contact information: Tel: 250-360-3080 Email: rsmith@crd.bc.ca

### 1.3 Organization Chart



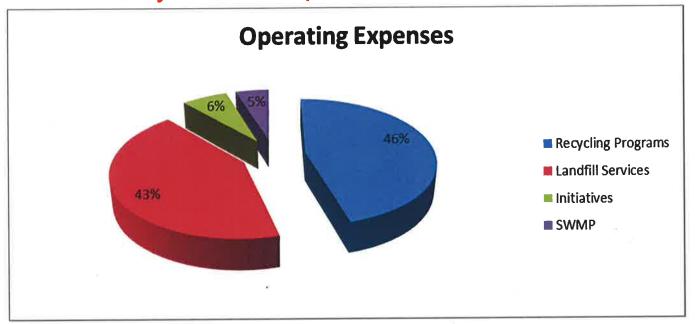
## 1.4 Key Trends and Issues

Environmental Resource Management has a waste diversion goal of 60% diversion by 2015. The 2013 diversion levels are 52% or 349 kg/per person. Increased diversion results in:

- less solid waste being disposed at the Hartland Landfill resulting in increased landfill life and reduced environmental risk (gas/leachate)
- decreased revenue from solid waste tipping fees at Hartland
- increase in Hartland operating costs resulting from increasing diversion programs to manage more materials

Revisions to the Integrated Solid Waste and Resource Management Plan, to be completed in 2014/2015, will result in increased clarity regarding community solid waste management expectations for the Capital Regional District.

## 1.5 Summary of 2014 Expenditures and Capital



Environmental Resource Management	2014 Budget
Total Operating Expenses	\$13,553,273
Total Capital Expenditures	\$2,580,000

## 2 Services

### 2.1 Core Services

Service	Scope
Diversion Programs	All municipalities and electoral areas
Landfill Services	All municipalities and electoral areas     Disposal of municipal solid waste and controlled wastes     Landfill gas capture and utilization     Leachate management
ERM Initiatives	All member municipalities and electoral areas     New diversion initiatives, including organics management, material restrictions     Product stewardship programs – oversight and implementation
Solid Waste Management Planning	All member municipalities and electoral areas Solid Waste Management Plan Solid Waste Management Plan revision and monitoring Long-term planning and financial management Regulatory requirements and compliance monitoring

Division Plan for Environmental Resource Management 2013-2015

#### 2.2 Service Levels

	Service Level Adjustments				
	Base year 2012	Year 1 (2013)	Year 2 (2014)	Year 3 (2015)	
Diversion Programs	<ul> <li>Bi-weekly curbside blue box for 117,000 residents (urban)</li> <li>Depots (rural)</li> <li>Hartland Depot (accepts 16 categories of items)</li> </ul>	Kitchen Scraps diversion strategy (phase 1) – incentive	Kitchen Scraps diversion strategy (phase 2) - not implemented  EPR/Blue Box funding model is changing	Kitchen Scraps diversion strategy (phase 3) - ban	
Landfill Services	<ul> <li>Accepting non banned items 6 days a week (open 57 hrs/wk commercial</li> <li>47 hrs/wk residential)</li> </ul>	No change	No change	Kitchen Scraps ban	
ERM Initiatives	<ul><li>Current pilots:</li><li>Styrofoam</li><li>Wood waste</li><li>Mattresses</li><li>Shingles</li></ul>	New Extended Producer Responsibility (EPR) initiatives	New Extended Producer Responsibility (EPR) initiatives	New Extended Producer Responsibility (EPR) initiatives	
Solid Waste Management Planning	Solid Waste     Management Plan –     Revision 2 (Nov     1995) + 8     amendments	Develop new Integrated Solid Waste and Resource Management Plan (ISWRMP)	Develop new Integrated Solid Waste and Resource Management Plan (ISWRMP)	Implementation of ISWRMP	

### 2.3 Workforce Considerations

	Workforce (FTEs)				
Diversion Programs	5.45	5.45	5.45	5.45	
Landfill Services	11.75	11.75	11.75	11.75	
ERM Initiatives	1.75	1.75	1.75	1.75	
Solid Waste Management Plan	1.75	1.75	1.75	1.75	
Total	20.70	20.70	20.70	20.70	

An increase of 1.7 term employees (3-year term positions) in landfill services is required in 2013-2015 to meet the increased workload:

The full time (1.0) term position is required to address the increased volume of diversion materials being handled at the Hartland drop off area. During off peak times, this position would perform maintenance tasks, freeing up senior maintenance staff to increase their attention to the management of the landfill gas system.

The part-time (0.7) term position is required to provide ongoing break and holiday relief for Hartland operations staff.

The need for these positions will be re-evaluated in 2015 to determine if there is an ongoing workload requirement in light of any substantial changes to waste diversion and landfilling activities within the CRD.

Division Plan for Environmental Resource Management 2013-2015

### 2.4 Customers and Governance

Service	External Customers	Internal Customers	Reviewing Commissions & Committees
Diversion Programs	Local residents and businesses	n/a	Environmental Services Committee
			Solid Waste Advisory Committee
Landfill Services	Local residents, businesses and municipalities	n/a	Environmental Services Committee
	19.		Solid Waste Advisory Committee
ERM Initiatives	Local residents and businesses	n/a	Environmental Services Committee
*			Solid Waste Advisory Committee
Solid Waste Management	Local residents, businesses and municipalities	n/a	Environmental Services Committee
Planning			Public and Technical Advisory Committee

The Solid Waste Advisory Committee provides advice and guidance to the Environmental Services Committee, as requested.

The Environmental Services Committee makes recommendations to the CRD Board on matters relating to the development, operation and administration of solid waste functions, and liquid waste disposal functions for areas outside of the Core Area Liquid Waste Management Plan; and oversees matters related to water supply on the Saanich Peninsula, Port Renfrew and some communities on the Gulf Islands.

The Public and Technical Advisory Committee (PTAC) acts as advisory committee to the Steering Committee (ESC) on the development of the Integrated Solid Waste and Resource Management Plan. PTAC's mandate is to review current and existing programs and identify issues and options. PTAC participates in public consultation, reviews public consultation results and provides input on the final Plan. PTAC ensures that proposed programs and policies are in the best interest of all residents of the CRD, balancing both community and industry needs and technical requirements.

### 2.5 Delivery Strategy

Service	Delivery Strategy	Funding	Legislative Authority
Diversion Programs	CRD resources, contracts and partnerships	Funded through tipping fees received at the landfill and sale of selected recyclable materials	<ul> <li>Local Government Act</li> <li>Solid Waste         Management Plan</li> <li>Various CRD bylaws</li> </ul>
Landfill Services	CRD resources and contracts	Funded through tipping fees received at the landfill	<ul> <li>BC Environmental Management Act</li> <li>BC Hazardous Waste Regulation</li> <li>Local Government Act</li> <li>Solid Waste Management Plan</li> <li>Bylaw 3117</li> <li>MOE Operating Certificate</li> </ul>

Division Plan for Environmental Resource Management 2013-2015

ERM Initiatives	CRD resources, contracts and partnerships	Funded through tipping fees received at the landfill	<ul> <li>Local Government Act</li> <li>Solid Waste         Management Plan</li> <li>Various CRD bylaws</li> </ul>
Solid Waste Management Planning	CRD resources and contracts and partnerships	Funded through tipping fees received at the landfill	<ul> <li>BC Environmental         Management Act</li> <li>Local Government Act</li> <li>Solid Waste         Management Plan</li> <li>Various CRD bylaws</li> </ul>

## 2.6 Assumptions and Risks

Service	Key Assumptions	Risks
Diversion Programs	<ul> <li>Diversion target of 60% by 2015</li> <li>Recycling programs are cost-effective and have high participation</li> <li>Contractors are established and stable</li> <li>Revenue from recyclable materials varies and does not fully cover program expenses</li> </ul>	<ul> <li>The impact of the new packaging and printed paper Extended Producer Responsibility (EPR) program on the CRD's curbside/Hartland recycling depot programs</li> <li>New EPR programs have the potential to shift program delivery and funding</li> <li>Market fluctuations for recyclable materials can significantly affect revenues</li> <li>Public confusion due to proliferation of EPR services</li> </ul>
Landfill Services	<ul> <li>Given current disposal rates, the Hartland Landfill has approximately 25 years of disposal capacity remaining</li> <li>Landfill earnings currently fully fund ERM programs/ initiatives</li> <li>Landfill expenses do not decrease with decreased disposal volumes due to significant fixed costs</li> <li>Hartland requires ongoing investment in critical environmental management infrastructure</li> </ul>	<ul> <li>Landfill volumes (and earnings) will decrease as regional diversion targets are achieved</li> <li>Reduced landfill earnings will result in the need for new revenue sources/program reductions</li> <li>Waste may be redirected by industry out of region if tipping fees increase significantly (loss of revenue)</li> </ul>
ERM Initiatives	<ul> <li>The community supports new or expanded diversion programs</li> <li>Material restrictions are cost-effective and achieve diversion</li> <li>Stewardship programs shift costs from the CRD to the producer/consumer</li> <li>Solid waste education programs are effective</li> </ul>	<ul> <li>Some markets for non-conventional recyclables are limited</li> <li>Material restrictions may increase illegal dumping and/or waste exports out of region</li> <li>New initiatives increase diversion but decrease landfill revenues</li> <li>Diversion initiatives are typically more expensive than incremental landfilling costs</li> </ul>
Solid Waste Management Planning	<ul> <li>The division has an established landfill closure and post closure reserve fund</li> <li>The existing Solid Waste Management Plan is 14 years old and has been updated through seven amendments</li> <li>The new ISWRMP will provide solid waste management direction for the next 5-10 years</li> </ul>	<ul> <li>Uncertainty of impact of liquid waste management plan on ERM</li> <li>Community input into the new ISWRMP may result in the changes to solid waste functions/activities</li> <li>A new ISWRMP must address the need for any additional funding by identifying potential revenue sources and/or program reductions</li> </ul>

## 3 Divisional Initiatives

This section highlights divisional Strategic Plan initiatives for 2013 – 2015 and CRD Strategic Plan priorities.

