



ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE

WEDNESDAY, MARCH 24, 2010 - 3:30 P.M.

CVRD BOARDROOM, 175 INGRAM STREET

AGENDA

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6. **NEW BUSINESS:**
7. **CLOSED SESSION** - No closed session items.
8. **NEXT MEETING:** April 28, 2010
9. **ADJOURNMENT:**
-

Distribution:

Director Cossey, Chair
Director Kuhn, Vice-Chair
Director Dorey
Director Duncan
Director Giles
Director Harrison
Director Haywood
Director Iannidinardo
Director Kent
Director Marcotte
Director Morrison

As Well As:

Warren Jones, CAO
Brian Dennison, General Manager, Engineering & Environmental Services
Bob McDonald, Manager, Recycling & Waste Diversion
Dave Leitch, ASCT., Manager, Water Management
Kate Miller, Manager, Regional Environmental Policy
Mark Kueber, Manager, Corporate Services

Agenda Cover Only:

Directors Hutchins, McGonigle, Seymour, Walker
Tom Anderson, General Manager, Planning & Development
Joe Barry, Corporate Secretary

The Full Agenda Package is available on-line at: <http://cverd.bc.ca/Archive.asp?AMID=50>

Minutes of the regular meeting of the Engineering & Environmental Services Committee held in the CVRD Boardroom, 175 Ingram Street, Duncan, on February 24, 2010 at 3:30 p.m.

PRESENT: Director Cossey, Chair
Directors Dorey, Duncan, Giles, Harrison, Haywood,
Iannidinardo, Kent, Kuhn (3:40 p.m.) Marcotte, Morrison,
Walker (3:45 p.m.)

ALSO Warren Jones, CAO
PRESENT: B. Dennison, P. Eng., General Manager, E & E
D. Leitch, AScT., Manager, Water Management
K. Miller, Manager, Regional Environmental Policy
Rachelle Moreau, Environmental Analyst
Sharon Moss, Manager, Financial Services
Steve Hurcombe, Budget Coordinator, Financial Services
Joanne Bath, Recording Secretary

**APPROVAL
OF AGENDA**

The following items were added under New Business:
NB 1 - Transit Coordinator position
NB2 – Utility System comparison

It was moved and seconded that the agenda be approved as amended.

MOTION DEFEATED

It was moved and seconded that the agenda be approved, as amended, to include Item NB2 only.

MOTION CARRIED

**ADOPTION
OF MINUTES**

It was moved and seconded that the minutes of the January 27, 2010 regular Engineering & Environmental Services Committee meeting be adopted.

MOTION CARRIED

**BUSINESS ARISING
OUT OF MINUTES**

No business arising

REPORTS

R1

A staff report was considered regarding a Cowichan Bay Sewer System petition for service.

It was moved and seconded:

1. That the *Certificate of Sufficiency*, confirming that a sufficient petition requesting inclusion into the Cowichan Bay Sewer System Service Area be received.
2. That the boundaries of the Cowichan Bay Sewer System Service Area NOT be amended to include "Lot A, Section 8, Range 2, Plan 22974, Cowichan District".

MOTION CARRIED

R2

A staff report was considered providing CVRD Bylaw No. 3359 – Environmental Initiatives Establishment Bylaw, 2010.

It was moved and seconded that this recommendation be referred back to staff to conduct a consultation process.

MOTION CARRIED

R3

A staff report was considered regarding the Sewer and Water 2010 Budgets, including revisions as noted.

Director Duncan requested that staff provide a report at the next Committee meeting regarding the need to obtain additional gas tax funding for Dogwood Ridge Water System.

It was moved and seconded:

That the Sewer, Water, Drainage, Street Lighting, Curbside Collection, South Cowichan Water Study, and Engineering Control budgets, as distributed, be approved and included in the Five Year Financial Plan Bylaw, including the following revisions:

- 601 - Satellite Park Water System + \$50,000 Community Works funding;
- 680 - Shawnigan Lake North Water System + \$467,000 Community Works funding;
- 840 - Shawnigan Beach Estates Sewer System + \$183,000 Community Works funding;
- 660 - Honeymoon Bay Water System + \$133,000 Community Works funding;
- 613 - Dogwood Ridge Water System + \$100,000 Community Works funding;
- 604 - Lambourn Estates Water System + \$5,300 in additional Connection Charges.

MOTION CARRIED

R4

A staff report was considered regarding creation of a pilot function for Busy Place Creek Drainage.

It was moved and seconded that the Busy Place (Sh-hwuykwselu) Creek Drainage area that would provide the following services:

1. Operations and Maintenance of drainage and water management works.
2. Accumulation of reserves for eventual replacement /upgrade of works.
3. Monitoring of water quality and drainage function.
4. Provide input for planning activities and development proposals within the drainage area.
5. Ongoing education and outreach.
6. Continue development of partnership with other interested organizations and agencies;

and further that upon successful assent of the electorate for this function that \$100,000 of the Community works fund be made available, together with funding from other partners for the necessary drainage works; and that up to \$10,000 be made available from Function 130 – Electoral Feasibility Studies for public consultation to establish the service area.

MOTION DEFEATED

R5

A staff report was provided regarding Municipal Green Building Leaders.

Director Kent requested consultation and integration with member municipalities.

It was moved and seconded that, following consultation with member municipalities, the Cowichan Valley Regional District partner with the Pembina Institute and other local governments in the Municipal Green Building Leaders program.

MOTION CARRIED

NEW BUSINESS

NB2

It was moved and seconded that staff submit a report to the Committee, providing a comparison of CVRD operated sewer and water systems.

MOTION CARRIED

**RESOLVE INTO
IN CAMERA
4:40 p.m.**

It was moved and seconded that the meeting be closed to the public in accordance with the Community Charter, Part 4, Division 3, Sections 90{ (1) (e)}.

MOTION CARRIED

**RISE FROM
IN CAMERA
6:40 p.m.**

It was moved and seconded that the Committee rise without report.

MOTION CARRIED

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

MOTION CARRIED

The meeting adjourned at 6:40 pm

Chair

Recording Secretary

Dated: _____



C·V·R·D

STAFF REPORT

R1

**ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING
OF WEDNESDAY, MARCH 24, 2010**

DATE: March 16, 2010

FILE NO: Bylaw 3360

FROM: Harmony Huffman, Environmental Technologist

SUBJECT: Amendment to Bylaw 1958 – Cowichan Valley Regional District Garbage and/or Recyclable Materials Collection Bylaw.

Recommendation:

That it be recommended that CVRD Bylaw No. 3360, Cowichan Valley Regional District Garbage and/or Recyclable Materials Collection Amendment Bylaw, 2010 be forwarded to the Board for three readings and adoption.

Purpose: To Amend Bylaw 1958 to set a new fee structure for collection of garbage and/or recyclables.

Financial Implications: 10% increases as noted in the attached bylaw and as set out in the 2010 budget.

Interdepartmental/Agency Implications: not applicable

Background:

A 10% increase in collection fees was incorporated into the 2010 budget for curbside collection. In order to put the new rates into effect, an amendment bylaw needs to be forwarded to the Board for three readings and adoption.

Submitted by,

Harmony Huffman
Environmental Technologist III

Approved by:

Brian Dennison, General Manager
Engineering and Environmental Services

:jlb

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COWICHAN VALLEY REGIONAL DISTRICT

BYLAW NO. 3360

A Bylaw to amend Bylaw No. 1958 – Cowichan Valley Regional District Garbage and/or Recyclable Materials Collection Bylaw

WHEREAS the Board of Directors of the Cowichan Valley Regional District established collection rates for the collection of garbage and/or recyclable materials under the provision of Bylaw No. 1958, cited as "CVRD Bylaw No. 1958 – Cowichan Valley Regional District Garbage and/or Recyclable Material Collection Bylaw, 1999";

AND WHEREAS the Board of Directors of the Cowichan Valley Regional District deems it desirable to amend the fee structure for Recycling and Garbage Collection Rates;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This Bylaw may be cited for all purposes as "**CVRD Bylaw No. 3360 – Cowichan Valley Regional District Garbage and/or Recyclable Materials Collection Amendment Bylaw, 2010**".

2. AMENDMENT

- a) That Schedule A to Bylaw No. 1958 be deleted its entirety and replaced with Schedule A attached hereto and forming part of this bylaw.

READ A FIRST TIME this _____ day of _____, 2010.

READ A SECOND TIME this _____ day of _____, 2010.

READ A THIRD TIME this _____ day of _____, 2010.

ADOPTED this _____ day of _____, 2010.

Chairperson

Corporate Secretary



SCHEDULE A

TO BYLAW NO. 1958

RECYCLING AND GARBAGE COLLECTION RATES

1.

Electoral Area	Frequency of Garbage Collection Service	Maximum Number of Garbage Containers Collected per Service	Frequency of Recycling Collection Service	Basic Rate (Per Annum)
A	None	None	Bi-weekly	30.00
B	None	None	Bi-weekly	30.00
C	None	None	Bi-weekly	37.00
D	Bi-weekly	2 with bi-weekly service	Bi-weekly	115.00
E	Bi-weekly	2 with bi-weekly service	Bi-weekly	115.00
F	Bi-weekly, Weekly June 15 – Oct. 15	2 with bi-weekly service 1 with weekly service	Bi-weekly	135.00
G	Bi-weekly	2 with bi-weekly service	Bi-weekly	115.00
H	None	None	Bi-weekly	37.00
I	Bi-weekly, Weekly June 15 – Oct. 15	2 with bi-weekly service 1 with weekly service	Bi-weekly	135.00

2. Tags for disposal of extra *Garbage* allows for setting out additional *Garbage Containers* over and above those permitted under Item 1, but limited to the maximum specified under Section 5 (1)(a) (vi).

\$2.50 per *Garbage Container*



STAFF REPORT

R2

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF WEDNESDAY, MARCH 24, 2010

DATE: March 16, 2010 **FILE NO:** Bylaws
FROM: Louise Knodel-Joy, Senior Engineering Technologist
SUBJECT: Water and Sewer System Management Amendment Bylaws

Recommendation:

1. That "CVRD Bylaw No. 3368 – Arbutus Ridge Water System Management Amendment Bylaw, 2010 be forwarded to the Board for three readings and adoption.
2. That "CVRD Bylaw No. 3369 – Arbutus Ridge Sewer System Management Amendment Bylaw, 2010 be forwarded to the Board for three readings and adoption.
3. That "CVRD Bylaw No. 3370 – Dogwood Ridge Water System Management Amendment Bylaw, 2010" be forwarded to the Board for three readings and adoption.

Purpose: To revise the above noted Management Bylaws to revise Flat Rate charges for 2010.

Financial Implications: Parcel Tax/User Fee equivalent for 2010.

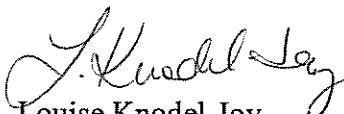
Interdepartmental/Agency Implications: not applicable

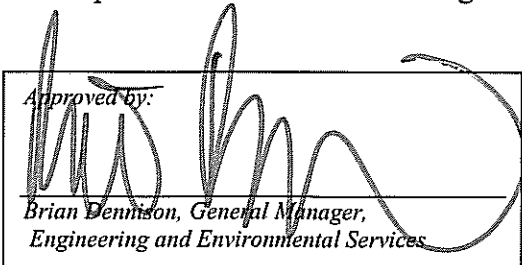
Background:

Flat rate charges for Arbutus Ridge have been revised to reflect the utility operation takeover date of March 1, 2010.

Schedule H – 2010 Flat Rate Charges for the Dogwood Ridge Water System needs to be revised as it has come to staff's attention that the Dogwood Ridge Improvement District collected user fees to April 2010. The attached Schedule H has therefore been pro-rated to reflect this change.

Submitted by,


Louise Knodel-Joy
Senior Engineering Technologist

Approved by:

Brian Dennison, General Manager,
Engineering and Environmental Services

LKJ:jlb

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COWICHAN VALLEY REGIONAL DISTRICT

BYLAW NO. 3368

A Bylaw to Amend the Arbutus Ridge Water System Management Bylaw No. 3305

WHEREAS the Board of the Cowichan Valley Regional District established the management of the *Arbutus Ridge Water System* pursuant to Bylaw No. 3305, cited as "CVRD Bylaw No. 3305 – Arbutus Ridge Water System Management Bylaw, 2009";

AND WHEREAS the Board of the Cowichan Valley Regional District deems it desirable to revise Schedule H;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This Bylaw may be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 3368 – Arbutus Ridge Water System Management Amendment Bylaw, 2010**".

2. AMENDMENT

That Schedule H be deleted in its entirety and replaced with Schedule H attached to and forming part of this Bylaw.

READ A FIRST TIME this _____ day of _____, 2010.

READ A SECOND TIME this _____ day of _____, 2010.

READ A THIRD TIME this _____ day of _____, 2010.

ADOPTED this _____ day of _____, 2010.

Chairperson

Corporate Secretary



SCHEDULE H
TO CVRD BYLAW NO. 3305
FLAT RATE CHARGE

A flat rate charge in the amount of \$0.893 per day will be invoiced in 2010 for each single-family dwelling within the Arbutus Ridge Water System Service Area for the period of the CVRD "takeover" date until December 31, 2010

A flat rate charge in the amount of \$31.759 per day will be invoiced in 2010 for the golf course property.

