

CSRD Solid Waste Management Plan Update – Identifying Future Servicing Needs and Opportunities

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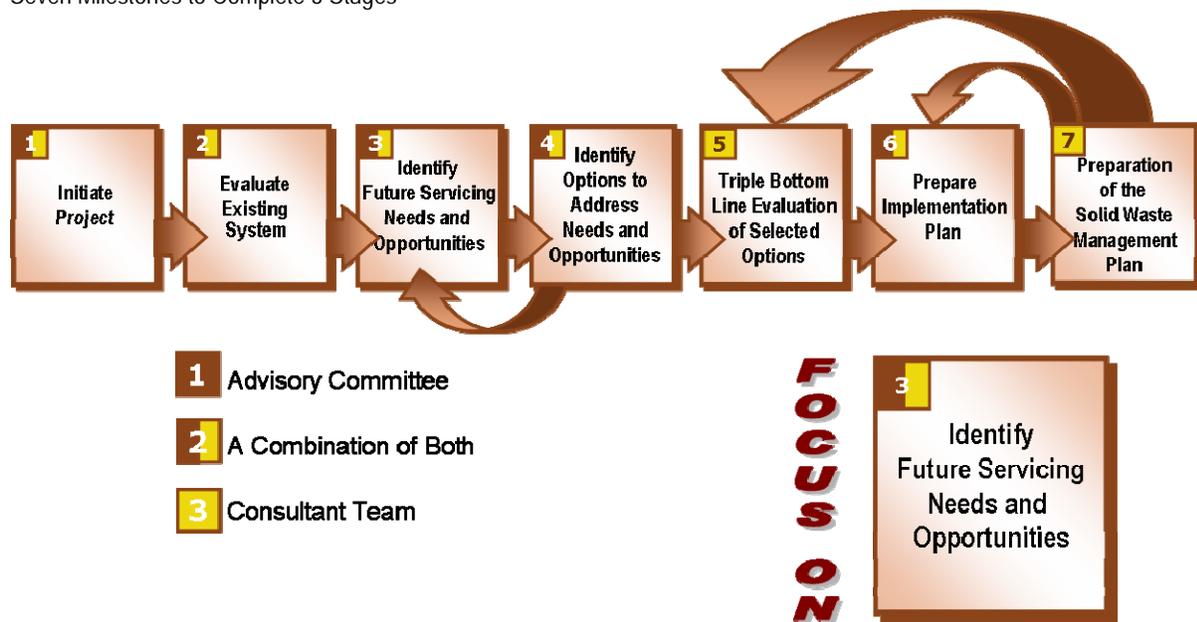
Technical Memorandum #2 (TM#2) begins Stage 2 of this Solid Waste Management Plan (SWMP) update process and focuses primarily on the determination of Solid Waste Management Plan needs and opportunities within the Columbia Shuswap Regional District (CSRD). This information will form part of the basis for identifying a long list of policies to be introduced at the Advisory Committee (AC) on October 23, 2007 in Revelstoke for further consideration.

1. Background

As detailed in TM#1, the SWMP review process was initiated in early 2007 with the selection of CSRD Board-appointed advisory committee and selection and appointment of CH2M HILL as the lead consultant responsible for completing the assignment. In their proposal, CH2M HILL partnered with Footprint Environmental Strategies (the consultants) to provide the service of managing the consultation process to address local and adjacent community, stakeholder, and regulatory concerns, and to bring an integrated planning perspective to the process.

The consultants' proposal outlined 7 steps to complete this three-stage process for reviewing the CSRD's SWMP consisting of six technical memoranda (TM) and leading to an updated SWMP. All documents are to be reviewed by the CSRD and approved by the SWMP Advisory Committee. This TM#2 completes step 3 of the process (Exhibit 1).

EXHIBIT 1
Seven Milestones to Complete 3 Stages



2. Introduction and Objective

TM#2 summarizes needs and opportunities within the CSRD solid waste management system as identified through the following actions: input from local stakeholders, senior government, adjacent Regional Districts, CSRD departmental staff; and information on community growth trends based on a literature review of local government planning studies.

The information presented includes:

- A summary table of input from the Advisory Committee
- A summary table of adjacent Regional District input focusing on potential cooperative approaches to solid waste management
- A brief discussion on growth trends in the CSRD
- Interview results with CSRD senior departmental staff.

3. Findings

The following sections provide highlights of the information collected. Full records of all information are contained within the Appendices.