Environmental Resource Management Division Initiatives

Implement new EPR programs developed by industry stewards	None - 100% per cent of
	None - 100% per cent of
	residential recycling program costs recovered by EPR funding
Work with industry to transition the CRD curbside recycling program under the EPR printed paper and packaging mandate	Assuming 100% cost recovery
Update the CRD's Solid Waste Management Plan in an effort to	Plan development costs in core budget
integrate regional waste management and ensure environmentally and economically sustainable management of the region's waste streams	Implementation costs to be determined
Implement kitchen scraps diversion strategy	Reduced tipping fees (\$800,000 in 2013) plus incentive costs (\$300,000 in 2013)
Optimize landfill gas production. Target of 75% landfill gas recovery	Increased capital investment (\$1,750,000 in 2013)
Implement at least one energy recovery/ enterprise initiative in 2013 that positively impacts the CRD's triple bottom line	To be determined
Implement new EPR programs developed by industry stewards	None - 100% per cent of residential recycling program costs recovered by EPR funding
Work with industry to transition the CRD curbside recycling program under the EPR printed paper and packaging mandate	Subject to completing an agreement with MMBC, blue box service costs will be 100% recovered
Update the CRD's Solid Waste Management Plan in an effort to integrate regional waste management and ensure environmentally and economically sustainable management of the region's waste streams	Plan development costs in core budget Implementation costs to be determined once plan is complete
	CRD curbside recycling program under the EPR printed paper and packaging mandate  Update the CRD's Solid Waste Management Plan in an effort to integrate regional waste management and ensure environmentally and economically sustainable management of the region's waste streams  Implement kitchen scraps diversion strategy  Optimize landfill gas production. Target of 75% landfill gas recovery  Implement at least one energy recovery/ enterprise initiative in 2013 that positively impacts the CRD's triple bottom line  Implement new EPR programs developed by industry stewards  Work with industry to transition the CRD curbside recycling program under the EPR printed paper and packaging mandate  Update the CRD's Solid Waste Management Plan in an effort to integrate regional waste management and ensure environmentally and

Core Initiatives	Description	Budget Implications
Waste Management continued	Implement kitchen scraps diversion strategy	Reduced tipping fees (\$800,000 in 2013) plus incentive costs (\$300,000 in 2013)
		Supplementary budget of \$100,000 required for enforcement of (composting) Bylaw 2736.
Climate Action	Optimize landfill gas production. Target of 75% landfill gas recovery	Increased capital investment (\$1,750,000 in 2013)
Energy Recovery/ Enterprise Opportunities	Implement at least one energy recovery/ enterprise initiative in 2013 that positively impacts the CRD's triple bottom line	Maxim Power assets at Hartland acquired in 2013
2015		8 1
Waste Management	Implement new EPR programs developed by industry stewards	None - 100% per cent of residential recycling program costs recovered by EPR funding
	Work with industry to transition the CRD curbside recycling program under the EPR printed paper and packaging mandate	Subject to completing an agreement with MMBC, blue box service costs will be 100% recovered
	Update the CRD's Solid Waste Management Plan in an effort to integrate regional waste management and ensure environmentally and economically sustainable management of the region's waste streams	Plan development costs in core budget Implementation costs to be determined once plan is complete
	Implement kitchen scraps diversion strategy	2013 - Reduced tipping fees (\$800,000) plus incentive costs (\$300,000)
		2014 - Supplementary budget of \$100,000 required for enforcement of (composting) Bylaw 2736
		2015 – RFP to be issued for regional processing facility, ownership structure and costs TBD
	Inflationary increase to general refuse tipping fee of \$3/tonne	2015 - \$322,500 more revenue
Climate Action	Optimize landfill gas production. Target of 75% landfill gas recovery	2013 - Increased capital investment (\$1,750,000)
Energy Recovery/ Enterprise Opportunities  Implement at least one energy recovery/ enterprise initiative in 2013 that positively impacts the CRD's triple bottom line  2013 - Maxim Powe Hartland acquired		2013 - Maxim Power assets at Hartland acquired
Division Plan for Environmental Res	ource Management 2013-2015	<b>8</b>  Page

#### CRD Strategic Priorities 2013-2015

CRD Strategic Priority	Corporate Goal (per Strategic Plan)	Strategic Initiatives	Description	Budget Implications
Regional Infrastructure	Increase Integrated Resource Recovery	Increase Integrated Resource Recovery	60% solid waste diversion by 2015	Decrease landfill revenue, increase program delivery costs
Regional Environmental Stewardship	Increase efforts to mitigate climate change	Energy Recovery/Enterprise Opportunities	Innovative energy opportunities	Optimization of landfill gas utilization in 2014

# 4 Performance Monitoring

Indicator	2013 (Planned)	2013 (Actual)	2014 (Projected)	2015 (Projected)
Financial				
Net cost per tonne diverted	\$58.11	\$58.11	\$48.65	\$44.27
Net revenue per tonne landfilled	(\$58.71)	(\$58.71)	(\$54.08)	(\$50.88)
Customers				
Hotline inquiries (solid waste) per year	50,000	55,000	45,000	40,000
Business Processes	Current year	Year 1	Year 2	Year 3
Kgs landfilled/capita	320	320	298	277
% diversion	52%	52%	54%	60%
% landfill gas capture	50%	50%	60%	65%

[This page deliberately blank]



#### **COMMITTEE - SERVICE PLAN UPDATE SUMMARY- 2015**

**SERVICE NAME:** Environmental Protection

Changes in assumptions, trends, and other issues since 2014: (linked to section 1.4, 2.6 of the detailed service plan)

Environmental Protection programs are on track to complete year 3 of the current budget and work plan cycle.

There are no changes in assumptions or trends since 2014.

#### Overall 2014 budget performance:

All budgets for all programs are on track to meet budget expectations.

Small surpluses will be carried over for multi-year projects or returned to the main budgets.

**New division initiatives:** (service plans have been updated accordingly; linked to section 3 of the detailed service plan)

There are no new, unfunded division initiatives for 2015.

Proposed changes to staffing levels: (linked to section 2.3 of the detailed service plan)

There are no changes to staffing levels for 2015.

#### KEY PERFORMANCE INDICATORS (linked to section 4 of the detailed service plan)

Indicator Name	2013 Planned	2013 Actual	2014 Actual	2015 Projected
Meet carbon neutral requirements	100%	100%	100%	100%
Investigate high-rated stormwater discharges in core area municipalities	80%	80%	80%	80%
Meet marine environment monitoring requirements	90%	90%	90%	90%

[This page deliberately blank]

## Service Plan for Environmental Protection

2013-2015 Updated September 15, 2014

Capital Regional District

Capital Regional District / Parks & Environmental Services Department Environmental Protection & Water Quality Division 625 Fisgard Street, Victoria, BC V8W 2S6

T: 250.360.3078 www.crd.bc.ca



### **Table of Contents**

1	Ove	rview	, 1
	1.1	Scope	
	1.2	Primary Contact	,1
	1.3	Organization Chart	2
	1.4	Key Trends and Issues	
	1.5	Summary of 2014 Expenditures and Capital	
2	Serv	rices	4
	2.1	Core Services	4
	2.2	Service Levels	<u>7</u>
	2.3	Workforce Considerations	9
	2.4	Customers and Governance	10
	2.5	Delivery Strategy	
	2.6	Assumptions and Risks	
3		sional Initiatives	
4		formance Monitoring	

## 1 Overview

### 1.1 Scope

The division provides scientific, technical and regulatory support to the corporation, municipalities, electoral areas and general public to meet goals and objectives for the restoration, protection and enhancement of the regional environment. The division provides support for service delivery and environmental management in the following areas:

- Wastewater and marine monitoring and assessment;
- Integrated Watershed Management, including: stormwater, harbours and watershed protection;
- Geo-environmental programs (e.g. landfill monitoring, contaminated sites remediation, odour, controlled waste, trucked liquid waste and regional septage, ); and
- Climate action

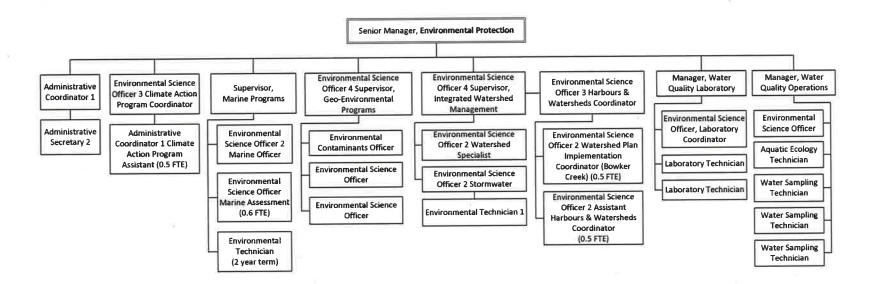
## 1.2 Primary Contact

Name: Glenn Harris

Title: Senior Manager, Environmental Protection & Water Quality Division

Contact Information: Tel: 250-360-3090 Email: <a href="mailto:gharris@crd.bc.ca">gharris@crd.bc.ca</a>

## 1.3 Organization Chart



### 1.4 Key Trends and Issues

The Division provides support and leadership for environmental management in regional services and functions. There are several major trends and issues that will impact Division work over the next three years. Research and information around climate change will emphasize the need for increased attention on mitigation (i.e., reduction of energy use) and adaptation (e.g., to rising sea levels and increased weather variability) over the short term.

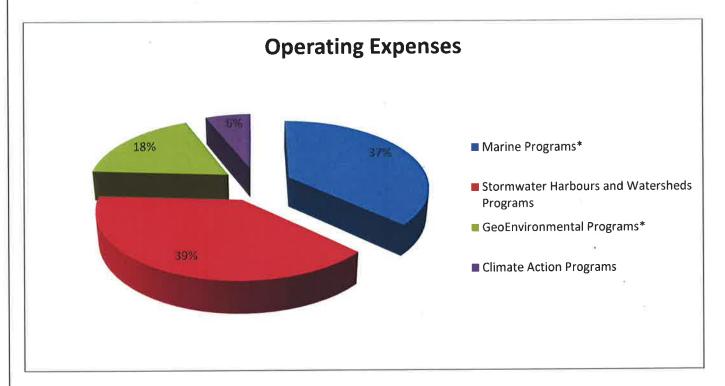
At the corporate level, the 2013-2015 Strategic Plan includes regional environmental stewardship as one of the six core priorities. A focus on climate change, conservation of habitat, and protection of watersheds, receiving environments and overall environmental quality are key threads in this priority. The Regional Sustainability Strategy (RSS) includes climate action through the entire document and the Division will play a key role in developing the climate action sub-strategy and the overall document, as well as working with municipalities and electoral areas on implementation.

The core area wastewater treatment project will result in changes to the marine monitoring and assessment programs, as well as support for wastewater characterization and baseline monitoring and assessment. The Integrated Solid Waste and Resource Management Plan will likely result in new support from our Division on policy and planning, as well as project development work in addition to the continued environmental monitoring programs. The Division will support Environmental Engineering development of resource recovery projects and opportunities for potential carbon and energy reduction.

At the program level,

- 1) The Wastewater and Marine Environmental program has developed a five-year Core Area monitoring program in collaboration with the BC Ministry of Environment. This program will further evolve as the core area sewage treatment project finalizes outfall locations and addresses regulatory monitoring and assessment requirements. Similar monitoring cycles have been put in place for the Saanich Peninsula (4-year cycle) and Electoral Area (3-year cycle) treatment plants.
- 2) The Climate Action program will continue its role to educate and enable internal departments, municipalities and electoral areas and the community to mitigate greenhouse gas emissions and adapt to climate change. Demand for climate action support will likely continue to increase as the economic case builds to complement the environmental need for action. The development of corporate greenhouse gas balancing projects will be a focus of short-term work as well.
- The Integrated Watershed Management program will continue to implement an integrated watershed management approach to protecting multi-use regional watersheds. The program will perform annual monitoring, evaluation and reporting for stormwater discharges, watercourses and receiving water bodies as well as facilitate and promote collaboration among local governments, senior governments, stewardship groups and other stakeholders. The program also supports other CRD programs as required.
- 4) The Geo-Environmental programs will focus on support to the Environmental Resource Management division, including Hartland Environmental programs, as well as miscellaneous waste programs and contaminated sites, such as Millstream Meadows and Thetis Lake Rifle Range.