Properties within the service area without dwellings will not be charged for service in 2010.

These charges will be replaced in 2011 by application of user rate fees.



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW No. 3369

A Bylaw to Amend the Arbutus Ridge Sewer System Management Bylaw No. 3306

WHEREAS the Board of the Cowichan Valley Regional District established the management of the *Arbutus Ridge Sewer System* pursuant to Bylaw No. 3306, cited as "CVRD Bylaw No. 3306 – Arbutus Ridge Sewer System Management Bylaw, 2009";

AND WHEREAS the Board of the Cowichan Valley Regional District deems it desirable to revise Schedule G;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This Bylaw may be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 3369 – Arbutus Ridge Sewer System Management Amendment Bylaw, 2010**".

2. AMENDMENT

That Schedule G be deleted in its entirety and replaced with Schedule G attached to and forming part of this Bylaw.

READ A FIRST TIME this _____ day of _____, 2010.

READ A SECOND TIME this _____ day of _____, 2010.

READ A THIRD TIME this _____ day of _____, 2010.

ADOPTED this _____ day of _____, 2010.

Chairperson

Corporate Secretary



SCHEDULE G

TO CVRD BYLAW NO. 3306

FLAT RATE CHARGE

A flat rate charge in the amount of \$0.893 per day will be invoiced in 2010 for each single-family dwelling within the Arbutus Ridge Sewer System Service Area for the period of the CVRD "takeover" date until December 31, 2010.

A flat rate charge in the amount of \$31.759 per day will be invoiced in 2010 for the golf course property.

Properties within the service area without dwellings will not be charged for service in 2010.

These charges will be replaced in 2011 by the application of user rate fees.



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW NO. 3370

A Bylaw to Amend the Dogwood Ridge Water System Management Bylaw No. 3313

WHEREAS the Board of the Cowichan Valley Regional District established the management of the *Dogwood Ridge Water System* pursuant to Bylaw No. 3313, cited as "CVRD Bylaw No. 3313 – Dogwood Ridge Water System Management Bylaw, 2009";

AND WHEREAS the Board of the Cowichan Valley Regional District deems it desirable to add Schedule H;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. **CITATION**

This Bylaw may be cited for all purposes as "**Cowichan Valley Regional District Bylaw No. 3370 - Dogwood Ridge Water System Management Amendment Bylaw, 2010**".

2. **AMENDMENTS**

a) That the attached Schedule H be added to and form part of this Bylaw.

READ A FIRST TIME this _____ day of _____, 2010.

READ A SECOND TIME this _____ day of _____, 2010.

READ A THIRD TIME this _____ day of _____, 2010.

ADOPTED this _____ day of _____, 2010.

Chairperson

Corporate Secretary



C·V·R·D

SCHEDULE H

TO CVRD BYLAW NO. 3313

2010 FLAT RATE CHARGE

A flat rate user charge of \$1.6438/day will be invoiced in **2010** to each property connected to the water system within the service area boundary of the Dogwood Ridge Water System, for the period April 1 – December 31, 2010. The flat rate user charge will be applied on a “one time” basis and will be replaced in 2011 by the application of the user rate fees.

In addition, a flat rate parcel tax equivalent charge of \$1.9178/day will be invoiced to ALL properties within the service area boundary of the Dogwood Ridge Water System, for the period of January 4 – December 31, 2010. This flat rate charge will be applied on a “one time” basis and will be replaced in 2011 by the application of the Parcel Tax Roll.



R3

STAFF REPORT

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF MARCH 24, 2010

DATE: March 16, 2010

FILE NO: 1855-03/HBW

FROM: Louise Knodel-Joy, Senior Engineering Technologist, Engineering Services

SUBJECT: CVRD Infrastructure Planning Grants

Recommendation:

That it be recommended to the Board that the CVRD support application of an infrastructure planning grant for a Honeymoon Bay Micro Hydro Energy Recovery Program to be funded to a maximum cost of \$15,000, with \$5,000 from the CVRD Electoral Area Feasibility Study Function and \$10,000 through a Provincial Feasibility Study Grant; and that, upon completion of a successful business plan, an energy recovery service area for this utility be created.

Purpose: To approve application of a study grant through the Ministry of Community Services Infrastructure Planning Grant Program for the next round of applications, when announced.

Financial Implications: The Infrastructure Planning Grant Program provides funding to the maximum of \$10,000 for approved projects of \$15,000 or more. The remainder of funding will be provided by the CVRD Electoral Area Feasibility Study Function.


Interdepartmental/Agency Implications: none.

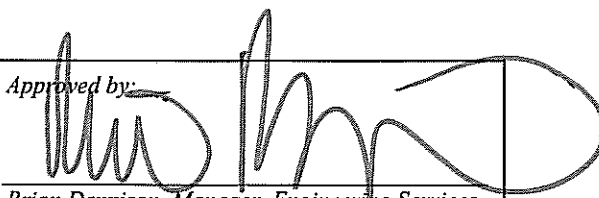
Background:

The Honeymoon Bay Micro Hydro Energy Recovery Program will examine potential options of generating hydro at the Ashburnham Creek dam in order to generate power for the Honeymoon Bay Water System and potentially sell surplus energy to BC Hydro as part of their net metering and standing offer programs. The study is to include a business plan which can determine if creation of an energy recovery service area is feasible.

Repayment of the Electoral Area Feasibility Study Fund will be provided upon establishment of an Energy Recovery Program.

Submitted by,


Louise Knodel-Joy
Senior Engineering Technologist

Approved by: 
Brian Dennison, Manager, Engineering Services



STAFF REPORT

R4

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF MARCH 24, 2010

DATE: March 2, 2010

FILE NO:

FROM: Harmony Huffman, Environmental Technologist

SUBJECT: CVRD Recycling and Waste Management – Annual Progress Report (2008)

Recommendation: N/A

Purpose: To update the Committee on recycling and waste management activities within the regional district for the 2008 calendar year, and to review the regional district's progress with regard to the implementation of its solid waste management plan.

Financial Implications: N/A.

Interdepartmental/Agency Implications: N/A

Background: The CVRD amended its' regional solid waste management plan in 2006. The CVRD's Environment Commission reviewed the plan at that time and continues to act as the public monitoring committee for the plan's implementation. The preparation of an annual progress report by Recycling and Waste Management staff assists the Environment Commission in this role. The annual report documents the regional district's progress on implementation of the plan, and also provides an analysis of regional waste disposal and recycling trends. The report is submitted on an annual basis to the Environment Commission, Engineering and Environmental Services Committee, and the BC Ministry of Environment.

Discussion: The layout of the 2008 Annual Progress Report (formerly "Waste Tracking Report") has been revised and updated. The new report contains two key sections, one providing an update on the status of various initiatives identified by the Solid Waste Management Plan, and another providing an overview and analysis of regional disposal and recycling figures. As in previous years, it is expected that this report will be completed during the spring/summer of the subsequent year for which the report is prepared (i.e. the 2008 report will be prepared for spring/summer 2009). However, the preparation of the 2008 report was delayed due to staffing shortages throughout 2008/09.

Some notable developments and key figures during 2008 include:

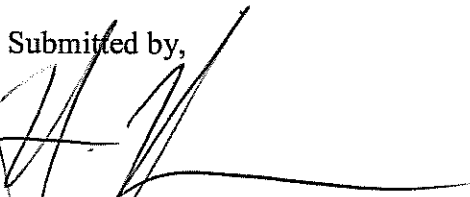
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- Approximately 33,606 tonnes of waste was disposed of in the CVRD during 2008, representing a slight increase over 2007 levels of 31,441 tonnes. This increase can be attributed to the strong economic growth and booming housing market experienced during much of 2008, prior to the economic downturn.
- Per capita waste reduction rates did not improve in 2008, and in fact decreased from the 2007 rate (by 1.4%). The per capita waste reduction rate represents the degree to which residents have *reduced* their garbage since 1990. In 2008, this rate was 46.1%, falling short of the provincial goal of a 50% reduction from 1990 levels. Although the CVRD was not able to meet this goal in 2008, it did manage to achieve it during 2000, 2001 and 2002 (see Figure 2 in the attached report for more information).
- Evidence shows that the overall waste stream (i.e. waste plus recyclables) within the CVRD continues to grow, meaning that continued emphasis on reduction, reuse and recycling initiatives is needed in order to support the Zero Waste mandate and to reach the provincial goal of a 50% reduction in per capita disposal levels.
- Total recycling in the region reached 85,924 tonnes during 2008, giving the CVRD a regional recycling rate of 71.9%, meaning that 71.9% of the total waste produced within the region was recycled and not sent to landfill. This figure represents a slight decrease from the 2007 rate of 75%. Note – this report also provides a correction to the 2007 recycling rate, which was originally reported to this Committee (on January 16, 2009) to be 68.2%, due to an error in calculations. The correct 2007 recycling rate of 75% is the highest rate ever achieved within the CVRD.
- The slight decrease in regional and per capita recycling rates indicated by the above figures is likely due to the economic downturn experienced during the latter part of the year and the corresponding decrease in commodity prices and household consumption.

Regionally Significant Projects – Gas Tax funding of approximately \$1.2 million was also secured during 2008 for the development of several initiatives outlined by the Solid Waste Management Plan, including upgrades to the Bings Creek and Peerless Road Recycling depots, and the development of a new south-Cowichan “eco” depot (recycling depot). However, staffing shortages have resulted in delays to the implementation of these and other projects. Because the information in the 2008 report is somewhat dated, the Committee will be provided with a more thorough and up-to-date review of current solid waste management projects with the preparation of the 2009 Annual Progress Report, projected for completion in June/July, 2010.

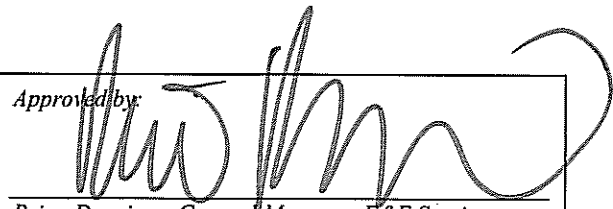
Further details regarding projects and directions in solid waste management for 2008 are available in the attached report.

Submitted by,



Harmony Huffman
Environmental Technologist

Approved by:



Brian Dennison, General Manager, E&E Services

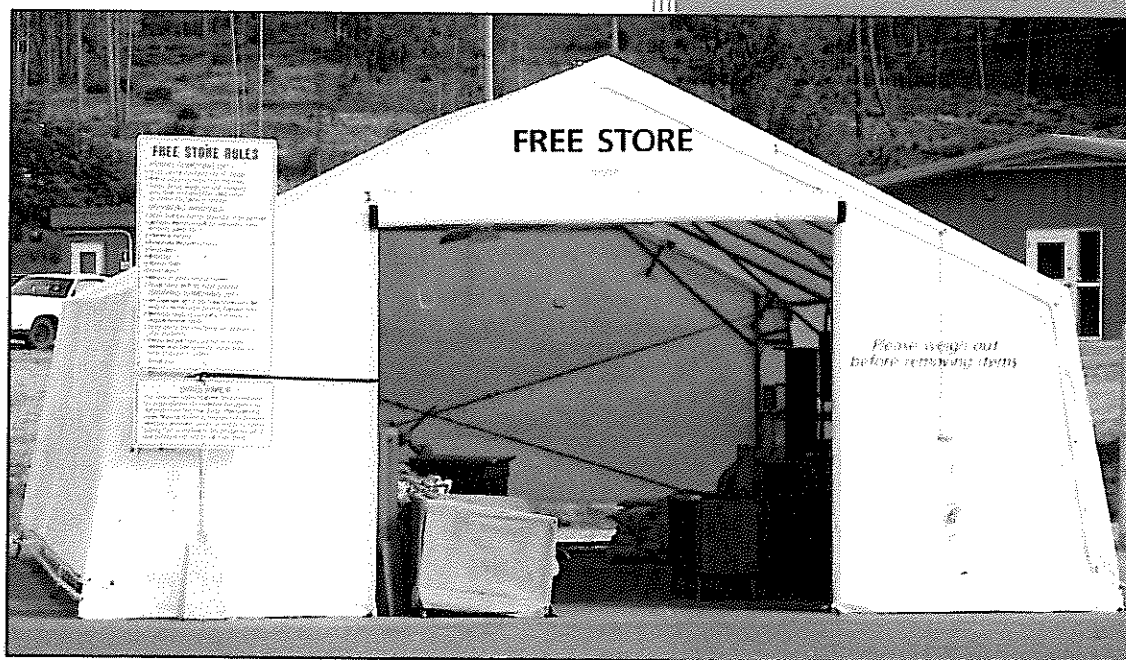
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C.V.R.D. Recycling & Waste Management

Annual Progress Report: 2008



Harmony Huffman, Env. Technologist
Kathleen Milward, Env. Technologist

March, 2010

Prepared for review by:
CVRD Environment Commission; and
BC Ministry of Environment 18

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1.0 EXECUTIVE SUMMARY

Regional recycling rates reached a historic high of 75% per person in 2007, but declined slightly in 2008 to 71.9%. Overall, approximately 85,000 tonnes of material was recycled within the CVRD in 2008. Per capita recycling volumes reached 1.2 tonnes per person in 2008, an increase of almost 2,000% over 1990 levels.

