

SERVICE NAME: Environmental Resource Management

Changes in Assumptions, Trends, and Other Issues since 2017: (linked to section 1.3 and 1.4 of the detailed service plan)

- Kitchen scraps tonnages being received at the Hartland transfer station are expected to decrease from 7,500 to 6,500 tonnes/year in 2018. This is due to the increase in the kitchen scraps tipping fee that was put in place in 2017 to fully recover costs, which resulted in some haulers taking their kitchen scraps to other lower-cost facilities.
- Projected general refuse tonnages being received at Hartland landfill in 2018 have been increased from 110,000 to 135,000 tonnes/year. The increased tonnage is due to strong construction activity within the region and the Highwest landfill only taking waste from a few selective customers hauling in waste from outside the region.

Overall 2017 Budget Performance: (linked to budget forecast to year end)

- There is a favourable capital variance of \$10,000,000, resulting from a delay in undertaking the gas utilization capital project. The project business case validation and Board direction is anticipated by the end of 2017.
- There is a \$3,000,000 favorable revenue variance in Landfilling Services due to higher than anticipated Hartland waste volumes from strong local construction activity and the limited private waste disposal availability at Highwest landfill in the District of Highlands. Delays to Solid Waste planning and programming activities resulted in a favourable expenditure variance of \$200,000 in Diversion Services.
- Any annual positive Environmental Resource Management (ERM) budget variance is transferred into the environmental sustainability reserve fund. The current balance of the Environmental Sustainability reserve fund is \$17.4M.

Update to Division Initiatives: (linked to section 3 of the detailed service plan)

- The revision of the Solid Waste Management Plan (SWMP) began in 2012 but was put on hold in 2015 at the Board's direction, in order to allow Integrated Resource Management (IRM) opportunities to be fully investigated. The completion of the SWMP revision has been deferred to 2018 while this process continues.
- ERM continues to support the Integrated Resource Management Project and implementation of the Core Area Wastewater Residuals Treatment Facility Project at the Hartland North site.
- Environmental Protection to submit federal Abandoned Boat Program (ABP) applications for a total of \$1,050,000: \$50,000 in abandoned Boat Education and Awareness funding (with CRD contribution of \$16,667) and \$1,000,000 in Abandoned Boat Assessment and Removals funding (with CRD contribution of \$333,333) in support of a local multi-year ABP initiative starting in 2018; and CRD contributions to be funded by the ERM Sustainability Reserve

Service Adjustments and Staffing Levels: (linked to section 2 of the detailed service plan)

• The likely advancement of Integrated Resource Management (IRM) over the next several years will require the addition of two (2) four-year term positions, a Project Director and Deputy Project Director, to manage the development and procurement of this regionally-significant project. The positions will be funded through the IRM capital project budget from 2018 through 2021.



Key Performance Indicators: (linked to section 4 of the detailed service plan)			
Indicator Name	2017 Planned	2017 Projected	2018 Planned
Service Goal: Manage solid waste in an environmentally, socially and economically responsible manner			
SWMP adoption	Complete	Delayed	In Progress
 Annual Waste disposal per capita (<369kg) 	338	350	350
Service Goal: Continue to optimize landfill operations			
 Landfill garbage to cover ratio (5:1 max) 	>5:1	>5:1	>5:1
Compaction rate (>850kg/m3)	>850	>850	>850
Service Goal: Optimize Landfill gas recovery at Hartland			
 Landfill gas capture (>75%) 	75%	70%	75%
Service Goal: Fee Revenue as % of Total Costs	100%	114%	100%

Contact

Name: Russ Smith Title: Senior Manager, Environmental Resource Management Contact Information: 250.360.3080





SERVICE NAME: Environmental Protection

Changes in Assumptions, Trends, and Other Issues since 2017: (linked to section 1.3 and 1.4 of the detailed service plan)