## 1.5 Summary of 2014 Expenditures and Capital



<sup>\*</sup> The Operating expenditures are included in other department/divisional budgets

Environmental Protection	2014 Budget
Total Operating Expenses	\$3,687,351

## 2 Services

#### 2.1 Core Services

Division services come at the request of other departments or divisions to meet regulatory obligations (e.g., marine monitoring, stormwater monitoring and landfill monitoring) or at the request of the Board to provide strategic support (e.g., climate action). The division also provides general environmental expertise on an "as needed" basis. This includes support for environmental assessments of capital projects, oversight of contaminated sites remediation or enhancement of capital assets and targeted educational initiatives.

Sei	rvice	Scope
1	Marine Monitoring and Assessment – Core Area	<ul> <li>Provide regulatory compliance monitoring and scientific assessment services on behalf of Integrated Water Services</li> <li>Assess the potential effects of the outfalls on the marine environment and human health</li> <li>Share results internally to guide Regional Source Control Program efforts and Integrated Water Services to inform plant operators about efficiency of treatment processes</li> <li>Prepare comprehensive annual reports and data interpretation</li> </ul>
2.	Marine Monitoring and Assessment - Saanich Peninsula and Electoral Areas (SGI, SSI, JdeF)	<ul> <li>Provide regulatory compliance monitoring and scientific assessment services on behalf of Integrated Water Services</li> <li>Assess the potential effects of the outfalls on the marine environment and human health</li> <li>Share results internally to guide Regional Source Control Program efforts and Integrated Water Services to inform plant operators about efficiency of treatment processes</li> <li>Prepare comprehensive annual reports and data interpretation</li> </ul>
3.	Stormwater – Core Area	<ul> <li>Monitor stormwater discharges to the environment</li> <li>Perform upstream investigations to narrow down sources of contamination</li> <li>Monitor conditions in watercourses</li> <li>Support municipal staff with resources and information</li> <li>Development and/or coordination of watershed plans</li> <li>Deliver public education programs related to controlling contamination and environmental stewardship</li> </ul>
4.	Stormwater - Saanich Peninsula	<ul> <li>Monitor stormwater discharges to the environment</li> <li>Perform upstream investigations to narrow down sources of contamination</li> <li>Monitor conditions in watercourses</li> <li>Support municipal staff with resources and information</li> <li>Deliver public education programs related to controlling contamination and environmental stewardship</li> </ul>
5.	Stormwater Source Control - Saanich Peninsula	<ul> <li>Evaluate stormwater-carried contamination leaving properties</li> <li>Provide guidance and education in order to assist the business to resolve potential and/or active contamination issues</li> <li>Monitor properties for potential contamination issues</li> <li>Enforce a stormwater protection bylaw</li> </ul>
6.	Stormwater – Salt Spring Island	<ul> <li>Monitor stormwater discharges to the environment</li> <li>Perform upstream investigations to narrow down sources of contamination</li> <li>Monitor conditions in watercourses</li> <li>Undertake activities related to the protection of multi-use watersheds (Salt</li> </ul>
7.	Stormwater – Southern Gulf Islands	Spring Island)  Support Electoral Area directors with resources and information  Deliver public education programs related to controlling contamination and environmental stewardship
8.	Stormwater – Juan de Fuca	

9. Stormwater - Sooke	Monitor stormwater discharges to the environment
41	Perform upstream investigations to narrow down sources of contamination
	Monitor conditions in watercourses
	Support municipal staff with resources and information
	Deliver public education programs related to controlling contamination and
	environmental stewardship
10. Harbours	<ul> <li>Coordination and implementation of harbours environmental protection and improvement initiatives, and related activities within Portage Inlet, Gorge Waterway, Victoria Harbour, Esquimalt Harbour and Esquimalt Lagoon</li> </ul>
	<ul> <li>Monitoring, mapping, reporting and public education on issues relating to the marine and shore area environments</li> </ul>
	Coordination and collaboration with public authorities and other persons
	on issues relating to the marine and shore area environments
	Implementing programs related to rehabilitation and improvement of the
	marine and shore area environments
11. Hartland Environmental	Conduct regulatory compliance monitoring of groundwater and surface water in operational areas and at property compliance locations to assess effectiveness of leachate containment and control systems
	<ul> <li>Conduct monthly monitoring of leachate quality to assess permit compliance for discharge to sanitary sewer</li> </ul>
	<ul> <li>Conduct regular monitoring of ambient air, property boundary and building foundations to assess potential for subsurface migration of landfill gas and protection of worker health and safety</li> </ul>
	Monitoring assesses effectiveness of collection and control systems for landfill gas and leachate
	Issue controlled waste permits and respond to public inquires
	<ul> <li>Prepare comprehensive annual report to comply with MOE Operational Certificate requirements</li> </ul>
	Coordinate and provide technical expertise on major projects and
	operational issues
12. Environmental Contaminants	<ul> <li>Work collaboratively with trucked liquid waste service providers to ensure appropriate disposal practices</li> </ul>
	Provide support to municipalities regarding options for high-strength liquid waste disposal
	<ul> <li>Monitor and assess sewer odour complaints and liaise with Integrated Water Services and Environmental Engineering to implement sewer odour control strategies</li> </ul>
	<ul> <li>Monitor the quality of sludge from CRD wastewater treatment facilities</li> <li>Manage the contract for the regional septage facility</li> </ul>
13. Millstream Meadows Remediation	Conduct quarterly monitoring of groundwater quality to assess the effectiveness of remedial actions on groundwater conditions at the site.
	Conduct drilling and well installation to assess potential pathways for contaminant movement in the groundwater on the site and within the
	regional aquifer
lk.	Conduct hydrogeological testing and evaluation to assess potential flow pathways for groundwater movement
	<ul> <li>Planning and implementing activities to identify risks and mitigation strategies, support risk management of the site and advance site remediation</li> </ul>
	<ul> <li>Complete quarterly monitoring of domestic wells within 1 km of the site</li> </ul>
	and reporting of results to residents
	and reporting or recents to recidents

14. Climate Action	•	Provide support to local governments in developing and implementing climate action plans, policies, programs and bylaws
	•	Support the CRD in achieving corporate climate action objectives including carbon neutral operations and adaptation preparedness
	•	Compile and distribute scientific information, data and indicators related to local and regional GHG emissions and projected climate impacts
	•	Liaise with senior levels of government on climate-related programs, policies and legislation
	•	Increase public awareness of climate change impacts and strategies for emissions reductions through engaging the public and private sectors, non-profit organizations and community organizations

## 2.2 Service Levels

	Service Level Adjustments				
Sa	rvice		Year 1 (2013)	Year 2 (2014)	Year 3 (2015)
1.	Marine Monitoring and Assessment – Core Area	Monitoring of 2 outfalls and 34 marine stations (surface) to meet regulatory requirements under 5-year plan (2011-2015)	New federal regulations require increased wastewater monitoring as of January 1, 2013	Increased allocation from IWS budgets for the new wastewater sampling.	No change relative to Year 2.
-		Monitoring of 2 outfalls and 17 marine stations (seafloor) to meet regulatory requirements under 5-year plan (2011-2015)	No marine monitoring under 5-year plan (2011- 2015)	Monitoring of 2 outfalls and 17 marine stations to meet regulatory requirements under 5-year plan (2011- 2015)	Monitoring of 2 outfalls and 3 marine stations to meet regulatory requirements under 5-year plan (2011-2015)
2.	Marine Monitoring and Assessment – Saanich Peninsula and Electoral Areas	Saanich Peninsula: Monitoring and assessment of 1 outfall and 37 marine stations to meet regulatory requirements	Updated monitoring (within existing budget) after review with MOE	No change relative to Year 1	No change relative to Year 2
		Electoral Areas: Monitoring and assessment of 5 outfalls and 30 marine stations to meet regulatory requirements	Potential changes (within existing budgets) after review with MOE	No change	No change
3.	Stormwater – Core Area	Monitor 650 discharges	No change	No change	No change
		Investigate 43 high-rated discharges	Investigate high-rated	Investigate high-rated	Investigate high-rated

			discharges	discharges	discharges
			from 2012	from 2013	from 2014
		Hold 6 IWM inter-municipal meetings	No change	No change	No change
4.	Stormwater - Saanich Peninsula	Monitor 290 discharges	No change	No change	No change
	Α.	Investigate 12 high-rated discharges	Investigate high-rated discharges from 2012	Investigate high-rated discharges from 2013	Investigate high-rated discharges from 2014
5.	Stormwater Source Control – Saanich Peninsula	Program Development	No change (Implementatio n phase)	Meet regulatory requirements	Meet regulatory requirements
6.	Stormwater – Salt Spring Island	Provide support related to multi- use watershed protection	No change	No change	No change
7.	Stormwater – Southern Gulf Islands	Monitor 80 discharges	No change	No change	No change
8.	Stormwater – Juan de Fuca	Monitor 97 discharges	No change	No change	No change
9.	Stormwater - Sooke	Monitor 147 discharges	No change	No change	No change
10	. Harbours	Meet regulatory requirements	No change	No change	No change
11	. Hartland Environmental	Complete quarterly groundwater quality monitoring on 49 boundary compliance wells	No change	No change	No change
		Complete semi-annual groundwater quality monitoring on 59 assessment wells	No change	No change	No change
		Complete groundwater flow monitoring and analysis on 120 wells a minimum of 6 times per year	No change	No change	No change
		Complete monthly leachate quality sampling at 5 stations to assess compliance	No change	No change	No change
	E P	Complete surface water quality monitoring at 5 boundary compliance stations and 25 assessment stations a minimum of 6 times per year	No change	No change	No change
		Conduct ambient grid monitoring for landfill gas at 140 locations	No change	No change	No change
		Conduct subsurface gas probe monitoring at 17 locations	No change	No change	No change

	Report gas collection efficiency quarterly	No change	No change	No change
	Complete 12 controlled waste audits per year	No change	No change	No change
	Process controlled waste permits as required (approx. 180 annually)	No change	No change	No change
12. Environmental Contaminants	Track volume of trucked liquid waste received at the septage facility (2,718,406 gallons of trucked liquid waste in 2011)	No change	No change	No change
13. Millstream Meadows Remediation	Complete quarterly monitoring for 20 wells, including property boundary wells	Complete Stage 1 work to install 5 proposed exploratory drill holes and complete hydrogeologic testing (see 5 year Capital Plan)	Complete Stage 2 work to install perimeter groundwater system (see 5-year Capital Plan)	Conduct soil vapour assessment, risk assessment and remediation planning (see 5-year Capital Plan)
	Complete quarterly monitoring of 20 privately-owned domestic drinking water wells within 1 km of the site	No change	No change	No change
14. Climate Action	Complete 13 local and 1 regional Community Energy and Emissions Inventory Reports (2012)	No change	No change	No change
:	Support 15 community climate events, projects or campaigns annually	No change	No change	No change
	Host 4 inter-municipal climate action working group meetings annually	No change	No change	No change
9	Complete 1 corporate Green House Gas (GHG) inventory report annually	No change	No change	No change