The proportion of waste going to landfill has declined significantly since 1990, with less than 30% of total waste going to disposal in 2008. However, the overall volume of waste produced continues to grow, while disposal rates have decreased in recent years. Figures show a 46.1% reduction in the per capita disposal rate for 2008 (over 1990 levels). While significant, this figure falls short of the provincially-mandated goal of a 50% reduction in per capita disposal rates.

Although the CVRD has been largely successful in implementing the mandates of its solid waste management plan, a great deal of work remains to be done if the goal of a 50% reduction in per capita waste disposal rates is to be achieved again. Implementation of initiatives described by the solid waste management plan including the introduction of residential food waste collection, addition of new products (such as electronic waste) to recycling programs, development of a new regional recycling depot, better enforcement of existing diversion bylaws, and increased education and communication with residents and the private sector, will be key elements in the CVRD's ability to reduce the volume of waste produced.

2.0 INTRODUCTION

In 1990 the provincial government required all regional districts to develop solid waste management plans, detailing how they would contribute towards the overall goal of a 50% reduction in waste disposal per person by the end of the year 2000 (as compared to 1990 levels). The Cowichan Valley Regional District (CVRD)'s first Solid Waste Management Plan was subsequently developed in October 1990 and received provincial approval later that year.

Since that time, the CVRD's Solid Waste Management Plan has undergone three major amendments as regional approaches to solid waste management have evolved. A significant change in recent years was the adoption, in 2002, of the Zero Waste mandate. In essence, this means that the regional district will direct its efforts towards eliminating waste on as many fronts as possible. Although the goal of Zero Waste may be difficult to achieve in the short-term, adopting this guiding direction in the approach to waste management has allowed the CVRD to make significant gains in terms of diverting waste from landfill.

Adopting the concept of Zero Waste also allows the regional district to look at waste management from a broader perspective, wherein the entire life cycle of a product can be considered. Approaches that allow the waste stream as a whole to be minimized, while viewing residual materials as valuable resources, advance the goal of Zero Waste and help to reduce the volume of material created and/or going to landfill. The most recent amendment to the solid waste management plan, completed in 2006, incorporates Zero Waste as a central tenant of regional solid waste planning, and provides the district with a comprehensive overview of waste management strategies and goals.

A key part of effective solid waste management planning is the ability to track the success of various waste management initiatives and goals. More specifically, a tracking and measurement system that shows the district's progress in reducing waste and implementing planned objectives helps to ensure the success of waste reduction initiatives and the ongoing effectiveness of waste management planning. The following report attempts to fulfill both objectives, the first section providing an overview of the regional district's progress to-date with regard to implementing its solid waste management plan, and the latter section providing a snapshot of the CVRD's status with regard to waste disposal and diversion levels. The report will conclude with an analysis highlighting strengths and weaknesses of the regional district's solid waste management plan implementation, and a discussion of future directions.

3.0 METHODOLOGY & LIMITATIONS

Data used in the preparation of this report is gathered by CVRD staff, on an annual basis, from regional district recycling depots, provincial stewardship program operators, and private recycling companies operating with the CVRD. Data is collected by a combination of the following: analysis of internal shipping and receiving reports, review of annual reports prepared by stewardship program operators, and phone/email surveys of private recycling or disposal companies operating locally. Once collected, data is tabulated and compared to regional population statistics to prepare the figures outlined in this report.

It should be noted that data collected from CVRD depots and provincial program operators is likely to have a higher degree of accuracy than data collected from private recycling companies, although staff attempt to verify data to the greatest extent possible. This is due to the fact that regional district depots and provincial stewardship programs have both staff and infrastructure (such as weigh scales) available to provide more sophisticated volume counts, whereas smaller or more rural operators tend to rely largely on estimations based on the previous year's figures (e.g. approximately 20% more material collected this year over last). Certain tools, such as a requirement that all facilities licensed under the CVRD's *Waste Stream Licensing Bylaw, 2004*, submit monthly material statements, have improved the quality of data received from private facilities. However, it is important to remember that certain factors, such as the addition of a new weigh scale, can influence the accuracy of figures from one year to the next.

For this reason, it is important to consider yearly trends rather than absolute numbers. Furthermore, given the inherent uncertainties in the tracking process, the key figure to consider when analyzing a region's progress on waste reduction is the amount of waste disposed, rather than the amount of waste recycled, as the former is the most rigorous and relevant to the waste reduction goal¹.

¹ Recycling Council of British Columbia (RCBC).

4.0 SOLID WASTE MANAGEMENT PLANNING

The following section will provide a broad overview of the CVRD's Solid Waste Management Plan (SWMP) and progress on its implementation. For ease of comparison, this section of the report borrows its structure from the SWMP itself. Appendix A of this report may be referred to for a more detailed implementation timeline for various initiatives described by the SWMP.

4.1 Regulations

In 2008 three bylaws regulated the CVRD's solid waste management system. Bylaw No. 1958 – *Cowichan Valley Regional District Garbage and/or Recyclable Materials Collection Bylaw, 1999* regulates the collection of curbside materials within all CVRD electoral areas. This bylaw was not amended in 2008.

Bylaw No. 2108 – *Solid Waste Management Charges and Regulations, 2000* regulates the operation of all CVRD recycling depots and transfer stations, while also outlining disposal bans and tipping fees. An important part of achieving diversion goals is effective enforcement of the disposal bans outlined in Bylaw No. 2108. Historically, enforcement has often been the responsibility of a seasonally-employed student, and is thus concentrated during the summer months. An increased enforcement presence throughout the year is needed in order to ensure that disposal bans are effectively enforced so as to increase the volume of material diverted from landfill.

Bylaw No. 2570 – *Waste Stream Management Licensing Bylaw, 2004*, regulates the management of all private and public facilities within the CVRD that manage municipal solid waste or recyclable materials. During 2008, six existing facility licences were renewed under the bylaw, while one application for a new facility licence was received. Staff responded in an enforcement capacity to at least eight separate violation incidents during 2008, all of which related to the illegal operation of unlicensed facilities. Each of these violations was successfully resolved on behalf of the CVRD, with one high profile case resulting in a \$10,000 settlement for the regional district. All investigation and enforcement activities were conducted in addition to the ongoing routine monitoring of existing licenced facilities.

Proposed Bylaw No. 2020 – *Landclearing Management Regulation Bylaw* has been in development for several years, and will regulate the open burning of large quantities of landclearing debris. This bylaw is anticipated for adoption and implementation during 2009.

4.2 Reduce

Waste reduction, the first "R" in the 5R management hierarchy, is a key component to the CVRD's approach to waste management. The CVRD relies primarily on education and communication initiatives to reduce the overall waste stream, which means reducing the total volume of material requiring disposal or recycling.

During 2008, two significant gains made in this area include the digitization of the CVRD's *Environmental Guide and Recycling Directory*, and the CVRD educational manual *Earth Issues, Our Lifestyles and the Environment*. Both documents offer extensive tips and information on reducing waste, with the latter manual targeted towards school-aged children, and designed for incorporation into academic lesson plans. Both documents are now available on the newly-redesigned CVRD website, along with information on Zero Waste, composting, air quality etc. Another significant achievement in 2008 was the signing of a contract with the Nanaimo Recycling Exchange (NRE) to provide educational classroom workshops free-of-charge to local schools. The NRE bases its workshops on material found in the *Earth Issues* manual, with topics including Zero Waste, Water Quality, Composting, Consumer to Conserver, Climate Change, and Green Washing. Working with the NRE has provided an excellent tool by which the CVRD can promote messages of reduction, reuse and recycling to homes throughout the region.

4.3 Reuse

The second "R" in the 5R hierarchy focuses on the reuse of materials. The economic downturn experienced in the latter part of 2008 provided a natural incentive for the reuse of materials as household incomes declined. CVRD initiatives such as the 'free store' offered at the Bings Creek Solid Waste Management Complex and Peerless Road Recycling Depot continued to be very popular with the public and encouraged the reuse of materials with remaining useful life.

4.4 Recycle

Recycling represents the third "R" in the 5R hierarchy, and also represents the most significant part of the CVRD's waste management strategy. Promotion of recycling opportunities remains a key part of regional waste management; initiatives undertaken in this area during 2008 include a continuation of daily advertisements (through both print and radio) regarding disposal bans and curbside recycling, and ongoing promotion of the free yard and garden drop-off initiative introduced in 2007. During 2008, this initiative resulted in the diversion of over 4,000 tonnes of yard and garden waste from landfill, an increase of almost 10% over 2007 figures.

During 2008 the feasibility of collectively tendering all regional curbside recycling collection contracts was also evaluated. Historically, curbside recycling services between CVRD electoral areas has varied widely, both in terms of service levels and cost to homeowners, with the result that contracts have been tendered separately by electoral area in the past. It was felt that a harmonization of all curbside contracts would result in not only a standardization of services throughout the region, but also a significant cost savings to most home owners. Unfortunately, the feasibility study conducted in 2008 indicated that the collective tender of curbside contracts was not practical at the time due to differing contract expiration deadlines and lack of an overall regional direction. It is hoped that this approach can be reevaluated during 2010, prior to the expiration of current contracts. An evaluation of the potential for integrating residential food waste collection with existing curbside programs is also planned for this time.

Commercial and multi-family residential units make up a significant proportion of waste generators within the CVRD and are typically under-serviced in terms of the availability of recycling and other diversion programs (e.g. composting). As a result, waste generated by these units typically contains a higher volume of recyclable materials than waste generated by single-family dwellings, which tend to be serviced by curbside recycling programs. Although the majority of commercial and multi-family units are within the jurisdiction of member municipalities, it is recognized that the waste they generate becomes the responsibility of the CVRD, and thus the CVRD has a vested interest in improving diversion rates for these units. To this end, further education and enforcement of the disposal bans outlined in Bylaw No. 2108 are needed, as is improved communication between regional district staff, commercial waste haulers, and the owners of commercial and multi-family units.

Two regional recycling depots, plus one recycling depot/transfer station represent a core portion of the CVRD's recycling program. These depots, particularly the flagship Bings Creek facility, are very popular with the public and a highly visible way for the CVRD to promote recycling initiatives. During 2008, the development of "free side" and "paid side" traffic streams at both the Bings Creek facility and Peerless Road Recycling Depot was evaluated and deemed feasible. BC Community Works – Gas Tax Funding was secured to implement these works (in conjunction with overall site upgrades) at the Peerless Road Depot, with works scheduled to begin in 2010.

BC Community Works funding was also received to develop an organics tipping area at the Bings Creek facility, adjacent to the existing tipping floor. However, implementation of this project has been delayed due to operational complications. In the interim, containers for the collection of residential organics have been installed at the Bings Creek facility, allowing both commercial and residential customers to drop off organic material. Residential customers are able to deposit up to five gallons per day of residential organic materials at no charge.

Other recycling initiatives successfully implemented in 2008 include: the bi-annual backyard composter sale, which provides all CVRD residents with an opportunity to purchase a backyard composter at a fraction of retail cost; and ongoing work with industry or non-profit stewardships organizations to increase the range of materials accepted for recycling. Of the recyclable materials currently accepted at CVRD depots, some notable diversion successes include the more than 4,000 tonnes of yard and garden waste, and more than 6,500 tonnes of wood waste, that were diverted from landfill during 2008.

4.5 Recover

Representing the fourth "R" in the 5R hierarchy, recovery refers to the ability to derive, or 'recover', some value from materials that cannot be reduced, reused, or recycled. These residuals often comprise the bulk of what ends up in a landfill. Today, recovery often implies the use of technology to recover energy from waste.

In 2008, a joint feasibility study conducted with the Regional District of Nanaimo (RDN), examined residual waste management technologies (i.e. gasification, refuse derived fuel, and waste-to-energy) and their applicability within the CVRD and RDN. The study projected a disposal cost of approximately \$100 per tonne if the RDN and CVRD were to combine their waste streams and invest in recovery technology. While this represented a realistic cost for the CVRD, which during 2008 was paying about \$110 per tonne to export waste, it represented a significant cost increase for the RDN, which subsequently decided not to move forward with a recovery facility at this time. The study also showed that the CVRD alone does not possess the economies of scale to justify an investment in new technology, thus the CVRD has continued to export waste to landfill for the time being.

4.6 Residual

The final "R" in the hierarchy refers to the management of residuals, materials for which no higher use can be found. Since 2001 the CVRD has exported its residual waste to an out-of-region landfill, owing to the lack of local disposal options. For several years, waste was trucked to a landfill in Cache Creek, BC, operated by Wastech Services Ltd. The CVRD's waste export ceiling, imposed by the Cache Creek landfill, was 29,500 tonnes during 2007 and 2008. However, in October 2008 the CVRD redirected its waste away from Cache Creek on account of the landfill nearing capacity, concerns related to future access, and rising costs.

As a result, residual waste from the CVRD is now being shipped to the Roosevelt Regional (Rabanco) Landfill located in Washington State, USA, and operated by Allied Waste Services. Under a three year contract which will expire in 2011, waste is transported from the CVRD Bings Creek facility in intermodal rail containers and barged to the mainland, where it makes the rest of the journey via rail.