- Environmental Partnership and Environmental Protection programs and staff are consolidated into one division for 2018.
- With an environmental management support role across the organization, the Division's focus will be on enhanced integration of (i) environmental regulatory oversight (sanitary sewers, stormwater sewers, onsite systems), (ii) drinking water quality protection programs (water quality monitoring, demand management, cross-connection control), (iii) consolidation of all environmental monitoring and reporting, as well as (iv) integration of communication initiatives (planning, education, outreach, community engagement and program delivery) across the Parks & Environmental Services department.
- The Division continues to provide environmental oversight for the Hartland landfill, as well as several smaller contaminant reduction programs (e.g., contaminated sites, trucked liquid waste, controlled waste, septage and odour)
- Strategic planning initiatives (e.g., Regional Drinking Water Strategic Plan update, Regional Climate Action Strategy, Integrated Resource Management, Emergency Planning and major capital projects (e.g., core area wastewater treatment plant, drinking watershed dam upgrades, drinking water treatment plant) will influence modifications to ongoing work plans.
- New federal funding will allow technical staff to support abandoned boat grant applications.
- There are significant regulatory changes across several key service areas (e.g., Contaminated Sites Regulation, Drinking Water Protection Regulation, federal/provincial wastewater regulation harmonization, Municipal Solid Waste Landfill Criteria) that will impact the monitoring and reporting programs.
- New financial reporting requirements and expanded omnibus changes to the core legislation will lead to increased oversight with contaminated sites liability associated with asset management.
- Increased expectations and associated resources for climate action are a significant priority across all levels of government, which continue to see more focus on emission reduction and adaptation planning at the local government level. Funding for new programs (e.g., BC Energy Step Code, sea level rise planning) are being unveiled for local government involvement on an ongoing basis.

Overall 2017 Budget Performance: (linked to budget forecast to year end)

- ES Admin Estimated net favourable variance of \$236,000 (3.5%) due to one-time cost savings from labour usage (\$125,000) and better than expected labour recovery (\$111,000) year-to-date. This variance will be returned to program budgets or carried forward to reduce labour charge-out rate in 2016.
- Source Control There is a \$43,000 (2.8%) favourable variance due largely to lower than expected labour expenses. This variance will be transferred to the operating reserve to fund 2018-2022 capital projects. The current balance of the operating reserve is \$357,000.
- LWMP Core & Saan Pen There is a \$473,000 (53%) favourable variance due largely to LWMP changes in 2017. This variance will be transferred to the operating reserve to fund 2018-2022 projects. The current balance of the operating reserve is \$811,000.
- LWMP Onsite There is a \$16,500 (7.2%) favourable variance due largely to unanticipated staff vacancies. This variance will be transferred to the operating reserve to fund 2018-2022 projects. The current balance of the operating reserve is \$73,000.



Update to Division Initiatives: (linked to section 3 of the detailed service plan)

- JdeF Distribution System Metal (lead) Investigation of potential lead concentrations in JdeF drinking water distribution system. \$15K
- Goldstream Reservoir Water Quality Study investigate annual water quality conditions for secondary drinking water source potential. \$5K
- Capital Projects Water Quality Study develop pre- and post-monitoring study for significant capital projects in the drinking watershed. \$5K
- Supply Management Modelling Study model development to investigate climate projections on near-term drinking water supply. \$75K
- Paperless Data Management pilot study to integrate direct lab data entry to drinking water quality database. \$15K
- Abandoned Boat Program (ABP) grant applications for up to a total of \$1,050,000 (amount pending grant approval): \$50,000 in abandoned Boat Education and Awareness funding (with CRD contribution of \$16,667) and \$1,000,000 in Abandoned Boat Assessment and Removals funding (with CRD contribution of \$333,333) in support of a local multi-year ABP initiative starting in 2018; and CRD contributions to be funded by the ERM Sustainability Reserve

Service Adjustments & Staffing Levels: (linked to section 2 of the detailed service plan)

- Demolition Waste Permit Technician. 0.5 FTE (ongoing) to address increased waste loads at landfill due to construction boom (to be funded by ERM operating budget).
- Contaminated Sites ESO. 0.6 FTE (ongoing) to address increased regulatory requirements for contaminated sites liability.
- Climate Action Program Assistant. 0.3 FTE (ongoing) to existing 0.7 FTE position to address implementation of Regional Community Climate Action Strategy.
- Ecosystem Biologist. 0.5 FTE (ongoing) to support regional coordination of invasive species management.
- Drinking Water Sampling Technician. 1.0 FTE (ongoing) to provide expanded municipal water sampling and analysis to achieve compliance with existing legislation.