## 2.3 Workforce Considerations

	Workforce (FTEs)				
Senior Manager	1	1	1	1	
Administration	2	2	2	2	
Wastewater and Marine Environmental Programs	3	3	3	3	
Integrated Watershed Management Program	6	6	6	6	
Climate Action Program	1.5	1.5	1.5	1.5	
GeoEnvironmental Program	3.6	3.6	3.6	3.6	
Total	17.1	17.1	17.1	17.1	

### 2.4 Customers and Governance

Service	External Customers	Internal Customers	Reviewing Commissions & Committees
Marine Monitoring and Assessment – Core Area	Core municipalities MOE (regulatory), MMAG (advisory), IOS/UVic/SFU (research)	IWS	ESC
Marine Monitoring and Assessment– Saanich Peninsula	Sidney, North Saanich, Central Saanich, MoE (regulatory), MMAG (advisory), IOS/UVic/SFU (research)	IWS	SPWWC
Marine Monitoring and Assessment – Electoral Areas	SSI, SGI, Port Renfrew, MoE (regulatory), MMAG (advisory)	IWS	Ganges Sewer Local Services Committee (LSC), Highland Water and Sewer LSC, Magic Lake Estates Water and Sewer LSC, Port Renfrew Utility Services Committee
Stormwater – Core Area	Core municipalities, Esquimalt and Songhees FN	ES	ESC
Stormwater –	Sidney, North Saanich, Central Saanich,	ES	SPWWC
Saanich Peninsula	Peninsula FNs		0711110
Stormwater Source Control – Saanich Peninsula	Sidney, North Saanich, Central Saanich	ES	SPWWC
Stormwater – Salt Spring Island	Internal	ES	SSI Director, EASC
Stormwater – Southern Gulf Islands	Internal	ES	SGI Director, EASC
Stormwater – Juan de Fuca	Internal	PPS (EA planning)	JdeF Director, EASC
Stormwater - Sooke	Sooke	ES	Sooke Council
Harbours	MOE	ES	ESC
Hartland Environmental	MOE (regulatory)	ERM	ESC
Environmental Contaminants	MOE (regulatory)	IWS, ES	ESC
Millstream Meadows Remediation	Ministry of Forests, Lands and Natural Resources Operations, MOE	ES	ESC
Climate Action	Municipalities, electoral areas, MCSCD (regulatory via LGA)	All CRD departments	ESC

## 2.5 Delivery Strategy

Generally, Environmental Protection works with municipal partners to provide monitoring and reporting services. Information regarding stormwater quality and any forensic investigations are provided directly to municipal engineering departments, as well as to the provincial regulator, as required. The Harbours program was

developed in consultation with municipal partners and coordinates many community groups around harbour stewardship issues. Part of the service now lies outside of the LWMP commitments. Wastewater and marine monitoring is negotiated with the regulator (now on a 5-year plan) and reported out to the ESC/Board and the regulator annually. The Climate Action program provides support and information to municipalities, the corporation, as well as the general public. The GeoEnvironmental program provides technical and regulatory support to other departments and divisions for the Hartland Environmental and Environmental Contaminants components of the program. The Millstream Meadows remediation provides services to municipal partners and the province.

Service	Delivery Strategy	Funding	Legislative Authority
Marine Monitoring and Assessment – Core Area	CRD Resources, contract, partnership	Allocation from IWS	<ul> <li>Environmental         Management Act (EMA)</li> <li>Municipal Sewage         Regulation (MSR)</li> <li>Wastewater Systems         Effluent Regulations         (WSER)</li> </ul>
Marine Monitoring – Saanich Peninsula and Electoral Areas	CRD Resources	Allocation from IWS	EMA, MSR, WSER
Stormwater – Core Area	CRD Resources, contract	Requisition	EMA, MSR
Stormwater – Saanich Peninsula	CRD Resources	Requisition	EMA, MSR
Stormwater Source Control – Saanich Peninsula	CRD Resources	Requisition	EMA, MSR
Stormwater – Salt Spring Island	CRD Resources	Requisition	EMA, MSR
Stormwater – Southern Gulf Islands	CRD Resources	Requisition	EMA, MSR
Stormwater – Juan de Fuca	CRD Resources	Requisition	EMA, MSR
Stormwater - Sooke	CRD Resources	Requisition	EMA, MSR
Harbours	CRD Resources	Requisition	EMA, MSR
Hartland Environmental	CRD Resources, contract	Allocation from ERM	EMA, Landfill Gas Regulation
Environmental Contaminants	CRD Resources	Allocation from IWS, ES	EMA
Millstream Meadows Remediation	CRD Resources, contract, partnership	Capital project requisition	EMA, CSR
Climate Action	CRD Resources, external funding partners	Requisition and Grants	LGA, BC Climate Act Charter, Greenhouse Gas Reduction Target Act

In the case of most services, the strategy is to utilize CRD resources (staff, equipment and operating funds) to deliver the service. Marine, stormwater and geoenvironmental programs utilize some contract services for analytical laboratory work and some data analyses. The climate action program has several partnerships (e.g., federal and provincial governments, BC Hydro) to deliver integrated messages and programs. The Millstream Meadows contaminated site remediation is a partnership with the BC government and utilizes contracted services for much of the on-site work. The Thetis Lake Rifle Range Remediation project utilizes consultant, contracting and internal resources (Environmental Protection and Parks divisions).

## 2.6 Assumptions and Risks

Service	Key Assumptions	Risks
Marine Monitoring and Assessment – Core Area	LWMP and MSR mandated service	
Marine Monitoring – Saanich Peninsula and Electoral Areas	LWMP and MSR mandated service	
Stormwater – Core Area	LWMP mandated service	
Stormwater – Saanich Peninsula	LWMP mandated service	
Stormwater Source Control – Saanich Peninsula	Requested service by municipalities, LWMP Mandated (by amendment)	Changes in legislated     requirements may impact
Stormwater - Salt Spring Island	Required service by EAs	programs.
Stormwater - Southern Gulf Islands	Required service by EAs	programo.
Stormwater – Juan de Fuca	Required service by EAs	Negative environmental
Stormwater - Sooke	Required service by EAs	effects from contamination
Harbours	LWMP mandated service	
Hartland Environmental	SWMP mandated service	may require increased
Environmental Contaminants	LWMP mandated service (Trucked Liquid Waste)	program effort.
Millstream Meadows Remediation	Liability - mandated service (EMA); property held until remediation completed	
Thetis Lake Rifle Range Remediation	Secured funding through existing Parks allocations and awarded provincial grant.	,
Climate Action	Requested regional service	

## 3 Divisional Initiatives

This section highlights divisional Strategic Plan initiatives for 2013 – 2015 and CRD Strategic Plan priorities.

#### **Environmental Protection Division Initiatives**

Description	Budget Implications
Continue with integrated watershed management in core stormwater program	\$25K supplemental
Develop and implement watershed monitoring and assessment program	none
Develop water quality objectives for harbours in partnership with MOE	none
Integrate climate-related policies into all five chapters of the Regional Sustainability Strategy and develop Climate Action Sub-Strategy to guide regional efforts for next decade	none
Complete annual corporate greenhouse gas inventory and associated reporting on behalf of CRD	Climate Action Revenue Incentive Program funds
Continued implementation of educational campaign on food/climate change issues	Included in \$30,000 continuous supplemental request (contingent on external matching funds)
Provide assistance to initiate hydrogeological review to assess leachate management requirements for future landfilling.  Provide assistance to implement enhanced landfill gas management plan	ERM funding
Exploratory drilling and hydrogeological testing for contaminant pathways assessment  Planning and implementing remedial activities to support risk management of the site	none
	Continue with integrated watershed management in core stormwater program  Develop and implement watershed monitoring and assessment program  Develop water quality objectives for harbours in partnership with MOE  Integrate climate-related policies into all five chapters of the Regional Sustainability Strategy and develop Climate Action Sub-Strategy to guide regional efforts for next decade  Complete annual corporate greenhouse gas inventory and associated reporting on behalf of CRD  Continued implementation of educational campaign on food/climate change issues  Provide assistance to initiate hydrogeological review to assess leachate management requirements for future landfilling.  Provide assistance to implement enhanced landfill gas management plan  Exploratory drilling and hydrogeological testing for contaminant pathways assessment  Planning and implementing remedial activities to support risk management of

Core Initiatives	Description	Budget Implications
Marine Monitoring and Assessment – Core Area	New federal wastewater regulations came in effect January 1, 2013. Additional monitoring is necessary to meet the regulations.	\$44K (\$22K continuous supplementary for each northeast trunk (Clover) and northwest trunk (Macaulay) sewer systems.)
Marine Monitoring and Assessment – Saanich Peninsula and Electoral Areas	Finalize monitoring program design for Electoral Area treatment plant monitoring programs	none
Core Area Stormwater -IWM	Continue with integrated watershed management in core area stormwater program	\$25K continuous supplementary approved for 2013
Core Area Stormwater – monitoring	Develop and implement watershed monitoring and assessment program	none
Harbours Water Quality Objectives	Develop water quality objectives for harbours in partnership with MOE	none
Watershed Education Initiative	A multi-media campaign to inform and engage residents, youth and businesses about watershed issues and to inspire action. This is core program work that is substantially enhanced with a RBC Blue Water grant.	\$50,000 (2013/2014 already allocated IWMP budget item) plus \$75,000 grant from Royal Bank.
Regional Sustainability Strategy and Climate Action Sub- Strategy Development	Support the development of the Regional Sustainability Strategy and associated Climate Action Sub-Strategy & Climate Action Blueprint through consultation and regional integration.	Not yet determined
Coastal Sea Level Rise Risk Assessment & Model Bylaw Project	Complete sea level rise risk assessment for capital region.  Create a model bylaw for management of coastal flood hazard areas in response to rising sea-levels.	\$50,000 secured from NRCan and \$15,000 secured from Tides Canada
Carbon Neutral Operations Reporting	Complete annual corporate greenhouse gas inventory and associated reporting on behalf of CRD	Climate Action Revenue Incentive Program funds
Hartland Environmental	Provide assistance to initiate hydrogeological review to assess leachate management requirements for future landfilling.  Provide assistance to implement	ERM funding
Thetis Lake Rifle Range Remediation	enhanced landfill gas management plan Undertake site remediation through Independent Remediation process.	Dedicated Parks allocation of \$683,854 and provincial grant of up to \$177,500

Core Initiatives	Description	Budget Implications
Millstream Meadows Remediation	Exploratory drilling and hydrogeological testing for contaminant pathways assessment	none
	Planning and implementing remedial activities to support risk management of the site	Ü