3.1 Consultation

A series of questionnaires were developed and administered to gather direct input of stakeholders, adjacent Regional Districts, and CSRD staff regarding local needs and opportunities.

3.1.1 Advisory Committee

A questionnaire was developed and distributed to the Advisory Committee (AC) in early August 2007 with a deadline of September 7. AC members were asked to consider priority issues to be addressed in the amended Plan, suggest specific outreach methods for program implementation once the new Plan is approved, and identify the level of desired integration with other Regional District and municipal planning processes and initiatives. In addition, members were asked to share comments often heard in their respective communities regarding the existing waste management system and potential partnership opportunities and sites for new resource recovery facilities.

Because the Advisory Committee draws membership from industry, member municipalities, the general public, adjacent regional districts, Provincial government, and First Nations, the responses to the questionnaire cover a wide range of professional, lifestyle, and geographic perspectives. The response rate was very good, with 18 out of 19 members providing input. (Note: there are 21 members but the representatives for the Ministry of Community Services and Indian and Northern Affairs Canada are monitoring the process and not actively participating until the later stages).

Without exception, all members had strong feelings and concrete suggestions for improving the performance of the solid waste management system. Deep concern was expressed by some regarding prevailing attitudes and actions of society in general. Understanding of the need for all sectors to take responsibility for both current problems and to take action for a better future was demonstrated.

In summary, the AC identified a number of very specific needs and viable opportunities, and indicated a more sustainable future is only possible if commitment to education, policies and programs that support sustainable choices and long-term solutions is provided by local and senior government, and industry.

3.1.2 Adjacent Regional Districts

Input from adjacent Regional Districts was solicited in the form of a questionnaire and a facilitated conference call on September 19. The Regional Districts consulted were Central Kootenay, Thompson-Nicola, East Kootenay and North Okanagan. Questions discussed were:

- Are there any specific opportunities for improving relations and service that you would like to see addressed during the CSRD Plan Review?
- Do you have specific publication/report excerpts that more fully reflect your current situation and thoughts on cooperation with adjacent Regional Districts that could be included in the CSRD Plan?

- How can the CSRD cooperate with your Regional District to best provide additional information and to keep residents and business informed about similar waste management programs?
- Do you envision waste management issues being included or with greater emphasis, in other planning initiatives?

Coordination of specific policies and programs were discussed including tipping fees, waste export, material bans, User Pay systems, hauling routes, waste reduction targets, organics management, EPR programs (performance, expansion and education), integration with other environmental and planning goals. Based on feedback received, there are definite opportunities for increased cooperation that will help improve the performance of solid waste programs for all Regional Districts. Areas to focus on include EPR programs, education, material bans, data tracking, and organics management (except for Central Kootenay). Coordination of tipping fees is already happening between CSRD and RDNO. The RDNO currently has incentive-based differential tipping fees to encourage a greater level of sorting to reduce recycling costs (for example). Disposal fees have been coordinated between the CSRD and RDNO for mixed refuse to minimize the movement of this waste across their borders.

3.1.3 CSRD Departments

Another excellent source of community information is the other Departments within the CSRD. Administration, Planning, Finance, Operations and others all can play a role in reducing the CSRD's waste and/or supporting efforts to achieve sustainability. It is for this reason that internal senior departmental staff was engaged. The following is a summary of information provided by CSRD staff:

Taxation to cover recycling costs along with full cost recovery from tipping fees for landfilled solid waste is well received by the public. Taxation applied this way for recycling is considered an incentive to divert and reduce materials entering a landfill, although applying differential tipping fees can be difficult when enforcement is necessary. Careful thought on how to apply disincentives is needed.

From an engineering perspective, maximizing the life expectancy of the landfill sites is very important to secure additional capacity to defer creating additional landfills if they are still needed. This course of action will minimize our environmental footprint.

From a planning perspective identifying waste transportation corridors to avoid community disruption, while minimizing visibility and ensuring adequate separation distances from waste management sites is of significant importance.

Other important issues the other CSRD departments would like to see emphasized in the Plan are:

- Carefully identifying all resources required to deliver the outcomes of the plan both now and in the future.
- Integrating solid waste management programs with the policies of member municipalities to ensure the effective and efficient delivery of plan objectives.

- Implementation of incentive-based programs that are focused on waste reduction.
- Maximizing geographically specific diversion opportunities to avoid the sometimes inequitable “one size fits all” approach”. The exception to this approach is tipping fees – regionally consistent tipping fees are supported.