Key Performance Indicators: (linked to section 4 of the detailed service plan)			
Indicator Name	2017 Planned	2017 Projected	2018 Planned
Service Goal: Contribute to community and corporate climate action goals.			
 Number and impact of projects and partnerships that demonstrate support for reduction in greenhouse gas (GHG) emissions and for increased climate resiliency* 	Support 25 external partnerships on regional climate action	Support 25 external partnerships on regional climate action	Support 25 external partnerships on regional climate action
Service Goal: Provide specialized information and technical support.			
 Number of environmental water quality sampling plans reviewed and updated* 	Review and update 8 WQ sampling plans	Review and update 8 WQ sampling plans	Implement 8 updated WQ sampling plans
 Achieve lab accreditation to ISO 17025 	Achieve lab accreditation to ISO 17025	Achieve lab accreditation to ISO 17025	Expand scope of ISO 17025 lab accreditation
 Number of streams with continuous flows and/or water flows monitored annually (target 9 streams by 2019) 	Provide continuous flow monitoring on 3 streams	Provide continuous flow monitoring on 3 streams	Provide continuous flow monitoring on 6 streams
 Percentage of sewer odour monitoring assessment stations monitored and reported on annually 	Monitor and report on 90% of sewer odour monitoring assessment stations annually	Monitor and report on 90% of sewer odour monitoring assessment stations annually	Monitor and report on 90% of sewer odour monitoring assessment stations annually
Service Goal: Maintain regulatory compliance monitoring activities for government agencies, member municipalities or other stakeholders			
 Percentage of sampling, analysis and reporting of in-house drinking water samples with turnaround within 5 business days. 	Turnaround 95% of in-house drinking water samples with within 5 business days	Turnaround 95% of in-house drinking water samples with within 5 business days	Turnaround 95% of in-house drinking water samples with within 5 business days
 Percentage of operational and compliance samples (outfall, 	Collect, analyze and report on	Collect, analyze and report on	Collect, analyze and report on



1				1
	nwater, landfill) collected, yzed and reported on annually	100% of samples collected annually	100% of samples collected annually	100% of samples collected annually
foun	nber of landfill gas ambient, dation and perimeter well itoring activities annually	Conduct a minimum of 4 landfill gas monitoring activities annually	Conduct a minimum of 4 landfill gas monitoring activities annually	Conduct a minimum of 4 landfill gas monitoring activities annually
com	centage of businesses in pliance with Sewer Use Bylaw uirements*	90% of inspected businesses compliant with bylaw	>90% of inspected businesses compliant with bylaw	90% of inspected businesses compliant with bylaw
	centage of compliance rate with w for Type 1, 2 and 3 onsite ems	Achieve 80% or better onsite system compliance rate	Achieve 80% or better onsite system compliance rate	Achieve 80% or better onsite system compliance rate
colle	king water compliance samples ected, analyzed and reported for icipalities.	Maximum achievable within current capacity	Maximum achievable within current capacity (not fully compliant with Drinking Water Protection Regulation - DWPR)	Full compliance with DWPR
requiren agencies	Goal: Maintain assessment nents for government s, member municipalities or akeholders			
a	Percentage of sludge assessment samples collected and reported	Collect and report on 90% of sludge assessment samples	Collect and report on 90% of sludge assessment samples	Collect and report on 90% of sludge assessment samples
C	Percentage of all stormwater discharges sampled annually	Sample 20% of all stormwater discharges annually	Sample 20% of all stormwater discharges annually	Sample 20% of all stormwater discharges annually
5	Percentage of all high-rated stormwater discharges nvestigated annually	Investigate 80% of all high-rated stormwater	Investigate 80% of all high-rated stormwater	Investigate 80% of all high-rated stormwater