### CRD Strategic Priorities 2013-2015

CRD Strategic Corporate Go		Strategic Initiatives	Description	Budget Implications
Priority	(per Strategic Plan)			
Regional Cooperation	Develop stronger relationships with First Nations in the CRD	Integrated Watershed Management	Discuss IWM with First Nations and see if traditional ecological knowledge can be incorporated into IWM	Included in 2013-2015 budget
		Marine Assessment	Discuss outfall monitoring results with First Nations and see if potential impacts on First Nations fisheries interests can be better incorporated into the overall outfall impact assessments.	Included in 2013-2015 budget
Regional Transportation & Planning	Increase integration of regional transportation and land use planning	Electric Vehicle Infrastructure and Strategy	Complete electric vehicle network planning, educate consumers, and help to accelerate installation of electric vehicle charging stations across region.	
Regional Infrastructure	Increase infrastructure resilient and emergency preparedness for natural	Improve capacity and quality of infrastructure to handle climate change impacts	Complete sea level rise risk assessment for capital region. Create a model bylaw for	\$50,000 secured from NRCan and \$15,000 secured from Tides Canada

CRD Strategic Priority	C Corporate Goal (per Strategic Plan)	Strategic Initiatives	Description	Budget Implications
	disasters and the impacts associated with climate change		management of coastal flood hazard areas in response to rising sealevels.	2
Regional Environmenta Stewardship	Increase efforts to mitigate further climate change	Maintain support to municipalities, electoral areas, businesses and individuals for reducing regional energy use and greenhouse gas emissions	Service activities and programming	\$30,000 continuous supplemental request (contingent on external matching funds)
		Achieve corporate carbon neutral operations	Annual program to measure energy and fuel use, reduce consumption, offset or balance carbon impacts and report to stakeholders.	Departmental costs to purchase carbon offsets, if required.
÷	Increase response to the effects of climate change	Increase regional capacity and action to adapt to the effects of climate change	Implement programs to educate and support businesses, households and institutions	\$30,000 continuous supplemental request (contingent on external matching funds)

# 4 Performance Monitoring

Level	Performance Measure	2013 Planned	2013 Actual	2014	2015
Wastewater and Marine Environmental Programs (WMEP) - Core Area (Macaulay/Clover)	Meet all regulatory compliance monitoring requirements	100% of necessary samples collected and reported	No change	No change	No change
WMEP - Saanich Peninsula Wastewater Treatment Plant (WTP)	Meet all regulatory compliance monitoring requirements	100% of necessary samples collected and reported	No change	No change	No change
WMEP - Ganges Harbour WTP	Meet all regulatory compliance monitoring requirements	100% of necessary samples collected and reported	No change	No change	No change
WMEP - Maliview Estates WTP	Meet all regulatory compliance monitoring requirements	100% of necessary samples collected and reported	No change	No change	No change
WMEP - Schooner Way WTP	Meet all regulatory compliance monitoring requirements	100% of necessary samples collected and reported	No change	No change	No change
WMEP - Cannon Crescent WTP	Meet all regulatory compliance monitoring requirements	100% of necessary samples collected and reported	No change	No change	No change
WMEP - Port Renfrew WTP	Meet all regulatory compliance monitoring requirements	100% of necessary samples collected and reported	No change	No change	No change
WMEP - Core Area (Macaulay/Clover) Receiving Environment Effects Monitoring	Meet all receiving environment effects monitoring requirements	90% of samples, proposed in Ministry of Environment approved monitoring program, collected and reported	No change	No change	No change
WMEP - Saanich Peninsula WTP Receiving Environment Effects Monitoring	Meet all receiving environment effects monitoring requirements	90% of samples, proposed in Ministry of Environment approved monitoring program, collected and reported	No change	No change	No change
Integrated Watershed Management Program (IWMPIWMP) – Stormwater Quality (Core Area, SaaPen, Sooke, SGI, JdF)	Amount of catalogued stormwater discharges sampled	20% of all stormwater discharges sampled each year	No change	No change	No change
IWMP – Stormwater Quality (Core Area, SaaPen, Sooke, SGI, JdF)	Amount of discharges sampled that had received high-ratings in the previous year	80% of all high-rated discharges sampled each year	No change	No change	No change

IWMP – Stormwater Quality (Core, SaaPen, Sooke, SGI, JdF)  Amount of discha that received high in the previous ye receive upstream investigative effor		80% of all high-rated discharges investigated each year	No change	No change	No change
IWMP – Harbours Program and Stormwater Quality  Number of streams with continuous flow monitoring		4 streams	No change	No change	No change
IWMP – Harbours Program and Stormwater Quality  Number of streams with continuous water quality monitoring		2 streams	No change	No change	No change
IWMP – Stormwater Source Control SaaPen	Number of businesses inspected	15% of businesses regulated under the bylaw inspected annually	No change	No change	No change
IWMP – Integrated Watershed Management (IWM)	Number of public events participated in with a high level of IWMP content	2 major public events annually	No change	No change	No change
IWMP - IWM	Number of regular meetings with municipalities to provide feedback on IWM work plans, create opportunities to work together to achieve IWM goals and ensure sharing of watershed-related information among participants	6 meetings annually	No change	No change	No change
IWMP – Stormwater Quality (Core, SaaPen, Sooke, SGI, JdF)	Number of sampling reports produced.	5 or 3 (varies due to reporting cycle) reports annually	5	3	No change
IWMP – IWM  Number of workshops forums to provide educational and professional growth opportunities for CRD and municipal staff or topics related to watershed management.		1 workshop held each year	No change	No change	No change
IWMP – Harbours Program	Amount of volunteer hours leveraged to efficiently deliver program	300 volunteer hours on projects each year	No change	No change	No change

IWMP – Harbours Program	Number of multi- stakeholder committees and community groups engaged and/or	3 multi-stakeholder committees supported annually	No change	No change	No change
	coordinated	15 community groups engaged or supported through program activities annually			
IWMP – Harbours Program  Number of active inventory or habitat restoration projects in progress		2 projects in-progress at a time during each year	No change	No change	No change
GeoEnvironmental Programs (GEP) - Hartland Environmental Programs	Groundwater, surface water and leachate monitoring	100% of compliance stations monitored each year	No change	No change	No change
GEP - Hartland Environmental Programs	Groundwater, surface water and leachate monitoring	90% of assessment stations monitored each year	No change	No change	No change
GEP – Hartland Environmental Program – Controlled Waste	Monitor waste received for acceptability and ensure all permit conditions are met	Minimum 12 audits/inspections per year	No change	No change	No change
GEP – Hartland Environmental Program – Landfill Gas	Ambient monitoring of landfill surface to evaluate the integrity of cover systems and identify locations of gas release	Minimum of 2 monitoring events per year	No change	No change	No change
GEP – Hartland Environmental Program – Landfill Gas	Monitoring of building foundation and perimeter wells to ensure compliance with BC Landfill criteria	Minimum of 4 (quarterly) monitoring events per year	No change	No change	No change
GEP – Environmental Contaminants – Sewer Odour Monitoring	Monitoring of sewer headspace to identify locations not in compliance with regional target of 10 ppm H <sub>2</sub> S average	90% of assessment stations monitored and reported each year	No change	No change	No change
GEP – Environmental Contaminants – Trucked Liquid Waste	Conduct public education with advertising campaign	Minimum of 6 advertisements per year	No change	No change	No change
GEP – Environmental Contaminants – Trucked Liquid Waste	Engage service providers/ stakeholders and provide opportunity for communication and education	Minimum of 1 service provider/ stakeholder meeting per year	No change	No change	No change

Division Plan for Environmental Protection 2013-2015

GEP – Environmental Contaminants – Trucked Liquid Waste  Volume of trucked liquid waste received at the Septage facility		100% of 2011 level	No change	No change	No change
GEP – Environmental Contaminants – Regional Septage Disposal	Continuity of service and compliance with terms of contract	Minimum of 1 contractor meeting per year	No change	No change	No change
GEP – Contaminated Sites – Millstream Meadows	Millstream Meadows site remediation	100% of compliance wells monitored each quarter	No change	No change	No change
GEP – Contaminated Sites – Millstream Meadows	Millstream Meadows site remediation	100% of domestic wells in program sampled quarterly and results reported to all residents within 1km of site, within 6 weeks of sampling.	No change	No change	No change
Climate Action Program	Complete annual carbon neutral operation commitments	100% of all requirements for the preceding year, completed by March 31	No change	No change	No change
Climate Action Program  Ensure municipalities and electoral areas have access to timely information and/or opportunities related to climate action		a) 4 inter-municipal climate action working group meetings annually b) 2 inter-municipal climate action steering committee meetings annually c) 12 e-newsletters annually d) annual 1:1 municipal staff visits	No change	No change	No change
Climate Action Program	Engage in projects, presentations and initiatives with community stakeholders on topics of energy conservation, GHG mitigation and/or climate adaptation	15 events/sessions annually	No change	No change	No change



### **COMMITTEE - SERVICE PLAN UPDATE SUMMARY- 2015**

**SERVICE NAME: Water Quality** 

Changes in assumptions, trends, and other issues since 2014: (linked to section 1.4, 2.6 of the detailed service plan)

Water Quality program will continue to be responsible for all aspects of drinking water quality within the Greater Victoria Water System and continue to provide water quality oversight for 13 small systems operated by the CRD.

Program staff will continue service delivery standard by providing drinking water quality planning, sampling, analytical and reporting services, including providing advice on water system design, source and distribution system water monitoring and auditing of treatment plant and watershed operations.

The Local Service Area (LSA) drinking water quality analysis program will expand to include more analyses coming to the CRD lab rather than to external laboratories. Analytical services for testing new water mains are dependent on the economy.

#### Overall 2014 budget performance:

Revenues are on track to meet budget expectations.

Any surplus will be returned to the Regional Water Supply budget.

**New division initiatives:** (service plans have been updated accordingly; linked to section 3 of the detailed service plan)

There will be a review of lab services provided by the CRD for drinking water and wastewater analyses. The LSA program will expand to include more analyses coming to the CRD lab rather than external laboratories.

There will be no budget impact or supplementary funding required.

**Proposed changes to staffing levels:** (linked to section 2.3 of the detailed service plan) An auxiliary position will be added in 2014 to assist with various duties.