This arrangement holds two significant advantages for the CVRD over the previous arrangement with Cache Creek: the combination of trucking, shipping and rail used to transport waste to the Roosevelt Landfill creates less of a carbon footprint than the previous transport arrangement which relied solely on trucking; and, unlike the Cache Creek Landfill, there is greater certainty regarding access. It is important to note, however, that at \$110 per tonne disposal cost, waste export provides a built-in incentive for the CVRD to constantly reduce the volume of waste produced, as less waste shipped means greater savings for regional taxpayers. It is anticipated that several planned initiatives including: the introduction of organics diversion in both residential and commercial waste streams; enhancing recycling opportunities for the commercial and multi-family sector; providing convenient access to regional recycling depots; and the expansion of industry stewardship programs and reduced packaging initiatives, will all help to reduce the volume of waste produced within the CVRD.

This report will now turn to an overview of regional progress with regard to waste management and diversion. Reviewing disposal and recycling trends allows the strengths and weaknesses of the CVRD's solid waste management plan, and its implementation, to be highlighted. An analysis of these strengths and weaknesses will follow.

5.0 WASTE DISPOSAL

THE GOOD NEWS...for the Region: The CVRD, on average, is disposing of far less waste than it did in 1990 (Figure 1). At that time, more than 90% of waste produced was going to landfill; in 2007, less than 30% of waste produced went to disposal.

...for Residents: CVRD residents have reduced the amount of waste disposed of, per person, by at least 50% (over 1990 levels) in the years 2000, 2001, and 2002 (Figure 2). Per capita disposal levels have declined from more than 0.75 tonnes per year, to about 0.42 tonnes per year (Figure 3).

The CVRD offers some of the most progressive recycling programs in the country, which enjoy a high rate of public participation. This, combined with a strong local recycling industry, has meant that the volume of waste generated has remained relatively stable in recent years, despite strong economic growth and a steadily growing population (Figure 4).

THE BAD NEWS...for the Region: Waste disposal rates are no longer declining overall, and in 2008 even increased slightly over the previous year (Figure 1). And despite the overall decline since 1990, almost 30% of all waste produced is *still* going to disposal. While strong housing starts throughout much of 2008

may have played a role in the increase, the general stabilization of rates over the past few years (Figure 4) may also indicate that existing recycling programs have reached capacity and that participation in regional programs such as curbside collection has begun to level-off.

...for Residents: Since 2000, per capita waste disposal rates have leveled off or risen slightly (Figure 2). This indicates that, despite increasing opportunities to recycle, people continue to produce *more* waste overall rather than *less* waste, even though they are recycling more of it. Significant work remains if the provincial goal of a 50% reduction from 1990 levels is to be achieved again, and the Zero

Figure 1: Regional Disposal Rate

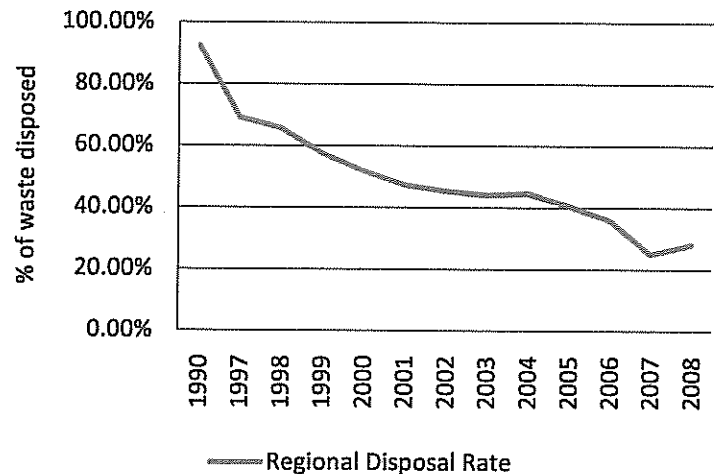


Figure 2: Per Capita Decrease in Waste Disposal Rate

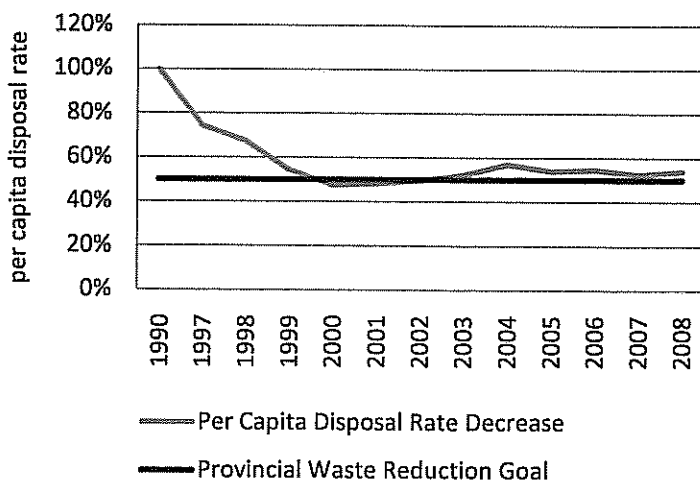
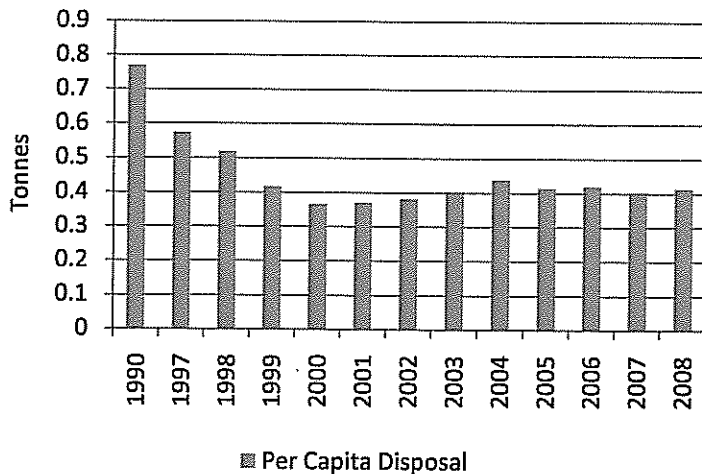


Figure 3: Per Capita Waste Disposal



Waste mandate further pursued.

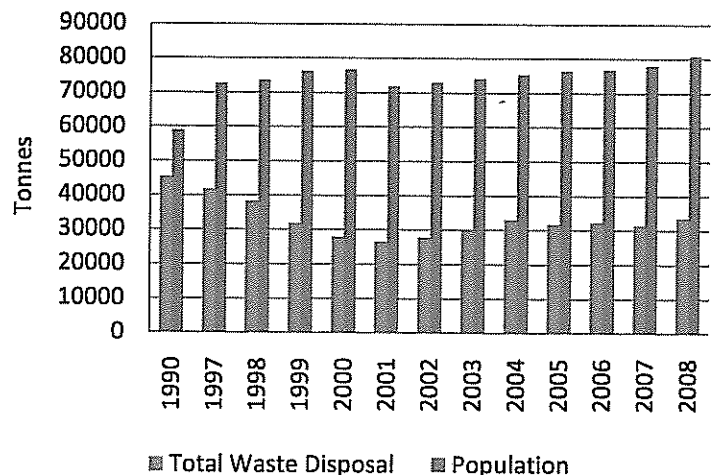
SOLUTIONS: Continued education will help new residents of the Cowichan Valley to fully participate in existing recycling programs, while effective enforcement of existing diversion bylaws will also provide an added incentive for current residents to participate in recycling and reduce their waste disposal needs. Education and enforcement initiatives should target multi-family dwellings in order to ensure that residents are able to fully participate in existing recycling programs.

Given the region's growing population, a continued expansion of recycling programs is also needed if a continued expansion of the

waste stream is to be avoided. Introduction of new programs such as the collection of residential organics at curbside, or expansion of existing programs to collect electronic waste, are two examples of programs that will divert a greater portion of what is currently considered waste. Other initiatives to minimize the waste stream include a continued emphasis on the first two "Rs" of the recycling hierarchy, "reduce" and "reuse".

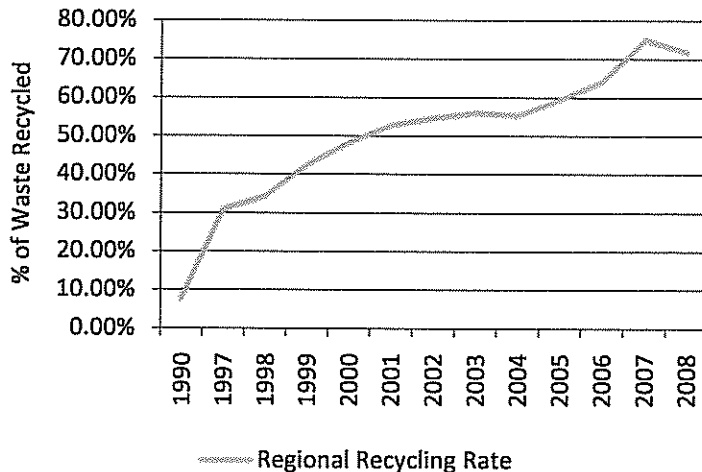
Planned initiatives including expanding the capacity of existing recycling programs, providing recycling options for new products such as electronic waste or organic materials, and targeting all sectors (commercial, institutional, residential) will result in greater opportunities for waste diversion amongst residents and private business. Effective enforcement of waste diversion bylaws will also help to ensure that recyclable materials are not included in the waste stream. The introduction of new recycling programs, such as provincial initiatives that reduce the quantity of packaging used in the manufacture of products will help to combat the volume of waste produced in a consumer-oriented society.

Figure 4: Regional Waste Disposal



6.0 WASTE DIVERSION

Figure 5: Regional Recycling Rate



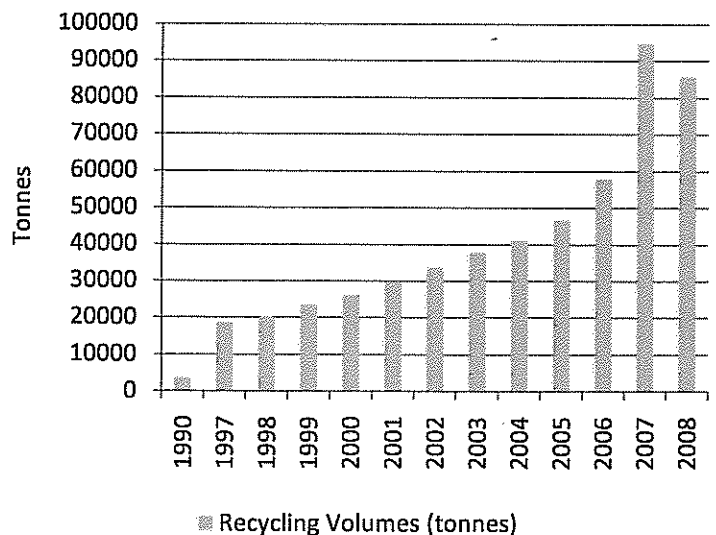
THE GOOD NEWS...for the Region: Regional recycling rates have increased dramatically since 1990 (Figures 5 and 6). Thanks to record high commodity prices during 2007 and the first part of 2008, the recycling industry was able to collect and divert more waste than ever before – resulting in diversion levels reaching more than 75% in 2007!

...for Residents: CVRD residents are recycling a lot more than they did in 1990, which resulted in per capita recycling rates rising to more than 1.2 tonnes per person in 2007 (an almost 2,000% increase since 1990) (Figures 7 and 8).

THE BAD NEWS...for the Region: After peaking in 2007, regional recycling rates dropped during 2008 to 71.9% (Figure 5), likely due to the global economic downturn and a corresponding decrease in commodity prices. For the local recycling industry, dramatic declines in commodity prices effectively put business on hold, with many operators stockpiling materials until markets improved. Although most recycling programs within the Cowichan Valley were able to continue during this downturn, private operators and recycling contractors saw a significant decline in their revenues. A slowing of activity in all sectors, particularly construction, also reduced the volume of materials being generated – leading to a decrease in both recycling volumes as well as in total waste produced.

...for Residents: Despite rapid increases in previous years, per capita recycling levels also dropped sharply in 2008. Again, this decrease can likely be attributed to the global economic downturn that took hold during the latter half of the year, as declining consumption levels and dropping commodity prices led to a decrease in the volume of material entering the recycling stream.

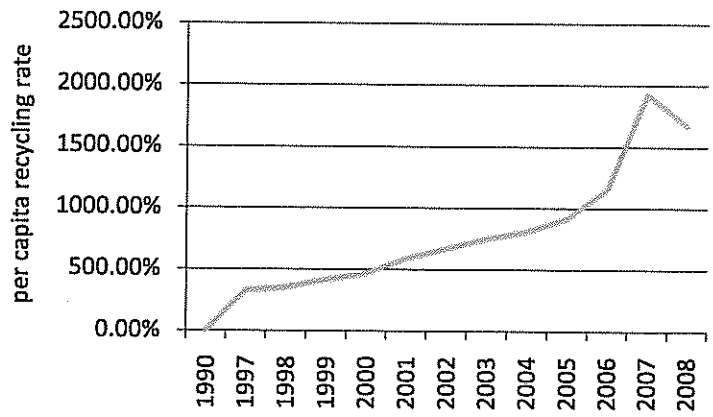
Figure 6: Regional Recycling



SOLUTIONS: Recycling programs will always be at least partially subject to global commodity prices, and thus vulnerable in times of economic downturn. During boom times, a strong focus on recycling initiatives will help to keep diversion levels strong as consumption levels rise along with household incomes.