		discharges annually	discharges annually	discharges annually
•	Number of days reduction of blue-green algae blooms compared to previous years at Elk/Beaver Lake	Plan to reduce the number of blue-green algae bloom days beginning 2018	Plan to reduce the number of blue-green algae bloom days beginning 2018	Reduce the number of blue- green algae bloom days by 20% relative to previous year
•	Percentage of businesses inspected annually as a part of Stormwater Source Control on Saanich Peninsula	Inspect 15% of Saanich Peninsula businesses annually	Inspect 15% of Saanich Peninsula businesses annually	Inspect 15% of Saanich Peninsula businesses annually
•	Number of controlled waste audits conducted annually	Conduct 12 or more controlled waste audits annually	Conduct 12 or more controlled waste audits annually	Conduct 12 or more controlled waste audits annually
•	Percentage of businesses (affected by Once-Through- Cooling prohibition) receiving informational letters	50% of affected businesses bylaw receiving information letter	50% of affected businesses receiving bylaw information letter	Remaining 50% of affected businesses receiving bylaw information letter
•	Percentage of all food service facilities inspected annually for compliance with Regional Source Control Bylaw	Inspect 33% of all food service facilities annually	Inspect 33% of all food service facilities annually	Inspect 33% of all food service facilities annually
•	Decrease or maintain priority contaminant loadings to the core area marine environment on results of 3-5 year trend assessment cycles	Decrease or maintain priority contaminant loadings to the core area marine environment	Decrease in most priority contaminant loadings over the 2012-2015 time period	Decrease or maintain priority contaminant loadings to the core area marine environment
•	Number of annual backflow incidents reported in Regional Water Supply	Achieve 0 or no annual backflow incidents reported	Achieve 0 or no annual backflow incidents reported	Achieve 0 or no annual backflow incidents reported
•	Number of cross-control audits conducted annually	Conduct 900 or more cross- control audits annually	Conduct 900 or more cross- control audits annually	Conduct 900 or more cross- control audits annually
and m	e Goal: Increase community unicipal engagement unities			



			1	1
•	Number of community outreach events the CRD participates in and/or supports annually*	Participate in or support 25 community outreach events & 15 water cart events annually*	Participate in or support 17 community outreach events & 10 water cart events annually*	Participate in or support 25 community outreach events & 15 water cart events annually*
•	Number of CRD educational workshops delivered or partnered on annually *	Deliver 24 water conservation, 6 Integrated Watershed Management Program (IWMP), and 5 other initiative workshops annually *	Deliver 24 water conservation, 6 IWMP, and 5 other initiative workshops annually *	Deliver 24 water conservation, 6 IWMP, and 5 other initiative workshops annually *
•	Number of stakeholders engaged through educational programming on biodiversity and ecological health issues *	Engage 9 stakeholders annually on biodiversity and ecological health issues *	Engage 9 stakeholders annually on biodiversity and ecological health issues *	Engage 9 stakeholders annually on biodiversity and ecological health issues *
•	Number of volunteer hours leveraged in restoration or stewardship activities	Leverage 300 volunteer hours in restoration or stewardship annually	Leverage 300 volunteer hours in restoration or stewardship annually	Leverage 300 volunteer hours in restoration or stewardship annually
•	Increased participation in Onsite Wastewater Management workshops over 2015 levels	Increase participation by 50% at Onsite workshops	Increase participation by 100% at Onsite workshops	Increase participation by 50% at Onsite workshops

*Corporate indicator – multiple divisions/programs may contribute to this measure.

Contact

Name: Glenn Harris Title: Senior Manager, Division Contact information: 250.360.3090

SERVICE NAME: Facilities Management & Engineering Services

Changes in Assumptions, Trends, and Other Issues since 2017: (linked to section 1.3 and 1.4 of the detailed service plan)

- In 2017, the Facilities Management division was combined with the Engineering Services division resulting in both groups reporting to a single senior manager.
- The Engineering Services workload continues to increase with more capital upgrades being planned for Regional Parks and the Environmental Resource Management divisions. Over the last year, the Engineering Services group has been involved with 63 contracts/RFPs with a total value exceeding \$11 million.
- The enhanced focus on integrated resource management (IRM) offers an opportunity to provide technical support to the Integrated Resource Management (IRM) Advisory Committee and Board.
- Proposed capital project evaluations are being enhanced to consider risk factors, as well as climate change impacts and/or opportunities.
- Enhanced efforts are required with the older municipalities to help them achieve their goals of Inflow & Infiltration (I&I) reduction to meet the commitments in the liquid waste management plan.
- The division continues to support the Core Area Wastewater Treatment Project, in particular the Core Area Liquid Waste Management Plan Residuals Treatment Facility at Hartland.
- The lease agreement with Island Health for the Peninsula Health Unit is due to expire in August 2018.
- Overall Facilities costs are under pressure due to increasing utility and insurance costs, as well as higher maintenance costs due to aging buildings and the consideration of climate change throughout the decision-making process.