#### KEY PERFORMANCE INDICATORS (linked to section 4 of the detailed service plan)

Indicator Name	2013 Planned	2013 Actual	2014 Actual	2015 Projected
Meet provincial water quality limits	100%	100%	100%	100%
Meet federal water quality limits	100%	100%	100%	100%
Meet laboratory certifications standards	Yes	Yes	Yes	Yes

[This page deliberately blank]

# **Service Plan for Water Quality**

2013-2015 Updated September 15, 2014

Capital Regional District

Capital Regional District / Parks & Environmental Services Department Water Quality Division 625 Fisgard Street, Victoria, BC V8W 2S6

T: 250.360.3078 www.crd.bc.ca



### **Table of Contents**

1	Overview						
	1.1	Scope	1				
	1.2	Primary Contact	1				
	1.3	Organization Chart	2				
	1.4	Key Trends and Issues	2				
	1.5	Summary of 2014 Expenditures and Capital	3				
2	Serv	ices	4				
	2.1	Core Services	4				
	2.2	Service Levels	4				
	2.3	Workforce Considerations	5				
	2.4	Customers and Governance	5				
	2.5	Delivery Strategy	6				
	2.6	Assumptions and Risks	6				
3	Divis	sional Initiatives	7				
4	Perf	ormance Monitoring	9				

# 1 Overview

# 1.1 Scope

The Water Quality Program is now part of the Environmental Protection Division, under one Senior Manager.

The water quality program is responsible for all aspects of drinking water quality within the Greater Victoria Water System, analytical services for the Wilderness Mountain Water System and Port Renfrew Water System, along with providing water quality oversight for eleven small, CRD-operated, local service area (LSA) drinking water systems.

The program consists of a water sampling section and laboratory support (water quality and aquatic ecology). The program provides planning, sampling, analytical and reporting services covering all aspects of drinking water system operation, including providing advice on drinking water system design, source water quality and distribution system monitoring along with auditing of water treatment plants and watershed operations.

The team consists of two exempt managers, eight technical staff and one auxiliary position to provide support across the sampling and laboratory functions.

The laboratory manager also oversees an analytical laboratory at Saanich Peninsula wastewater treatment plant which provides support to the facility and several other small, CRD-operated sewage treatment facilities in the electoral areas.

The team has started a review of laboratory services to evaluate and make recommendations for laboratory operations and sampling programs for both wastewater and drinking water services.

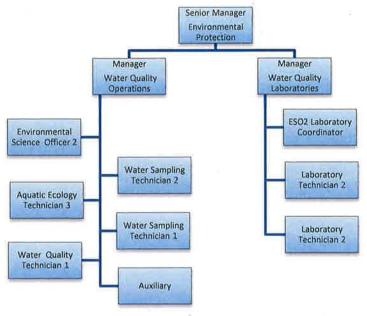
### 1.2 Primary Contact

Name: Glenn Harris

Title: Senior Manager, Environmental Protection

Contact information: Tel: 250-360-3090 Email: gharris@crd.bc.ca

### 1.3 Organization Chart



### 1.4 Key Trends and Issues

#### **Increasing Consumer Expectations**

Over the years, consumers in Greater Victoria continue to raise their expectations of the quality of drinking water delivered to their homes. In past years, many consumers readily tolerated intermittent episodes of discoloured water. Now, they are less tolerant and request explanations of water quality lapses. Consumers also expect that water quality data is freely available to them.

#### **Increasingly Stringent Water Quality Guidelines and Standards**

Over the years, regulatory authorities have implemented increasingly stringent water quality guidelines and standards. The new limits require increased attention to water supply and delivery operations and to water quality monitoring and reporting. New drinking water quality guideline limits were recently published by Health Canada.

#### Improved Fire Protection Standards Adversely Affect Water Quality

New fire protection standards require large-diameter water mains and increased storage within distribution reservoirs. These additional volumes adversely influence water quality by increasing the age of water within the distribution system contributing to the loss of chlorine residuals and the increased potential for bacterial regrowth in the distribution system.

Division Plan for Water Quality 2013-2015

#### New Treatment Plants Installed in Local Service Area Water Systems

With the installation of new water treatment plants, the quality of the drinking water in the local service area distribution systems will improve.

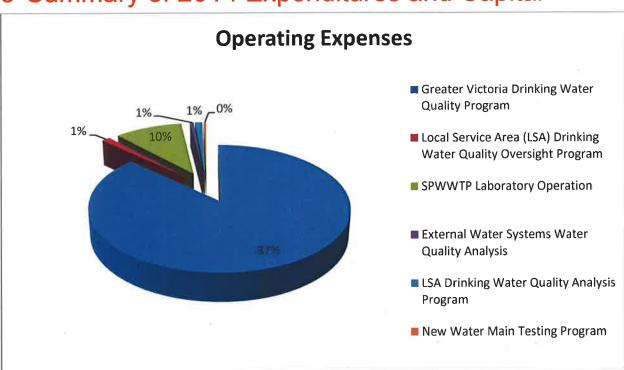
#### Implementation of New Water Quality Information System Database

The new water quality database now provides for the automatic upload of water quality data to the internet and is resulting in substantive time saving for laboratory staff along with providing the public and other agencies with upto-date water quality information.

#### **Assumptions**

The Greater Victoria drinking water quality program is mature and relatively stable from year to year. In contrast, the water quality monitoring programs in the Local Service Area water systems are in a state of flux as the overall monitoring program must still be reviewed and redesigned.

## 1.5 Summary of 2014 Expenditures and Capital



Water Quality	2014 Budget
Total Operating Expenses	\$1,252,834
Total Capital Expenditures	\$27,000

# 2 Services

### 2.1 Core Services

Service	Scope
Greater Victoria Drinking Water Quality Program (sub-regional service)	The Water Quality program is responsible for all aspects of drinking water quality within the Greater Victoria Water System. Program staff provide planning, sampling, analytical and reporting services covering all aspects of drinking water system operation, including providing advice on water system design, source and distribution system water monitoring and auditing of treatment plant and watershed operations.
LSA Drinking Water Quality Oversight Program (local service)	The Water Quality program provides water quality oversight for thirteen small drinking water systems operated by the Capital Regional District. Program staff also provide sampling, analytical and reporting services for some of the water systems and provide advice on water system design, source and distribution system water monitoring and auditing of treatment plant operations.
SPWWTP Laboratory Analytical Services (local service)	The SPWWTP laboratory provides analytical and reporting services for a number of CRD-operated waste water treatment facilities and outfalls.
External Water Systems WQ Analysis (local service)	The Water Quality laboratory provides analytical and reporting services for external water systems such as Parks Canada, DND, etc., that are connected to the Greater Victoria Drinking Water System.
LSA Drinking Water Quality Analysis (local service)	The Water Quality laboratory provides analytical and reporting services for select Local Service Area water systems such as Wilderness Mountain and Port Renfrew.
New Water Main Testing Program (local service)	The Water Quality laboratory provides analytical and reporting services for new water main developers.

## 2.2 Service Levels

	Service Level Adjustments					
Service	Base year 2012	Year 1 (2013)	Year 2 (2014)	Year 3 (2016)		
Greater Victoria Drinking Water Quality Program	<ul> <li>Approx. 6,000 samples and 26,000 tests analyzed at CRD WQ lab</li> <li>Approx. 100 analytical reports published on the CRD website annually</li> </ul>	No Change	No Change	No Change		

LSA Drinking Water Quality Oversight Program	<ul> <li>13 drinking water systems monitored</li> <li>Samples analyzed internally and externally</li> <li>Approx. 90 analytical reports published on the CRD website annually</li> </ul>	No Change	No Change	No Change
SPWWTP Laboratory Analytical Services	Approx. 10,000 tests performed	No Change	No Change	No Change
External Water Systems WQ Analysis	<ul> <li>Approx. 1650 tests performed for Saanich Operations</li> <li>12 tests performed for Parks Canada</li> </ul>	No Change	No Change	No Change
LSA Drinking Water Quality Analysis	Approx. 550 samples and 2,000 tests for 3 local service systems	No Change	No Change	No Change
New Water Main Testing Program	Approx. 500 tests performed	No Change	No Change	No Change

## 2.3 Workforce Considerations

	Workforce (FTEs)		D.			
			Year 2 (2014)			
Greater Victoria Drinking Water Quality Program	8.8	8.8	8.8	8.8		
Water Quality Oversight for Local Service Area Water Systems	0.2	0.2	0.2	0.2		
SPWWTP Lab	1	1	1	1		
Total	10	10	10	10		

# 2.4 Customers and Governance

Service	External Customers	Internal Customers	Reviewing Commissions & Committees
Greater Victoria Drinking Water Quality Program	6 Water Suppliers, Public	IWS	Regional Water Supply Commission (Standing) Regional Water Advisory Committee
LSA Drinking Water Quality Oversight Program	LSA customers	IWS	Various Local Service Area Commissions (Advisory Commissions)
SPWWTP Lab Analytical Services	None	IWS	None directly
External Water Systems	Parks Canada, District of	None	None

Division Plan for Water Quality 2013-2015

WQ Analysis	Saanich		
LSA Drinking Water Quality Analysis	Public	IWS Divisions	Various Local Service Area Commissions
New Water Main Testing Program	Developers	IWS Divisions	None

Comments if needed.

# 2.5 Delivery Strategy

Service	Delivery Strategy	Funding	Legislative Authority
Greater Victoria Drinking Water Quality Program	CRD Resources	Regional Water Supply System Operations Budget	BC Drinking Water Protection Act and Regulation
LSA Drinking Water Quality Oversight Program	CRD Resources	Allocation from Local Service Area Operations Budgets (various)	BC Drinking Water Protection Act and Regulation
SPWWTP Lab Analytical Services	CRD Resources	Allocation from SPWWTP Operations Budget	a a
External Water Systems WQ Analysis	CRD Resources	External water suppliers	BC Drinking Water Protection Act and Regulation
LSA Drinking Water Quality Analysis	CRD Resources	Specific LSA Operations Budgets	BC Drinking Water Protection Act and Regulation
New Water Main Testing Program	CRD Resources	Developers	BC Drinking Water Protection Act and Regulation

# 2.6 Assumptions and Risks

Service	Key Assumptions	Risks
Greater Victoria Drinking Water Quality Program	Program will continue unchanged	a I
LSA Drinking Water Quality Oversight Program	Program will continue unchanged	×
SPWWTP Lab Analytical Services	Program will continue unchanged	

External Water Systems WQ Analysis	Program may add additional external systems	
LSA Drinking Water Quality Analysis	Program will expand to include more analyses coming to the WQ Lab rather than MB Labs	
New Water Main Testing Program	Analytical services are dependent on the economy	

# 3 Divisional Initiatives

This section highlights divisional Strategic Plan initiatives for 2013 – 2015 and CRD Strategic Plan priorities.