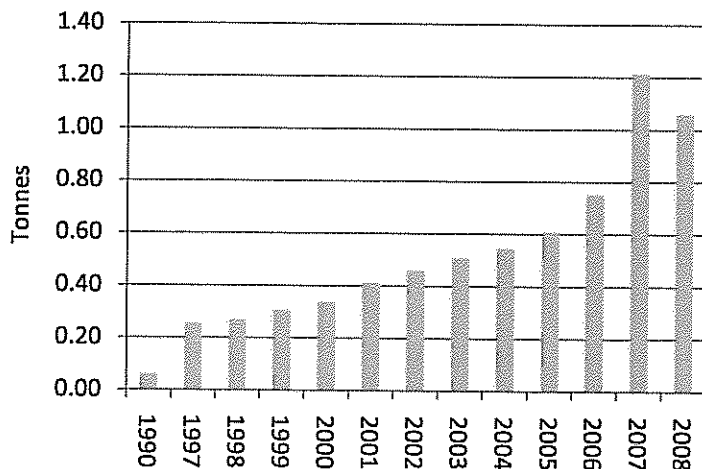
During down times, there is a natural incentive to reduce and reuse which can result in a decrease to the volume of recyclables entering the regional system. For local governments, a willingness to accommodate private operators where possible, and ensuring that recycling programs remain convenient and low cost, will allow residents to continue good recycling habits. On a broader scale, the volume of materials recycled will continue to grow as the waste stream grows, but only by implementing recycling programs for *new* materials (such as residential organics or electronic wastes) will a larger proportion of the waste stream be diverted.

Figure 7: Per Capita Recycling Rate Increase



Per Capita Recycling Rate Increase

Figure 8: Per Capita Recycling



Per Capita Recycling Rate

7.0 DISCUSSION & ANALYSIS

The overall volume of waste disposed by the CVRD has decreased significantly since 1990. However, 2008 figures suggest that this downward trend may have stabilized, and further, that that regional disposal volumes have tended to increase slightly in recent years. These findings are reflected at the per capita level, with figures indicating a slight increase in per capita disposal rates during 2008. These trends are similar to those found in neighboring jurisdictions including the Regional District of Nanaimo and the Capital Regional District. Factors that may have influenced these trends include:

- High saturation levels and strong public participation in existing curbside recycling programs, which have resulted in a gradual leveling-off of the waste reduction achieved. If curbside recycling programs are to continue to play a significant role in reducing both regional and per capita waste, they must expand to accept additional materials, such as food wastes.
- During 2008, housing starts within BC remained strong, despite the beginnings of an overall decline nationally². In the Cowichan Valley, new construction maintained a steady pace for a large portion of the year, although numbers began to decline during the autumn in conjunction with the global economic downturn³. As construction and demolition wastes comprise a significant portion of the waste stream (between 15% and 20%⁴), the steady growth in the local housing market for the majority of 2008 may have been a strong contributor to the volume of local waste produced.
- The region continued to experience moderate population growth during 2008, with local populations increasing by about 1.5%⁵. Population growth (and the associated growth in consumption), in combination with the gradual leveling-off of participation rates in curbside recycling programs, also likely played a role in the slight increase to waste disposal rates.

As may be expected, given the regional decline in waste disposal volumes, regional recycling rates have skyrocketed in recent years with rates reaching a high of 75% in 2007, although declining slightly in 2008. The dramatic increases in recycling volumes seen in 2007/08 can likely be attributed to a booming global economy and record high commodity prices (for example, high steel prices led to more than 35,000 tonnes of metal being diverted within the CVRD alone⁶), while the global economic downturn experienced during the latter half of 2008 likely resulted in the corresponding drop in recycling rates.

Nonetheless, regional recycling rates have remained strong through the year at 71.9%. Some factors that have likely influenced this figure, and the slight decline in recycling rates from 2007 to 2008, are discussed below:

² Canada Mortgage and Housing Corporation.

³ Institute of Chartered Accountants of BC.

⁴ Figures based on waste composition study prepared in 2004 for Regional District of Nanaimo by Gartner Lee Ltd.

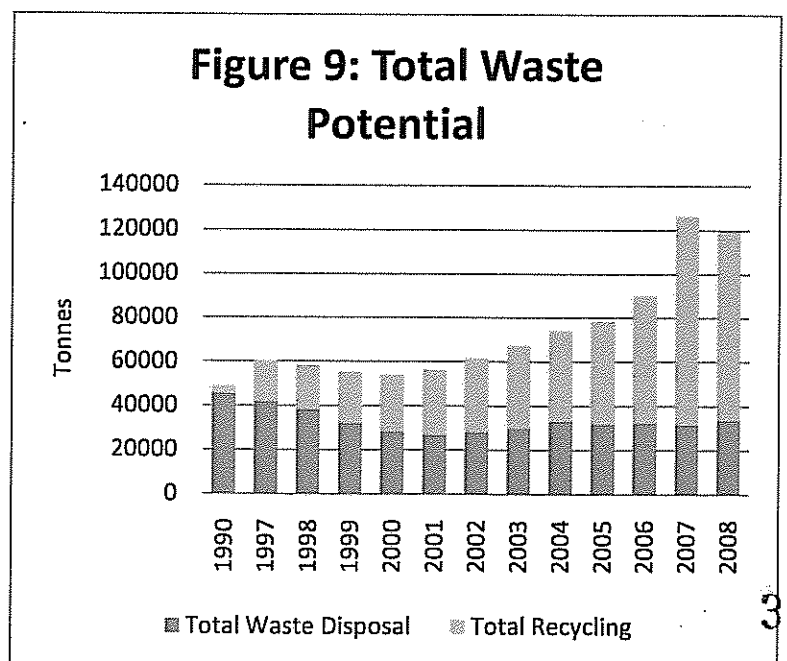
⁵ BC Stats.

⁶ Estimate derived from CVRD Waste Tracking Database, 2008.

- A strong local recycling industry exists within the CVRD, allowing the regional district to access convenient and relatively low cost recycling programs for many materials.
- High metal prices have allowed the CVRD to fund many of its free recycling programs, encouraging residents to recycle rather than dispose of waste at the relatively high cost of \$130 per tonne tipping fee for garbage.
- The introduction of new recycling programs also helps to maintain high diversion rates, thus the introduction in 2007 of free yard and garden recycling likely helped to push recycling rates higher during that and subsequent years, while also reducing incidents of disposal by way of open burning.
- A residential 'free store' (now offered at two regional disposal facilities) has proven to be very popular with customers, allowing reusable items to be diverted from the waste stream and picked up for free by interested customers.
- During the economic downturn experienced during the latter part of 2008, the CVRD was able to implement several options that allowed regional recycling programs to continue at full capacity, these included:
 - Allowing private recycling facilities to temporarily stockpile materials (until markets improved); and
 - Allowing recycling companies to temporarily defer payments to the regional district.

Together, these initiatives helped regional recycling rates remain strong despite fluctuations in global commodity prices and a steady increase to the region's population. However, more work is needed if diversion levels are to increase for an ever-growing waste stream.

Figure 9 shows regional disposal rates as compared to regional recycling rates. As we can see, recycling rates have increased dramatically in relation to disposal rates in recent years. However, Figure 9 also shows us that, overall, the total waste stream has also increased dramatically in recent years, reaching a historical high of more than 120,000 tonnes in 2007.



Although the CVRD has historically been successful in reducing the amount of waste going to landfill, it is apparent that recycling initiatives will have to be strengthened and expanded if waste disposal levels are to further decrease. The truly telling figure in this analysis is the per capita waste disposal rate (Figure 2). As we can see from Figure 2, per capita disposal rates decreased at least 50% from 1990 levels during 2000, 2001, and 2002, but since that time have begun to rise again. This means that, despite significant increases to recycling rates, people are still producing *more* waste than they used to, thanks largely to increased spending power and the wide availability of consumer goods. If this trend is to be reversed, recycling programs must remain strong and be expanded wherever possible. As described in the first section of this report, increasing recycling rates amongst commercial and multi-family units, while providing accessible and low cost recycling programs for a wide range of materials, are a key focus of the regional district's solid waste management plan. Initiatives planned for upcoming years include the implementation of a residential food waste collections program, the introduction of Provincial stewardship programs for several electronic waste items, and the expansion of commercial organics collection programs.

Education will also play a key role in keeping local diversion rates strong. Educational initiatives should focus on reduction and reuse, the first two "R's" of the 5R hierarchy, in an effort to reduce consumption levels and the waste stream as a whole. Programs designed for school-aged children introduce the concepts of reduction, reuse and recycling at an early age, and provide good avenue by which information can be transmitted back to homes and to the larger family. Working with educational providers such as the Nanaimo Recycling Exchange, and providing the educational manual *Earth Issues* to local groups at no charge, are core aspects of the CVRD's current educational approach to waste diversion. The area will be further expanded in future by providing more educational information online, making increased use of forums such as newspaper and radio to provide information to residents, and targeting key areas (such as multi-family dwellings) with recycling and diversion information.

8.0 CONCLUSION

The Cowichan Valley Regional District has made significant progress with regard to waste diversion over the past several years. The regional recycling rate has increased dramatically, and although it decreased slightly in 2008 over the previous year, is still very high at 71.9%. Waste disposal rates have decreased overall since 1990, although the per capita waste disposal rate is no longer declining, indicating that people continue to produce more, rather than less, waste overall. While progress was made on implementation of the regional solid waste management plan in 2008, the introduction of major new initiatives (such as residential food waste collection) in upcoming years will likely play a significant role in helping to reduce regional waste disposal volumes. Ongoing programs, such as providing education and outreach to local residents and businesses, along with consistent enforcement of waste diversion bylaws, will also help to reduce waste disposal volumes.

9.0 WORKS CITED

- BC Stats. 15 December 2009. "population estimates, standard age groups, regional district Cowichan valley – query submitted 15 December 2009". Retrieved 15 December 2009 from
<<http://www.bcstats.gov.bc.ca/data/pop/pop/dynamic/PopulationStatistics/Query.asp?category=Census&type=RD&topic=Estimates&agegrouptype=Standard&subtype=®ion=19000&year=200&year=2005&year=2006&year=2007&year=2008&agegroup=totals&gender=t&output=browbro&rowsperpage=all>>.
- Canada Mortgage and Housing Corporation. 15 May 2008. "Housing Starts to Slow in 2008". Retrieved 15 December 2009 from < <http://www.cmhc-schl.gc.ca/en/corp/nero/nere/2008/2008-05-15-0815.cfm>>.
- Gartner Lee Limited. November 2004. "Regional District of Nanaimo Solid Waste Composition Study". Retrieved 13 December 2009 from
<<http://www.rdn.bc.ca/cms/wpattachments/wpID1602atID2081.pdf>>.
- Institute of Chartered Accountants of BC. nd. "BC Check-up 2009". Retrieved 15 December 2009 from
<<http://www.bccheckup.com/bccheckup.php?cat=81>>.
- Recycling Council of British Columbia (RCBC). 2006. "BC Municipal Solid Waste Tracking Report 2003-2005." Retrieved 4 January 2010 from
<http://rcbc.bc.ca/files/u3/bc_mun_solid_waste_tracking_report.pdf>.

APPENDIX A: Solid Waste Management Plan - Updated Project Timeline

Year*	Initiative	Status	Comments	Projected Completion
2007	Commission report on feasibility of employing new and emerging technology for residual waste stream	Complete	A report was jointly commissioned with the Regional District of Nanaimo in 2007.	-
	Redevelop west side of tipping area at Bings Creek to accommodate cardboard compactor, free store and hazardous materials	Complete	The hazardous waste building at Bings Creek has been expanded to offer storage for a wider range of items, including product care materials, fluorescent tubes, batteries etc. The expanding building will also accommodate the new free store location. The new cardboard compactor was installed in 2007.	-
	Develop closure plan for Koksilah Road ash landfill	In progress	Staff are currently working with representatives from both Cowichan Tribes and INAC to develop a closure plan for the Koksilah Road ash landfill. It is anticipated that a closure plan and cost-sharing arrangements will be developed over the next several months.	2010
	Initiate development of South-end depot	In progress	Consultation with regional landowners, area directors, architects and other stakeholders continues.	2010
2008	Initiate planning for upgrades to Peerless Road and Meade Creek depots	Complete	Planning for upgrades to Peerless Road depot has begun and funding secured (see below). Upgrades to the existing Meade Creek depot are not planned as it is hoped that the facility may be relocated to a more centralized area. Relocation of the facility will provide increased ease of use for residents, while reducing travel times and costs associated with servicing.	-
	Identify replacement disposal facility for Cache Creek landfill	Complete	The CVRD has been exporting waste to the Roosevelt (Rabanco) Landfill in Washington State since fall 2008. Staff continue to investigate alternative means of regional waste disposal.	-
	Develop closure plan for Peerless Road ash landfill	In progress	CVRD Board Resolution no. 9-313.4 of June 10, 2009 resolved that a loan authorization bylaw for approximately \$1,800,000 be approved for a five year period to cover the cost of ash landfill remediation at Peerless Road, Koksilah Road, and Meade Creek, use of these funds was approved by Alternative Approval Process completed December, 2009. Closure planning continues.	2010
	Redevelop Peerless Road Recycling Drop-off Depot	In Progress	Funding for upgrades to Peerless Road depot have been secured from BC Community Works – Gas Tax funding. Construction will begin once closure plan for onsite ash landfill has been prepared.	2010
	Evaluate feasibility of implementing Environmental Management System	Delayed	Low staffing levels have precluded the evaluation of an Environmental Management System at this time.	2012
	Phase out Multi Bin program	Delayed	Phase out of Multi Bin program has been delayed until the new South-end depot is constructed, in order to prevent an interruption of service to area residents.	2011
2010	Implement residential food waste collection service	In progress	Implementation of residential food waste collection service has been delayed due to higher than anticipated costs. Program and cost structures will be revisited during 2009/2010 for implementation in spring 2011.	2010
	Develop food waste tipping area at Bings Creek	In progress	Development of a food waste tipping area at Bings Creek has been delayed due to operational complications. However, BC Community Works – Gas Tax Funding has been secured to develop a food waste tipping area in the onsite transfer building. Staff are currently attempting to schedule construction around the existing workload. Construction is anticipated to begin within the next several months.	2010

*Projected year for completion, as per section 2.9 of SWMP, 2006.