Overall 2017 Budget Performance: (linked to budget forecast to year end)

- 1.576 Engineering Services: There is an overall favourable variance of \$13,000 (0.6%) due mainly to decreased operating costs of \$59,000 (2.89%) and decreased revenue from internal recovery of \$47,000 (2.3%). This estimated variance will be returned back to CRD services.
- 1.105 Facility Management: There is an overall favourable variance of \$220,000 (12.4%) mainly due to the vacant position of the building coordinator and the retirement of the general manager. A surplus of \$125,000 will be carried forward to 2018 to fund the FM manager's position to reduce requisition. The estimated surplus of \$95,000 will be transferred to the equipment replacement fund to fund future equipment and vehicle pool replacement. The current ERF balance is \$223,000.
- 1.106 CRD Headquarters Facilities: There is an overall favourable variance of \$36,000 (2.8%), mainly related to lower electricity consumption due to the LED lighting upgrades expected to be completed this year. This variance will be transferred to capital reserve, with the current balance being \$6,000,000.
- 1.107 Corporate Satellite Facilities: There is an overall favourable variance of \$7,500 (3.8%) due to minor savings on various operating costs. This estimated variance will be returned back to Planning & Protective Services.
- 1.123 Family Court Building: There is an overall favourable variance of \$6,000 (2.8%), mainly due to the savings in utilities from mild weather. This variance will be transferred to capital reserve with the current balance of \$60,000.
- 1.226 Island Health Facilities: There is an overall favourable variance of \$29,600 (1.7%) mainly from the savings in natural gas and electricity due to mild weather and the lighting upgrades done this year for the Vancouver Health Unit and Esquimalt Health Unit. This estimated variance will be returned back to Island Health.



Update to Division Initiatives: (linked to section 3 of the detailed service plan)

Core Services:

- Additional focus to develop a plan to prepare CRD assets for future climate change impacts
- Additional focus to work with other divisions on greenhouse gas reporting following CARIP requirements
- Additional focus to support capital projects at Hartland in relation to IRM
- Evaluation of potential capital projects through the climate change lens
- Establish a system for tracking and reporting energy use at all CRD facilities
- Provide project management support to Regional Parks with dam and trestle evaluations

Board Priorities: No changes

Service Adjustments and Staffing Levels: (linked to section 2 of the detailed service plan)

- The Engineering Services group is leading dam safety evaluations for Regional Parks.
- The service model for the Facilities Management group is under review. Resources and service levels to be aligned with the model as determined.

Key Performance Indicators: (linked to section 4 of the detailed service plan)				
Indicator Name	2017 Planned	2017 Projected	2018 Planned	
Service Goal: Ensure preparation, management and implementation of liquid waste management plans	Prepare and submit Core Area I&I Management Plan Five Year Update to CALWM Committee	Five-year update to be submitted to the CALWM Committee. Develop educational materials for I&I reduction.	Distribute/promote educational materials and introduce a GIS pilot project to identify historical semi-combined inflow sources.	
Service Goal: Provide specialized engineering and project management support to multiple divisions	As required	New subject areas continue to emerge through projects originating in other departments	Continued support to other departments in evaluating and applying special technologies	
Service Goal: Contribute to corporate climate action goals	Plan and carry out capital projects that result in GHG reductions	Majority of facility lighting projects complete	Determine remaining lighting projects and support ERM on Renewable Natural Gas project	
Service Goal: Monitor liability and property exposures	Ongoing	Ongoing	Establish an inventory of property liabilities and exposures, and develop strategies to address accordingly	
Service Goal: Maintain buildings and facilities and ensure compliance with relevant regulations	Ongoing	Carry out projects at Island Health facilities to maintain high level of environmental standards	Continued efforts to ensure facilities are professionally maintained and up to date with applicable codes	

Contact

Name: Steve May Title: Senior Manager, Facilities Management & Engineering Services Contact Information: 250.360.3064