### Water Quality Division Initiatives

Core Initiatives	Description	Budget Implications
2013		
Water Quality Database Redevelopment	Redevelop the 1990s era Oracle-based Water Quality Information System (WQIS) database to provide internal sample and test processing and a repository for drinking water quality data. Currently, the WQIS database holds 2.2 million records covering some two decades of water quality monitoring.	\$15,000 in 2013 IWS Capital Budget
LSA Drinking Water Quality Monitoring Standardization ongoing	Review and standardize water quality monitoring and reporting requirements for 13 LSA drinking water systems.	\$15,552 in 2013 LSA budgets (various)
ES Emergency Response Procedures Update	Coordinate the review and update Environmental Sustainability Emergency Response Procedures	Allocation from IWS and Hartland Operations Budget in 2014
2014		
Water Quality Database Redevelopment 2013 COMPLETE	Currently, the WQIS database holds 2.2 million records covering some two decades of water quality monitoring. Provide additional enhancements including GIS location mapping and QC/QA aspects.	\$15,000 in 2014 IWS Capital Budget

Division Plan for Water Quality 2013-2015

Core Initiatives	Description	Budget Implications
LSA Drinking Water Quality Monitoring Standardization ongoing	Review and standardize water quality monitoring and reporting requirements for 13 LSA drinking water systems.	\$15,552 in 2015 LSA budgets (various)
Expand LSA Drinking Water Analyses (this is new for 2014)	Explore the feasibility for samples being collected from the LSA drinking water systems to be analyzed at the WQ Laboratory rather than MB Laboratories. If feasible, implement.	No budget implications
2015		
LSA Drinking Water Quality Monitoring Standardization ongoing	Review and standardize water quality monitoring and reporting requirements for 13 LSA drinking water systems.	\$15,000 in 2015 LSA budgets (various)
Expand LSA Drinking Water Analyses ongoing	Explore the feasibility for samples being collected from the LSA drinking water systems to be analyzed at the WQ Laboratory rather than MB Laboratories. If feasible, implement.	No budget implications

### CRD Strategic Priorities 2013-2015

CRD Strategic Priority	Corporate Goal (per Strategic Plan)	Strategic Initiatives	Description	Budget Implications
Regional Infrastructure	Links to Success Indicator Metric	LSA Drinking Water Quality Monitoring Standardization	Meet Provincial, Federal and Vancouver Island Health Authority's health- related drinking water guidelines, acts and regulations in water service areas	None

# 4 Performance Monitoring

Indicator	2013 Planned	(2013) (actual)	(2014) (actual)	(2015) (projected)
Financial				
Meet annual WQ operations budget target	Within 5%	Same	Same	Same
Customers				
Meet provincial water quality limits	Meet all health-related limits	Same	Same	Same
Meet federal drinking water quality guideline limits	Meet all health-related guideline limits (cannot meet some aesthetic limits)	Same	Same	Same
Meet USEPA drinking water quality rules and regulation	Where appropriate, meet USEPA rules and regulations	Same	Same	Same
Business Processes	Current year	Year 1	Year 2	Year I
Provincial Lab Certification	Pass certification requirements	Same	Same	Same
CALA Proficiency Testing	Within limits of proficiency tests	Same	Same	Same

[This page deliberately blank]



# REPORT TO ENVIRONMENTAL SERVICES COMMITTEE MEETING OF WEDNESDAY, OCTOBER 1, 2014

#### SUBJECT REGIONAL KITCHEN SCRAPS PROCESSING CAPACITY

#### ISSUE

To update the Environmental Services Committee (ESC) regarding the Request for Proposals (RFP) process for the development of a kitchen scraps processing facility in, or within proximity, of the region.

#### **BACKGROUND**

At its June 25, 2014 meeting, the ESC made the following recommendations:

That staff be directed to initiate and report back to the Environmental Services Committee, at its October 1, 2014 meeting, the development of a Request for Proposals (RFP) for a long-term regional kitchen scraps processing facility by:

- a) working with the Province to amend the Capital Regional District's Solid Waste Management Plan to allow for a wider variety of processing technology and ownership structures should the facility be sited at Hartland; and
- b) developing a draft RFP structure that, when issued and evaluated, would result in a CRD Board preferred regional kitchen scraps processing solution being offered to municipalities and private industry to which they can consider committing tonnage.

The Capital Regional District's (CRD) current Solid Waste Management Plan (SWMP) includes approval for a public private partnership (P3) composting facility at Hartland North. Any proposed facility at Hartland would be subject to consultation, traffic studies and an environmental impact assessment. CRD staff have contacted the British Columbia Ministry of Environment (MOE) who have confirmed that any changes to our current SWMP, with respect to food waste processing technology and facility ownership structures, would require an administrative amendment to the SWMP in the form of a written request to the MOE. This work can be conducted in parallel to the RFP process.

CRD staff worked with consultants, Morrison Hershfield, to develop a scoping report to identify key considerations in the development of a kitchen scraps processing RFP. Appendix A outlines the proposed draft RFP structure and an implementation timeline. Key considerations include ownership, procurement, type of technology and location. The proposed timeline is dependent on technology and location, with a small private sector composting proposal requiring a shorter timeline than a major P3 facility at Hartland.

It is proposed that preferred kitchen scraps processing proponents, selected from the Expression of Interest (EOI) submissions, will participate in a collaborative RFP process. The collaborative procurement process, that would include municipal waste haulers, would better inform the proponent's RFP submissions and attempt to ensure the proposals best meet the needs of participating municipalities.

#### **ALTERNATIVES**

That the Environmental Services Committee recommend that the Capital Regional District Board:

- 1. Endorse the proposed work-plan and direct staff to issue an Expression of Interest.
- 2. Not proceed with the Expression of Interest at this time.

#### **ECONOMIC IMPLICATIONS**

The economic implications of a long-term in-region facility will only be determined once the results from an in-region kitchen scraps processing RFP are available. It is anticipated that interested municipal or private sector participants would commit to paying the tipping fee associated with the successful RFP.

#### **ENVIRONMENTAL IMPLICATIONS**

Kitchen scraps processing technology and facility location both have the potential to influence environmental impacts. Any in-region facility, regardless of technology, would be subject to the CRD composting bylaw and include environmental assessments and controls, including leachate, odour, vector, litter and dust management plans. The diversion of kitchen scraps from disposal at the landfill will result in environmental benefits, including landfill space savings, greenhouse gas reductions and resource recovery. These will be determined by the results of the RFP.

#### **STAKEHOLDER IMPLICATIONS**

Long-term options arising from the RFP process will be presented to CRD municipalities and private haulers, specifying the preferred technology and expected user fees, in order to allow them to determine whether they will commit to delivering kitchen scraps to the processing facility.

Stakeholder consultation will be conducted with the local community as potential locations are identified through the Expression of Interest process.

#### FEEDSTOCK IMPLICATIONS

Most kitchen scraps collection programs in the region currently accept source separated kitchen scraps. The District of Saanich co-collects residential kitchen scraps with yard and garden material. Staff from other municipalities have indicated that they are considering modifying their kitchen scraps collection to also include yard and garden material in the future. As a result, the type and ratio of organic feedstocks supplied by municipal participants, discussed as part of the collaborative RFP process, will potentially impact processing technology selection.

#### **INTERGOVERNMENTAL IMPLICATIONS**

Potential proponents are expected to ensure proposed locations have appropriate land use designations by working directly with the appropriate municipality or electoral area.

#### **MARKET IMPLICATIONS**

The CRD completed an informal telephone survey of potential buyers in the region which indicated that there would be a market for CRD-produced Class A compost. This information will be made available to short-listed proponents who will be required to provide a more detailed market study for all resources recovered from their proposed processing technology as part of the RFP. The recovered resources could include, but is not be limited to, compost, biogas, heat/energy and fertilizer.

#### **NEXT STEPS**

Implementation of the kitchen scraps processing procurement process includes:

- Issue Expression of Interest (EOI) October 2014
- Board selection of EOI proponents and review of RFP documents January/February 2015
- Issue RFP March 2015
- Collaboration with RFP proponents and municipal haulers Summer 2015
- Volume commitments and award RFP (timing dependent on technology and location) Summer / Fall 2015
- Finalize contracts and start construction (timing dependent on technology and location) –
   Fall 2015 / Spring 2016

#### CONCLUSION

The systematic development of a kitchen scraps processing Request for Proposals (RFP), in consultation with solid waste collection providers and the community, has the best potential for facilitating the development of a long-term, sustainable and cost effective processing facility in, or within proximity, of the region. This report presents background information, a draft RFP structure and associated implementation timeline.

#### RECOMMENDATION

That the Environmental Services Committee recommend that the Capital Region District Board endorse the proposed work plan and direct staff to issue an Expression of Interest.

Russ Smith, Senior Manager

Environmental Resource Management

Larisa Hutcheson, P.Eng., General Manager

Parks & Environmental Services

Concurrence

Robert Lapham, MCIP, RPP

Chief Administrative Officer

Concurrence

RS:dd

Attachment: 1

[This page deliberately blank]

#### PROPOSED DRAFT RFP STRUCTURE AND IMPLEMENTATION TIMELINE

12R223 Page 3 Sept. 19, 2014

### Regional Kitchen Scraps Processing Facility Expression of Interest & Request for Proposals Outline

#### **Expression of Interest**

- **Project Overview** 
  - Summary
  - -Purpose
  - -Eligibility
- **Evaluation Criteria** 
  - Experience/Past Projects
  - Project Team/Qualifications
  - Due Diligence
  - **Proximity**
  - Beneficial End Use
- Submission Requirements
- · EOI Conditions and Legal Requirements
- · Selection of 3 Preferred Proponents

#### Request for Proposals

- RFP Process
  - **Estimated timelines**
  - Collaborative meetings
- Project agreement, review comments
- **Project Elements** 
  - Project scope
  - Alternate proposals
  - Process technology
  - Contract structure
  - Project agreement Project site requirements
  - -Design and construction -Operations

  - -Insurance
  - **Financing**
  - -Payments
  - -Acceptance testing
  - Delay Costs
- Affordability
  - Capital cost ceiling
  - -Affordability model
  - Life cycle cost analysis
  - -Financial review on affordability
- **Proposal Requirements**
- **Submission Interviews**
- **Evaluation Criteria** 
  - -SWMP/LWMP integration -Project budget

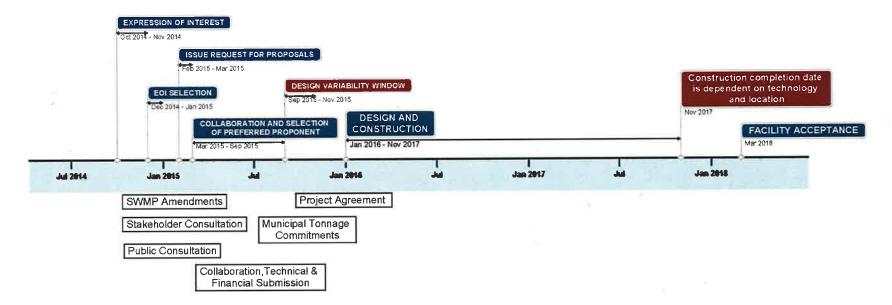
  - Environmental management
  - Processing technology

  - Beneficial end use Procurement methodology
  - Implementation schedule
  - Carbon footprint
- -Marketing strategy Selection of Preferred Proponent and Award
- **RFP Tender Conditions**
- RFP Contract/Legal Requirements



### PROPOSED IMPLEMENTATION STEPS

#### CRD KITCHEN SCRAPS PROCESSING FACILITY





### CRD EXECUTIVE OFFICE

Head Office: 155 George Street Prince George, BC V2L 1P8

Telephone: (250) 960-4400 Long Distance from within the Regional District: 1-800-667-1959

Fax: (250) 563-7520

http://www.rdffg.bc.ca

Municipalities: McBride Mackenzie Prince George Valemount

Electoral Areas:

Chilako River-Nechako Crooked River-Parsnip Robson Valley-Canoe Salmon River-Lakes Tabor Lake-Stone Creek Willow River-Upper Fraser Woodpecker-Hixon

D	,	- 1
K	eceivo	ુત

**BOA 1.8** 

Corresp. for Board / Committee meeting

AUG 0 5 2014

DCAO PES

☐ For action / resp. by

☐ For Information Only

Copies to K. Sm

☐ Board Communications

Alastair Bryson, Chair Capital Regional District PO Box 1000 Victoria, BC V8W 2S6

Dear Chair Bryson:

July 23, 2014

The Regional District of Fraser-Fort George invites you to join our call for changes to the provincial Recycling Regulation. We are interested in seeing changes that would compel product stewards to deliver EPR programs in all communities where fees are collected to support these programs.