APPENDIX B: Waste Tracking and Recycling Figures

Table 1: Waste Disposal Figures (all figures in metric tonnes unless otherwise indicated)

	1	2	3	4	5	6
Year	Population	Disposal to Private Facilities	Disposal to GVRD Facilities	Total Waste Disposed ⁷	Per Capita Disposal Rate ⁸	Per Capita Disposal Rate Decrease ⁹
1990	59,059	11,000	29,500	45,475 ¹⁰	0.770	-
1997	72,691	11,249	30,571	41,820	0.575	25.3%
1998	73,735	10,500	27,823	38,323	0.520	32.5%
1999	76,386	7,747	24,164	31,911	0.418	45.7%
2000	76,820	4,675	23,413	28,088	0.366	52.5%
2001	71,998	4,919	21,780	26,699	0.371	51.8%
2002	73,129	3,060	24,881	27,941	0.382	50.4%
2003	74,260	3,275	26,487	29,762	0.401	48.0%
2004	75,392	5,125	27,987	33,112	0.439	43.0%
2005	76,523	4,225	27,556	31,781	0.415	46.1%
2006	76,929	5,204	27,112	32,316	0.420	45.4%
2007	78,060	3,593	27,948	31,541	0.404	47.5%
2008	80,936	5,328	28,278	33,606	0.415	46.1%

⁷ Sum of columns 2 and 3.

⁸ Column 4 divided by column 1.

⁹ Per capita rate decrease divided by per capita base year rate (1990).

¹⁰ Includes 4,975 tonnes of alternative waste disposal (e.g. backyard burning etc.) during 1990.

Table 2: Recycling Figures (all figures in metric tonnes unless otherwise indicated)

	1	2	3	4
Year	Population	Total Recycling ¹¹	Per Capita Recycling Rate	Per Capita Recycling Rate Increase ¹²
1990	59,059	3,661	0.06	0.00%
1997	72,691	18,691	0.26	333.33%
1998	73,735	20,019	0.27	352.50%
1999	76,386	23,566	0.31	414.19%
2000	76,820	26,107	0.34	466.41%
2001	71,998	29,817	0.41	590.23%
2002	73,129	33,769	0.46	669.62%
2003	74,260	37,877	0.51	750.10%
2004	75,392	41,173	0.55	810.20%
2005	76,523	46,730	0.61	917.78%
2006	76,929	57,975	0.75	1156.03%
2007	78,060	94,891	1.22	1926.03%
2008	80,936	85,924	1.06	1669.38%

¹¹ Figures represent all private, governmental and non-profit recycling.

¹² Per capita rate increase divided by per capita base year rate (1990).

Table 3: Waste and Recycling Comparison (all figures in metric tonnes unless otherwise indicated)

	1	2	3	4	5
Year	Total Waste Disposed ¹³	Total Recycling ¹⁴	Total Waste Potential ¹⁵	Regional Disposal Rate ¹⁶	Regional Recycling Rate ¹⁷
1990	45,475	3,661	49,136	92.55%	7.50%
1997	41,820	18,691	60,511	69.11%	30.90%
1998	38,323	20,019	58,342	65.69%	34.30%
1999	31,911	23,566	55,477	57.52%	42.50%
2000	28,088	26,107	54,195	51.83%	48.20%
2001	26,699	29,817	56,516	47.24%	52.80%
2002	27,941	33,769	61,710	45.28%	54.70%
2003	29,762	37,877	67,639	44.00%	56.00%
2004	33,112	41,173	74,285	44.57%	55.40%
2005	31,781	46,730	78,511	40.48%	59.50%
2006	32,316	57,975	90,291	35.79%	64.20%
2007	31,641	94,891	126,432	24.95%	75.05%
2008	33,606	85,924	119,530	28.12%	71.90%

¹³ Column 4 of Table 1.

¹⁴ Column 2 of Table 2.

¹⁵ Sum of columns 1 and 2.

¹⁶ Column 1 divided by column 3.

¹⁷ Column 2 divided by column 3.



STAFF REPORT

R5

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF MARCH 24, 2010

DATE: March 16, 2010 **FILE NO:** 2320-20-WI
FROM: Harmony Huffman, Environmental Technologist
SUBJECT: Recycling Depot Service Contract Extensions

Recommendation: That the Cowichan Valley Regional District enter into sole source Recycling Depot Servicing contract extensions, as negotiated for the period of 1 June 2010 to 31 December 2010.

Purpose: To inform the Committee of the results of negotiations to extend Recycling Depot Servicing contracts from 31 May 2010 to 31 December 2010.

Financial Implications: As discussed.

Interdepartmental/Agency Implications: None.

Background: All CVRD Recycling Depot Servicing contracts expire on 30 April 2010. During the regular Engineering and Environmental Services Committee meeting of January 27, 2010, the Committee recommended that staff pursue sole source Recycling Depot Servicing contract extensions for a period of up to one year. As was described at that meeting, the purpose of seeking extensions would be to continue existing levels of service while allowing staff time to review cost savings and other issues associated with the use of Regionally Significant Gas Tax funding to purchase servicing equipment (such as a truck and roll-off bins).

Discussion: The following table outlines the service contracts currently administered by CVRD staff for the provision of recycling services at regional recycling depots:

CVRD Recycle Depot Service Contracts			
Product	Processing	Transportation	Cost Change
antifreeze, used	Newalta Corporation	Included.	None
asphalt roofing	Johel Brothers Contracting Ltd.	Active Industrial	None
glass	Johel Brothers Contracting Ltd.	Active Industrial	None
gypsum (drywall)	Active Industrial Waste Mgmt.	Active Industrial	None
metal, scrap	Steel Pacific Recycling	Active Industrial	None
oil, used	Newalta Corporation	Included.	None
plastic, bulk	Vancouver Island Recycling Ltd.	Active Industrial	None
recyclables, household	Vancouver Island Recycling Ltd.	Active	None
scrap lumber & wood	Steel Pacific Recycling	Active Industrial	None
white goods (cfc removal)	Electra Appliance Ltd.	N/A	None
yard and garden	Central Landscape Supplies Ltd.	Active Industrial	None

Because the existing contracts described above are set to expire April 30, 2010, staff have approached these service providers with regard to extending contracts until December 31, 2010. At this time, staff can report that all service providers have indicated their agreement with this proposal, with no cost increase to the CVRD.

Temporarily extending existing contracts allows staff the time to more fully review potential changes to the servicing system which may result in significant cost savings and greater efficiencies. For example, current analysis shows that the use of Regionally Significant Gas Tax funding to purchase servicing equipment may result in an annual savings of \$100,000. Therefore, with no increase in costs to extend contracts until year-end, staff are able to pursue the separate goal of increased annual cost savings.

The following table outlines the various service agreements administered by the CVRD. Unlike contracts, these agreements have no defined expiry date. However, this table, in combination with the former, does illustrate the wide range of service providers and local industry representatives that staff work with in order to provide recycling services at CVRD depots. In total, staff are currently managing 14 processing and transportation contracts in addition to 12 separate service agreements. This number will soon increase as more Provincial stewardship programs come online during 2010-2011, meaning that more products may be collected at CVRD recycling depots.

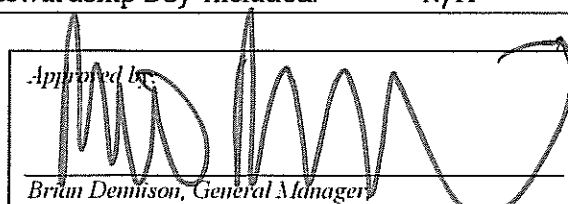
CVRD Recycle Depot Service Agreements			
Product	Processing	Transportation	Cost Change
batteries, disposable	Aerosmith Environmental Services	Included.	N/A
batteries, rechargeable	Rechargeable Battery Recycling Corporation	Included.	N/A
batteries, vehicle	Interstate Battery System	Included.	N/A
cardboard	Steel Pacific Recycling	Active Industrial Waste Mgmt. ¹	N/A
fluorescent tubes, bulbs	Aerosmith Environmental Services	Included.	N/A
organics (res. & comm.)	International Composting Corporation (ICC) ²	Active Industrial Waste Mgmt.	N/A
paint PLUS	Product Care Association	Included.	N/A
phones, cellular	Rechargeable Battery Recycling Corporation	Included.	N/A
propane tanks, canisters	Viper Fuels	Included.	N/A
tires	Island Tire Recycling (Tire Stewardship BC)	Included.	N/A

Submitted by,



Harmony Huffman
Environmental Technologist

Approved by,



Brian Demison, General Manager
Engineering and Environmental Services

HH:jlb

Bath: Z:\ES\Memos\2010\ServicingContractExt-Mar24-10.docx

¹ Under contract.

² No contract or service agreement.



STAFF REPORT

R6

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF MARCH 24, 2010

DATE: March 15, 2010

FILE NO: 5400-20-02/B

FROM: Joanne Bath, Administrative Coordinator, Engineering and Environmental Services

SUBJECT: Critical Location Streetlight – Electoral Area B – Shawnigan Lake

Recommendation:

That it be recommended to the Board that a *critical location* streetlight be installed at the corner of Gregory Road and McKean Road in Electoral Area B – Shawnigan Lake, as requested in a petition from local residents.

Purpose: To consider a request for the installation of a *critical location* streetlight at the corner of Gregory and McKean Roads in Shawnigan Lake (see attached site plan).

Financial Implications: Annual operating costs, including repair and maintenance, will be approximately \$168.00 (\$14.00 per month).

Interdepartmental/Agency Implications: As set out in the attached CVRD policy, this location has been approved by BC Hydro and endorsed by the Electoral Area Director.

Background: The *critical location* streetlighting service allows for installation of a single streetlight at any location within the Electoral Area, provided that specific safety issues are being addressed. In the attached petition, local residents are requesting a streetlight in order to access postal boxes at that corner.

BC Hydro have advised that there will be no capital costs associated with this installation.

Submitted by,

Joanne Bath
Administrative Coordinator
Engineering and Environmental Services

Approved by:

Brian Demison, General Manager
Engineering and Environmental Services

jlb

File: Bath\CA\JES\Memos-2006\EASC\BoyaRdStLight-Oct206.doc

PLEASE SIGN THE PETITION BELOW TO REQUEST
APPROPRIATE LIGHTING IN THIS MAILBOX AREA.

This request will be sent to BC Hydro and the Electoral Director and then to the
CVRD for approval.

Critical Street Lighting Request

We, the undersigned, are requesting the installation of a small lamppost in the area of the Super
Mailboxes at the entrance of the Shawnigan Beach Estates on Gregory Road in Shawnigan Lake.

We believe the lack of lighting to be a safety concern as residents are standing and squinting in the
dark, fiddling with their key in order to unlock their box while cars are pulling in very close to the
mailboxes. The combination of darkness and vehicles makes it a vulnerable and difficult situation for
residents wanting to retrieve their mail. A BC TRANSIT PULL OUT IS ALSO LOCATED THERE.

<u>NAME</u>	<u>ADDRESS</u>	<u>SIGNATURE</u>
G. Flamen	2787 Gregory Rd	[Signature]
R. Anderson	2309 McKen Rd	[Signature]
A. Finlay	2845 Gregory Rd	A. Finlay
M. Jarvis	2751 " "	NICK JARVIS
A. Tranter	2756 " "	[Signature]
C. Carter	2822 Lampman	[Signature]
S. Livingston	2820 LAMPMAN	[Signature]
C. Goodyer	2299 MacFarlane	[Signature]
M. Pask	2233 McKean	[Signature]



Covichan Valley Regional District

The original Bylaws should be consulted for all purposes of interpretation and application of the Bylaws.

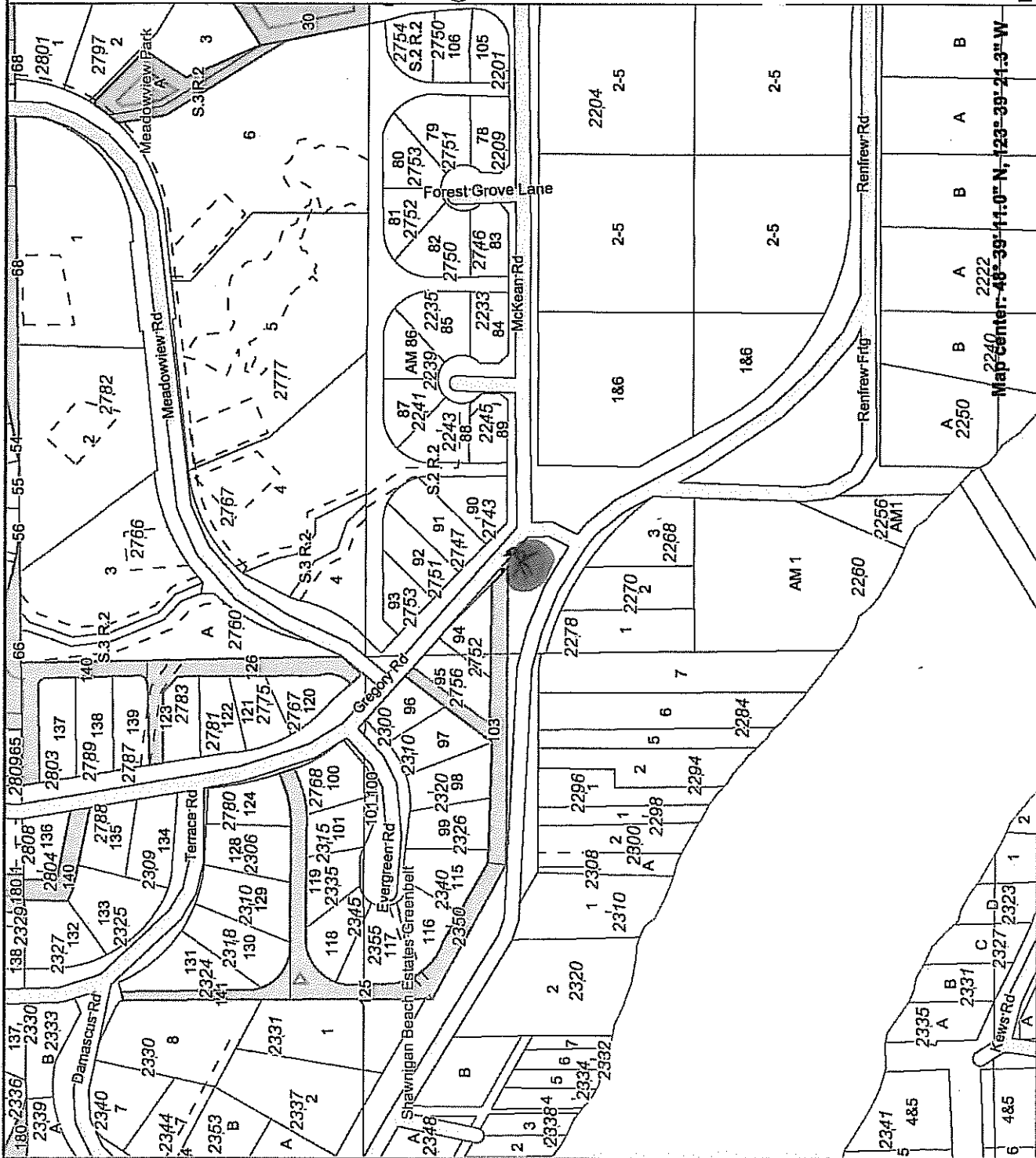
Legend

- Addresses
- Roads
 - Highway
 - Road
- Foreshore
- PARCEL_ARC
- BDEALNS
- BORDLNS
- ROOTHNGZ
- Parcel Area
- First Nations
- Parks by Community
- PARKS
- Park Boundaries



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This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.





R7

STAFF REPORT

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF MARCH 24, 2010

DATE: March 15, 2010 **FILE NO:** 5600-30-DHW
FROM: Gord Bonekamp, Senior Engineering Technologist, Water Management Division
SUBJECT: Douglas Hill Water Service Establishment and Loan Authorization Bylaws,
Electoral Area C & D.

Recommendation:

That it be recommended to the Board:

- 1. That the *Certificate of Sufficiency*, confirming that sufficient petitions requesting establishment of a Water System Service Area and authorizing the borrowing of up to \$150,000.00, be received.**
- 2. That Service Establishment and Loan Authorization bylaws for the Douglas Hill Water System Service Area be prepared.**
- 3. That, following adoption of the Service Establishment and Loan Authorization Bylaws, a Capital Reserve Fund Establishment Bylaw, a Parcel Tax Roll Bylaw and a Management Bylaw be prepared for the Douglas Hill Water System, and that these bylaws forwarded to the Board for consideration of three readings and adoption.**

Purpose: To present the results of a *Petition for Services* that provides the CVRD with the authority to establish a water service area within a portion of Electoral Areas C & D, and borrow up to \$150,000 to upgrade the capital works of the water system to a municipal standard.

Financial Implications: Service costs, estimated to be \$71,925 annually, are to be recovered through a combination of parcel taxes and user fees on the parcels within the participating service area. The service area consists of 137 residential properties. A breakdown of costs is: \$30,825 in user fees and \$41,100 in parcel taxes. The CVRD has requested and received Gas Tax funding to fund a portion of the required upgrades to the water system. This grant will provide \$100,000 of an estimated \$250,000 required to purchase and upgrade this water system. Borrowing of up to \$150,000 through the Municipal Finance Authority and system reserve funds will contribute the remainder. Costs per property will be: \$250/year for User Fees, \$206/year for Parcel Tax, and Debt Retirement of \$94/year for 20 years (included in parcel tax).

Interdepartmental/Agency Implications: In cases where a sufficient petition for services has been received, voter approval may be obtained by the Area Director consenting, in writing, to the adoption of the Bylaw. Engineering and Environmental Services is responsible for the operation and administration of this service.

.../2

Background:


The following resolution was ratified by the Cowichan Valley Regional District Board at its regular meeting of March 11, 2009:

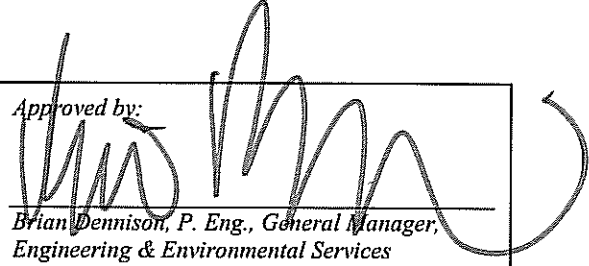
"That the CVRD Board authorize staff time to investigate takeover of the existing Douglas & Moth Water System located in Electoral Areas C and D, as requested in the attached correspondence from Leighton Mellemstrand, Secretary, Douglas Hill Ratepayers Association, subject to the following conditions:

- 1. All lands on which infrastructure works are located will be placed within registered Statutory Rights-of-way, using the CVRD's standard charge terms;*
 - 2. A utility transfer agreement be executed between the CVRD and the owners;*
 - 3. A CVRD in-house review of the system be undertaken in order to address deficiencies in the water system;*
 - 4. The owner of the Douglas and Moth Water Utility be willing to sell and/or transfer the system to the CVRD;*
 - 5. A public consultation process regarding CVRD takeover be undertaken;*
 - 6. A petition process be carried out and completed by at least 50% of the owners of parcels within the proposed service area with the total value of the parcels representing at least 50% of the net taxable value of all land and improvements in the service area.*
- and further that, upon completion of a successful petition process, bylaws be prepared to create a service area for this utility."*

A total of 105 out of 137 petitions to establish a water service area and borrow up to \$150,000.00 were received, of which 97 were accepted as valid. Pursuant to Section 797.4 of the *Local Government Act*, a petition is deemed sufficient if at least 50% of the owners of parcels within the proposed service area sign it, **and** the total value of their parcels represent at least 50% of the net taxable value of all land and improvements within the service area. In this case, the petitions received equal 71% of the property owners holding 72% of the net taxable value of all land and improvements within the proposed service area. Therefore the petitions are deemed sufficient and the CVRD has the authority to proceed with establishment of the service area and borrowing up to \$150,000.00. (the Certificate of Sufficiency is attached.) The Water Feasibility Study and public consultation process has been completed.

Submitted by:


Gord Bonekamp, Senior Engineering Technologist
Water Management Division
Engineering & Environmental Services

Approved by:

Brian Dennison, P. Eng., General Manager,
Engineering & Environmental Services

GB:jlb

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CERTIFICATE OF SUFFICIENCY

I hereby certify that the petition for establishment of a *Water System Service Area* within a portion of Electoral Areas C – Cobble Hill and D – Cowichan Bay is sufficient, pursuant to section 797.4 of the *Local Government Act*.

DATED at Duncan, British Columbia
this 16th day of March, 2010

)
)
)
)


Kathleen Harrison, Deputy Corporate Secretary

Douglas Hill Water System Service Area

Total Number of Parcels in Service Area:	137
Net Taxable Value of All Land and Improvements in Service Area:	\$51,532,800.00
Number of Valid Petitions Received:	97
Net Taxable Value of Petitions Received (Land and Improvements):	\$36,953,500.00



STAFF REPORT

R8

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF MARCH 24, 2010

DATE: March 16, 2010

FILE NO: 2320-20-WAS/G&R

FROM: Harmony Huffman, Environmental Technologist

SUBJECT: Curbside Collection Contract Extensions

Recommendation: That the Cowichan Valley Regional District enter into sole source Curbside Collection contract extensions for the period of June 1, 2010 to May 31, 2011.

Purpose: To inform the Committee of the results of negotiations to extend Curbside Collection contracts through May, 2011.

Financial Implications: Cost increases for Curbside Collection contracts of 28 to 61% will be recovered by the 10% increase to user fees outlined in the current 2010 budget.

Interdepartmental/Agency Implications: None.

Background: At the Engineering and Environmental Services Committee meeting of January 27, 2010, staff were directed to pursue sole source Curbside Collection contract extensions for a period of up to one year. As was described during that meeting, the purpose of seeking an extension would be to continue existing levels of curbside service while allowing staff to fully research some proposed changes to the service, which may include: the addition of food waste collection; use of Community Works Gas Tax funding; more user-pay options; more consistent service provision; a new cost recovery structure etc. Staffing shortages over the past year and a half have prevented the department from fully investigating these options until now.

Discussion: The following table outlines existing service levels within the CVRD, as well as projected cost changes stemming from the recent negotiations with haulers to extend existing contracts:

Electoral Area	Contractor	Service	Frequency	Cost Change
A - Mill Bay/Malahat	WSI	R	Bi-weekly	~61% increase
B - Shawnigan Lake	WSI	R	Bi-weekly	~61% increase
C - Cobble Hill	Sun Coast	R	Bi-weekly	~29% increase
D - Cowichan Bay	WSI	G/R	Bi-weekly	~50% increase
E - Cowichan Stn./Sahtlam/Glenora	WSI	G/R	Bi-weekly	~50% increase
F - Cowichan Lk. South/Skutz Falls	WSI	G/R	Bi-weekly *	~28% increase
G - Saltair/Gulf Islands	WSI	G/R	Bi-weekly	~50% increase
I - Youbou/Meade Creek	WSI	G/R	Bi-weekly *	~28% increase
H - North Oyster/Diamond	Sun Coast	R	Bi-weekly	~29% increase

*Areas F and I are augmented by weekly garbage collection for 4 months during the summer.

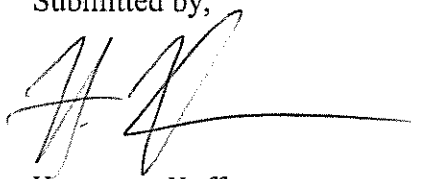
To extend contracts by one year will result in price increases across-the-board of between 28 and 61%. Although higher than staff had anticipated, such increases are not inconsistent with what other jurisdictions, such as the Regional District of Nanaimo, are experiencing. This is due in part to the continuing slump in prices for recyclable materials. However, price increases proposed for the CVRD are slightly higher than in other jurisdictions for two reasons: 1) the proposed contract extension is short-term; and more importantly, 2) the CVRD has inconsistent service levels, resulting in smaller populations receiving a similar service, and thus a decreased opportunity to realize economies of scale. This fragmentation has consistently resulted in higher costs-per-household for CVRD residents (as compared to other jurisdictions) since the implementation of the curbside collection program in the late-1990s.

Although the projected cost increase might be mitigated to a slight degree by re-tendering curbside collection contracts at this time (as opposed to simply extending them), staff recommend against this action for two reasons:

- Staff have been advised by collection companies that this is not an appropriate time to re-tender, given the ongoing slump in commodity prices (meaning that costs will be passed on to customers instead of recuperated through the sale of recyclable materials collected); and
- A short-term extension will allow staff to more fully investigate potential cost-savings options for an enhanced curbside service, thereby minimizing overall cost increases for residents in coming years.

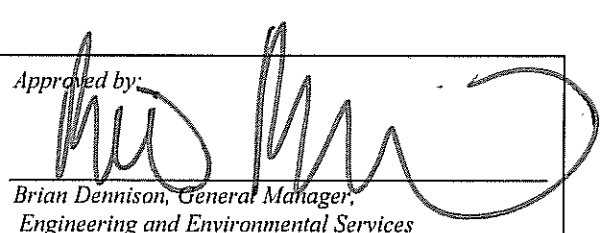
A user fee increase of 10% approved for the proposed 2010 budget will accommodate most of the projected cost increase (about three-quarters of it, or about \$75,000). The remaining cost increase (about \$25,000) may be addressed by the use of expected surplus within the curbside budget. This nominal rolling surplus has dwindled in recent years and is expected to be exhausted in 2010 with the proposed price increases.