The Recycling Regulation is a strong piece of legislation, but falls short in holding product stewards accountable for delivering EPR programs that are accessible, or that don't shift the responsibility for collection to other levels of government. Many stewardship programs have a standard established to recover 75% of the materials they produce. However this standard can be easily achieved by focusing serving on large urban centres with dense populations.

In short, the regulation does not provide for equitable service levels for rural and urban areas and consumers.

A recent review of the accessibility of stewardship programs in our region showed that out of 14 different stewardship categories, only six were available to residents in McBride and Mackenzie, while seven were available in Valemount. These communities are two to three hours driving time from large centres such as Prince George where a full suite of stewardship services are offered. As such, residents in and around these smaller centres face significant challenges when it comes to participating or engaging in recycling programs.

The Printed Paper and Packaging (PPP) stewardship program is the newest program and at this time in our region, there are no provisions for access to this program outside of Prince George. And unlike other EPR programs, there are no alternatives through retailers, making curbside and depot collection challenging for small and rural communities.

We understand there are several other communities in the province that are also facing this challenge. The lack of reasonable access to stewardship programs make it challenging for Regional Districts to meet waste diversion targets as established in their Regional Solid Waste Management Plans.

The Regional District of Fraser-Fort George has submitted a resolution on this issue for consideration at the UBCM convention this fall. We ask you to consider supporting the resolution and add your voice to the call for change.

The resolution is as follows:

WHEREAS the Minister of Environment approved a Packaging and Printed Paper Stewardship Plan that allows the Producers of packaging and printed paper to achieve a Province wide recovery rate of 75% and the Producers can meet this recovery rate by focusing service delivery in denser and more populated regions of the Province and consequently avoid service delivery in rural and small communities;

AND WHEREAS many of the rural and small communities will not have reasonable access to collection services even though these communities have retail services that will be paying fees to the stewardship agency in support of the operation of collection services for residential packaging and paper products;

THEREFORE BE IT RESOLVED THAT NCLGA and UBCM lobby the Minister of Environment on behalf of all BC Local Governments that the Extended Producer Responsibility Regulation be amended to ensure that in any community where a regulated product or material is retailed to a residential consumer that collection services for these same products be made available.

The most practical solution to address this unfairness in service delivery is to have the Minister of Environment amend the Recycling Regulation so that it meets a simple principle that where regulated products/materials are distributed that there is also a collection service for these same products/materials. Where this may not be practical, the Minister also has the ability to prescribe increased service performance standards that would ensure that small and rural communities are reasonably served.

We thank you for your consideration and look forward to your support.

Sincerely,

Art Kaehn Chair

C. Cut Kailm

AK:RM:jg



### Minutes of a Meeting of the Roundtable on the Environment Held June 6, 2014 in Room 488, 625 Fisgard Street, Victoria, BC

PRESENT:

**Members:** Lynn Bailey (Vice-Chair), Stephen Brydon, Stephanie Cairns, Jill Doucette (via phone), Neville Grigg, Gene Miller, David Moffat (via phone),

Dale Wall, Nancy Wilkin

**New Members**: Cora Hallsworth, Andrew Pape-Salmon (1:30, via phone)

**Staff:** Larisa Hutcheson, General Manager, CRD Parks & Environmental Services; Glenn Harris, Senior Manager, CRD Environmental Protection; Angela Bains and Sonia Santarossa, CRD Information Services; Signe Bagh, Senior Manager, Regional & Strategic Planning (1:03); Kevin Lorette, General Manager,

CRD Planning & Protective Services; Cathy Leahy, Recorder

ABSENT:

CRD Board: Nils Jensen

The meeting was called to order at 12:02 pm by Vice-Chair Lynn Bailey. New member Cora Hallsworth was introduced (still to be ratified by Capital Regional District Board).

#### 1. Approval of Agenda

**MOVED** by G. Miller, **SECONDED** by D. Wall, that the agenda be approved as circulated. **CARRIED** 

#### 2. Adoption of Minutes of April 4, 2014

**MOVED** by D. Wall, **SECONDED** by G. Miller, that the minutes of April 4, 2014 be adopted.

CARRIED

#### 3. Review of Task List of April 4, 2014

The task list was reviewed. N. Grigg and S. Cairns will write up a Built Environment goal for the Roundtable on the Environment (RTE) goals and guiding principles document by next meeting.

#### 4. Freedom of Information Act

Angila Bains, Manager of CRD Information Services, advised RTE members that under the *Freedom of Information and Protection of Privacy Act*, if a request were made, their e-mail correspondence could be released. Any reference to RTE business in personal e-mails is subject to FOI. She also noted that members' personal opinions belong to the RTE as a whole if they are given during the meeting and are recorded.

[12:15 – K. Lorette arrived] [12:21 – A. Bains and S. Santarossa left the meeting]

# 5. Draft Regional Sustainability Strategy – Initial Comments from Priority Area Champions

S. Bagh thanked the RTE for its comments on the draft Regional Sustainability Strategy (RSS), which will be considered in the next draft of the RSS. Staff have drafted a vision statement that will be forwarded to members.

Ms. Bagh would like the RTE's input this summer on the draft evaluation framework for the RSS. She described next steps for the RSS, including modelling during July and a report to the Planning Committee in October. The draft RSS will go to elected officials in January and the broader community in February.

Discussion included the following points:

- The RSS should make a stronger case for broader action in the context section; more sense of urgency. (Staff response: RTE needs to look at the latest set of actions in the document. Some local governments are hesitant for RSS to push too far. The draft RSS pushes further than existing Regional Growth Strategy.) In particular, the RTE is looking to see a greater sense of urgency communicated in the RSS regarding global warming and climate change. The draft RSS and process seems to be "business as usual." It doesn't engage in a serious discussion of possible consequences of climate change and global warming if society doesn't change.
- The RTE's identification of 3 priorities is very helpful. As we evaluate the document this summer, we can discuss if the actions are strong enough.
- The RSS is a provincially-legislated document with a prescribed process and content and requires sign-off from 13 municipalities, so there will be compromise.
- There may be other avenues than the RSS that allow the RTE a greater expression of urgency.
- Are we trying to influence the document, or to influence the environment into which it's received? The RSS provides a communications hook for the RTE to deliver its message of urgency.
- D. Wall asked for, and was granted, the RTE's permission to approach climate study staff at UVic and Royal Roads regarding regional impacts and regional-based remedies. Mr. Wall will also talk to G. Harris about the CRD's Climate Action Program.

Discussion will continue at the RTE's September meeting and be tied into the energy priority. RTE priorites for 2014-15 can be revisited with new members with discussion on how the RTE can convey a sense of urgency and leverage public opinion during the RSS process.

S. Bagh will set up workshops this summer for the RTE to participate in the evaluation framework for RSS.

[1:20 pm: S. Bagh and K. Lorette left the meeting]

6. Updates and Next Steps from Priority Area Champions

(a) Solid Waste – L. Bailey asked if this remains a priority for the RTE. After discussion, it was decided that the RTE will drop solid waste as a priority area and focus on energy, including the energy aspects of solid waste.

#### (b) Energy

At last week's Environmental Services Committee (ESC) meeting, the RTE was asked to look long-term and strategically at energy and conduct brainstorming sessions with the ESC. Staff will try to schedule the session in September.

- N. Wilkin reported on the positive results of the Solar Colwood program for residential energy efficiency assessments/retrofits; energy use has been reduced by 44% and GHG is down 45% in participating homes.
- A. Pape-Salmon and N. Grigg volunteered to be champions for the energy priority; S. Cairns will also participate. They will set up a meeting with an RTE subgroup of interested members. The CRD's Glenn Harris and Liz Ferris (climate action coordinator) will be invited.
- Mr. Pape-Salmon mentioned the upcoming launch by BC Hydro/FortisBC of a revised LiveSmart BC Program called HERO (Home Energy Retrofit Offer); would be timely to share that Colwood report with Fortis/Hydro. He also mentioned a resolution going to UBCM in September regarding benchmarking tools for building energy use.
- (c) Green Space/Invasive Species The Royal Roads University students will make a second presentation next week. They've researched social, environmental and economic impacts and are looking at the issues of governance and disposal.

### 7. Energy Priority

Already discussed under Item 6(b).

#### 8. RTE Membership

Three names of new members are going forward to the CRD Board for approval in mid-June. L. Hutcheson expressed concern that the membership process was lengthy. Once the Board has approved new members, letters will be sent to unsuccessful applicants.

J. Doucette and S. Brydon will collate lessons learned regarding the membership process, touching base with L. Hutcheson to understand the Board's process, and then write up a proposed process document.

#### 9. Roundtable on the Environment – Terms of Reference (TOR)

The issue of who the RTE reports to was raised by the Environmental Services Committee. L. Hutcheson will bring revised TOR to the September meeting regarding reporting structure and will see if administrative updates are needed to align the TOR with other advisory committees.

10. CRD Standing Committees: Environmental Services, Regional Parks, Planning, Transportation & Protective Services

Minutes were included in the agenda package.

#### 11. Other Business

- G. Miller asked whether a parallel group to the RTE should be created that is less constrained by process: a better vehicle for conversation, imagination and innovation regarding environmental issues during urgent times. Discussion included the following points:
- This is beyond the scope of the RTE, but there's no barrier to someone starting it.
- However, it would be good if such an initiative occurred inside the sphere of political influence.
- A launching point could be D. Wall's outreach and discussion on imminent threats and climate challenges with university staff.
- Universities have a role to play; can host discussions and invite the public.
- Simon Fraser University has an initiative called "<u>carbon talks</u>". The City of Vancouver has collaborated with them to initiate dialogue with the public and thought leaders on critical topics and emerging policy suggestions.
- Use the RSS as the reason to bring academic, political and public together.

### 12. Closing Comments and Next Steps

- C. Hallsworth introduced the concept of planetary boundaries and will e-mail information to RTE members.
- L. Hutcheson will hold a "CRD 101" session with new members this summer; current members are welcome to attend for a refresher.

### 13. Next Meeting Date

The next meeting will be held Friday, September 12 at noon.

### 14. Adjournment

The meeting adjourned at 2:32 pm.

CHAIR

RECORDING SECRETARY