Submitted by,



Harmony Huffman
Environmental Technologist

Approved by:



Brian Dennison, General Manager,
Engineering and Environmental Services

HH:jlb

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STAFF REPORT

R9

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF MARCH 24, 2010

DATE: March 17, 2010

FILE NO: 2360-30-LAMBOURN

FROM: Jeralyn Jackson, Capital Projects, Engineering & Environment

SUBJECT: Lambourn Estates - Hiles Subdivision – Addition of Covenant on Lot 11

Recommendation:

That it be recommended that the Board approve the removal of the “no-build” covenant on Lot 7 and add a covenant restricting “use” and “no-build” for Lot 11 within the Hiles Subdivision of the Lambourn Estates Sewer and Water Systems Service Areas. Six lots of ten in the development will retain their “no-build” covenants.

Purpose: To release the restrictive covenant to prevent building on Lot 7 and add a covenant restricting “use” and “building” on Lot 11 in the Hiles development in the Lambourn Estates Subdivision.

Financial Implications: The Hiles are switching the covenant from Lot 7 to Lot 11, which will generate one additional user fee. All legal fees for the preparation of the covenants will be paid by the developer.

Interdepartmental/Agency Implications: Not applicable.

Background:

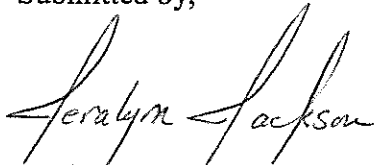
In January, 2010, the CVRD released the “no-build” covenants on six lots from the Lambourn Estates developments, two for the Hiles development and four for the Royal Island development. In addition, the Hiles would like to remove the “no-build” covenant on Lot 7 in exchange for placement of a “no-build” and “no-use” covenant on Lot 11, which has an existing house, well #4 with pumphouse and is the site of the proposed water treatment building. Lot 11 also has the existing 100-mm supply line that crosses diagonally through the property and currently supplies water from wells #3 and #4 to the reservoir (see attached Figure 1).

The Hiles are in a position to sell Lot 11 as it does not have a “no-build” covenant registered on title because the existing house had already been constructed at the time of registration of the subdivision. The Hiles would like to sell this lot, but the upcoming construction of the water treatment building and the existing supply line make this lot unfavourable for purchasers. To switch the covenant to Lot 11 from Lot 7 would allow the Hiles to sell a vacant lot and provide the CVRD time to construct the water treatment building and decommission the water supply line without residents possibly living in close proximity to the construction or potentially holding up development plans with the supply line crossing through the middle of the future building envelope.

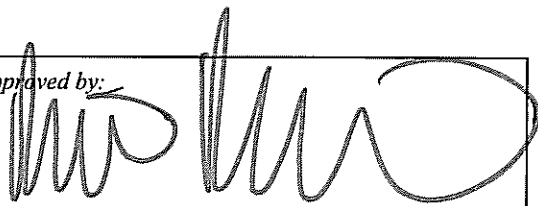
The upgrades are estimated to cost approximately \$1.6 million, with the CVRD contributing 47% (2/3 Gas Tax Funding and 1/3 MFA Funding), and the developers contributing 53%. (\$16,792 per lot developed). The Consultants working on this project estimate that the upgrades will be completed by late 2010.

To switch the “no-build” covenant from Lot 7 to Lot 11 and add “no-use” will allow the developers to sell one more lot and free up some of their financial investment, which has been tied up for many years in the development and upgrades of the subdivisions. All other lots in the two subdivisions will remain registered with “no-build” covenants on title until such time as the upgrade works are complete.

Submitted by,



Jeralyn Jackson, ASCT., PMP
Project Engineer
Capital Projects Division

Approved by: 

Brian Dennison, General Manager,
Engineering and Environmental Services

JHJ:jlb

Bath: Z:\ES\Memos2010\LambournCovenant Removal Lot 7-Mar24 -10.docx



R10

STAFF REPORT

**ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING
OF MARCH 24, 2010**

DATE: March 3, 2010

FILE NO:

Bylaw 3366

FROM: Alina Lintea, Engineering Technologist II

SUBJECT: Bylaw No 2476 Amendment to revise Schedule B.

Recommendation:

That it be recommended that "CVRD Bylaw No. 3366 – Cowichan Bay Sewer System Management Amendment Bylaw" be forwarded to the Board for three readings and adoption.

Purpose: To amend the above noted bylaw as discussed below.

Financial Implications: not applicable

Interdepartmental/Agency Implications: none

Background:

Revision of Schedule B includes adding two classifications for Float Homes and Live-aboard units to allow collection of user fees from the Cowichan Bay marinas.

Submitted by,

Alina Lintea
Engineering Technologist II
Engineering and Environmental Services

Approved by:

Brian Dennison, General Manager
Engineering and Environmental Services

:jlb



COWICHAN VALLEY REGIONAL DISTRICT

BYLAW NO. 3366

A Bylaw to Amend the Cowichan Bay Sewer System Management Bylaw No. 2476

WHEREAS the Board of the Cowichan Valley Regional District established the management of the *Cowichan Bay Sewer System* pursuant to CVRD Bylaw No. 2476, cited as "CVRD Bylaw No. 2476 – Cowichan Bay Sewer System Management Bylaw, 2003";

AND WHEREAS the Board of the Cowichan Valley Regional District deems it desirable to update the language of the bylaw and revise Schedule B – Sewer Service Charges.

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District, in open meeting assembled, enacts as follows:

1. CITATION

This Bylaw may be cited for all purposes as "CVRD Bylaw No. 3366 - Cowichan Bay Sewer System Management Amendment Bylaw, 2010".

2. AMENDMENT

That Schedule B be deleted in its entirety and replaced with Schedule B attached to and forming part of this bylaw.

READ A FIRST TIME this _____ day of _____, 2010.

READ A SECOND TIME this _____ day of _____, 2010.

READ A THIRD TIME this _____ day of _____, 2010.

ADOPTED this _____ day of _____, 2010.

Chairperson

Corporate Secretary



C·V·R·D

SCHEDULE B

TO CVRD BYLAW NO. 2476

SEWER SERVICE CHARGES

(a) *Consumers of Sewer Services* who do not receive *Metered District Water*, shall pay the minimum billing set out in sub-section (b) below.

(b) Minimum Sewer Classification Charge per Six (6) month billing period

<u>Classification</u>	<u>Charge</u>	<u>10% Discount</u>	<u>Discounted Amount</u>
Single Family Dwelling – Per Dwelling	106.67	10.67	96.00
STEP – Per Dwelling	90.67	9.07	81.60
Apartment – Per Unit	90.67	9.07	81.60
Float Home – Per Unit	53.34	5.34	48.00
Live-aboard – Per Unit	35.56	3.56	32.00
Mobile Home Park – Per Unit	106.67	10.67	96.00
RV Trailer Park/Campground:			
a) <u>Site Connected to Sewer</u> - Per serviced pad or site	53.34	5.34	48.00
b) <u>Site not Connected to Sewer</u> - Per pad or site	10.67	1.07	9.60
Hotel/Motel:			
a) Room or Suite: - Per room or suite	42.67	4.27	38.40
b) <u>Kitchenette or Housekeeping Unit</u> - Per room or suite	64.00	6.40	57.60
Restaurants: per seat	6.40	0.64	5.76
Licensed Premises: per seat	10.67	1.07	9.60
Laundromat:			
Minimum charge for each washing machine	106.67	10.67	96.00
Commercial:			
Minimum charge for the <u>first 5 employees or portion thereof per shift</u>	53.34	5.34	48.00
<u>Each additional 5 employees or portion thereof per shift</u>	53.34	5.34	48.00

<u>Classification</u>	<u>Charge</u>	<u>10% Discount</u>	<u>Discounted Amount</u>
School: Minimum charge per classroom.	106.67	10.67	96.00
Continuing Care Facility: Minimum charge for <u>each bed</u>	80.00	8.00	72.00
Bed & Breakfast/Rooming House:			
The minimum charge for such facility shall include the minimum charge for a single family dwelling unit plus a minimum charge for <u>each and every guestroom</u>			
a) Single Family Dwelling:	106.67	10.67	96.00
b) Per guest room	42.67	4.27	38.40
Fish Processing Plant:	853.33	85.33	768.00

Other: for each 1.18 m³ (259-Igal.) of daily metered or calculated flow. There should be a minimum of 1 unit applied to each connection if the above calculation yields less than one, where calculation yields an uneven number round to the higher whole number

Single Family Dwelling:

Applies to any connection servicing a single segregated self-contained residential dwelling used for, or intended for the domestic use of one or more individuals as a single housekeeping unit with cooking, living, sleeping and sanitary facilities including, but not limited to a townhouse, semi-detached, residential home, duplex and a cabin.

Septic Tank Effluent Pumping (STEP):

Applies to a connection that pumps grey water and retains solids in a holding tank. The rate is calculated at 85% of the Single-Family Dwelling rate to offset the cost of septic tank pump outs (typically a maximum of every 5 years).

Apartment:

Applies to any connection servicing a multiple occupancy residential building(s) with self-contained and segregated units consisting of two or more rooms used for, or intended for the domestic use by one or more individuals as a single housekeeping unit with cooking, living, sleeping and sanitary facilities.

Float Home:

Applies to a connection servicing a structure located on water incorporating a floatation system intended for use or being occupied for residential purposes, containing one dwelling unit only, not primarily intended for or usable in navigation, and does not include a water craft designed or intended for navigation.

Live-aboard:

Applies to a connection servicing a vessel licensed or registered by Transport Canada as suitable for navigation, which serves as a residence of its owner.

Mobile Home Park:

Applies to a connection servicing land used or occupied for the purposes of providing space for the accommodation of mobile homes either on a rental or ownership basis. A mobile home means any structure containing one dwelling whether ordinarily equipped with wheels, or not, that is designated, constructed or manufactured to be moved from one place to another by being towed, or carried, but not including travel trailers, campers, or other vehicles exempt from the provisions of the Mobile Home Act.

RV Trailer Park/Campground:

Applies to any connection servicing land used, temporarily occupied for the purpose of providing space for the accommodation of recreational vehicles or recreational structures. A recreational vehicle or recreational structure means a vehicle, trailer, coach, tents, structure, or conveyance designed to travel, or be transported on a highway and constructed and equipped to be used as temporary living or sleeping quarters for travelers.

Where individual spaces for the above accommodations are connected directly to a *Sanitary Sewer* disposal system, the minimum charge shall be based on the charges set forth in the applicable schedule(s).

Where individual spaces or sites are not serviced directly by an individual and/or separate *Sanitary Sewer* disposal system, but have the use of common or centrally located sanitary facilities, the minimum charge shall be based on the charges set forth in the applicable schedule(s).

Hotel/Motel:

Applies to any connection servicing a building or structure that contains sleeping units for the overnight accommodation of transient paying guests. Auxiliary assembly, commerce, entertainment, or restaurant uses as well as areas licensed to service alcoholic beverages and staff accommodation shall pay the charges according to the classification set forth in the applicable schedule(s).

Where units contain cooking facilities, the minimum charge shall be based on the charges set forth in the applicable schedule(s) per housekeeping or kitchenette unit.

Where units contain sleeping and sanitary facilities only, the minimum charge shall be based on the charges set forth in the applicable schedule(s) per room or suite.

Restaurant:

Applies to any connection servicing a building or structure, or segregated self-contained unit used for, or intended to be used for, the commercial sale of refreshments, prepared or assembled food, and/or meals together with non-alcoholic beverages for sale to the public.

Licensed Premises:

Applies to the connection servicing a licensed beverage establishment as governed by the Liquor Licensing Board of British Columbia, and includes, but is not limited to pubs, restaurants, eateries, lounges, cafeterias and private clubs where alcoholic beverages are served.

Laundromat:

Applies to a connection servicing a building, self-contained unit, or separately owned business entity where washing machines are available for public use for a fee or charge.

Commercial:

Applies to a connection servicing a complex, facility, or parcel of land used to manufacture, sell, repair goods, or provide a service including, but not limited to retail stores, offices, convenience store, service establishment, and light industrial.

School:

Applies to a connection servicing an institution of learning, or teaching facility, as defined by the School Act.

Continuing Care Facility:

Applies to a connection servicing a multiple occupancy complex providing long-term care, and living accommodations that include residents requiring full-time professional care, including living, sleeping, cooking, and sanitary facilities, but not including an acute care facility.

Bed & Breakfast:

Applies to any connection servicing a single family dwelling, with an accessory use for overnight accommodation for transient paying guests in which breakfast is the only meal served.

Rooming House:

Applies to any connection servicing a single family dwelling with an accessory use of rooms for rent by individuals for living and sleeping, but with common cooking and sanitary facilities shared by the occupants.

Fish-processing Plant:

Applies to a *Sanitary Sewer* connection servicing a facility involved in the processing of aquatic life. The effluent discharge from such facilities into the *Sewer* system must be pre-treated and fully comply with CVRD effluent quality standards and discharge volume limitations.

Other:

The volume of discharge to be apportioned for other types of developments that do not fall within the above classifications. Single family residential equivalents shall be calculated at 1.18 m³ (259 lgal.) per day metered or calculated flow, rounded to the higher whole number.