At least one senior staff member views the Plan as a plan of partnerships. Partnerships could be internally between various CSRD departments; with member municipalities; with adjacent regions; with stewards of the environment and industry; with Provincial Ministry legislation and goals; and/or with the public.

3.1.4 Gaps in Consultation

Key stakeholders needing further consultation before a short list of options for addressing needs and opportunities can be finalized include:

- local First Nation bands (no private landfills but do own garbage collection)
- INAC
- Central Kootenay Regional District (was unable to participate in the conference call)
- Product Stewardship associations and local agents

Interior Health was unable to participate on the AC due to having limited resources. However, they did provide a letter with their preliminary recommendations as follows:

- The CSRD include soil bio-remediation facilities at selected CSRD landfills for hydrocarbon contaminated soils from within the CSRD. The CSRD should ensure this waste coming from outside the area, only be allowed into these facilities on a case by case basis.
- Waste reduction initiatives and targets should be set as long-term plans/goals.
- Waste importation should be subject to stringent waste reduction and operating conditions.
- Develop minimum operating standards for all landfills and use Best Available Control Technologies to protect potable groundwater.

The consultants will be seeking input, or further input, from these parties in the next phases of the review process and will continue to invite all AC members to engage in the design and completion of consultation activities.

3.2 Community Growth

A general knowledge of community growth within the CSRD will not only allow for the prediction of future community servicing needs, but also to establish “windows of opportunity” in which to implement solid waste policies consistent with growth management principles such as the principle of sustainability. Solid waste staff and consultants already have a general understanding of rural and semi-urban growth patterns in the CSRD. The following table summarizes basic growth information for the CSRD and member municipalities.

	Population	Growth Rate	Density (People per km ²)	Jurisdictional Area (km ²)
CSRD	19,656	N/A	N/A	2,676
Sicamous	2676	-0.3%	182.2	14.7
Salmon Arm	16,012	1%	103.1	155.4
Revelstoke	8,300	-0.4%	226.6	31.9
Golden	3,811	-1%	345.7	11.02

The following literature review sections are a very brief summary of highlighted community information more specific and relevant to solid waste management planning taken from: 2006 census information, Official Community Plans, Growth Management Strategies, and general policies located in a variety of reports.

3.2.1 The Columbia Shuswap Regional District

- The 2006 population is 49,385 (29,729 from municipalities and 19,656 from Electoral Areas) and projected to be 64,646 in 2025.
- The jurisdictional land area is 29,969.2 km².
- 38.5% of the total population resides within Electoral Areas A to F in 2001 as follows: Area A – Golden-Columbia, Area B – Revelstoke-Columbia, Area C – South Shuswap, Area D – Falkland-Salmon Valley, Area E – Sicamous-Malakwa, and Area F – North Shuswap-Seymour Arm.
- Shuswap area is growing at a rate of approximately 3% per year.
- In general, not including the recent boon in Revelstoke, Electoral Area C has had the highest consistent growth rate in the 15 years prior to 2001.
- Currently, the CSRD is developing OCPs for Electoral Areas B, C, D (Deep Creek and Rancho), E, and F.
- Currently the CSRD is developing Liquid Waste Management Plans for Electoral Areas C, E, and F.
- More development, more part-time residents and fewer children seem to be a common theme.
- Electoral Area F’s primary population center and concentration of new growth is in Scotch Creek; intensification (or densification) is being considered to handle growth demands.

3.2.2 The City of Salmon Arm

- The projected annual population growth rate is 5.3% from 2001 to 2006 growing to 16,012 in 2006.

- The jurisdictional land area is 155.4 km² with a population density of 103.1 people per square kilometre.
- New growth in the Urban Containment Boundary (defined in the OCP on Map 2.1) is supported, supporting the policy to infill and intensify.

3.2.3 The City of Revelstoke

- In 2006, the jurisdictional land area is 31.9 km² with a population density of 226.6 people per square kilometre.
- The 2006 population was 8,300. The projected total population growth is 3.4% from 2005 to 2025 although the following Revelstoke Mountain Resort is not included in these figures.
- The City of Revelstoke has recently embarked on 20-month process to undertake a comprehensive review and update of the community's Official Community Plan due to recent growth with the Revelstoke Mountain Resort.
- Creation of the "world class" Revelstoke Mountain Resort
 - 5,000 new residences and 50,000 square feet of commercial and retail space.
 - A village center similar to other ski resort communities such as Sun Peaks in Kamloops and Whistler.

3.2.4 Town of Golden

- The jurisdictional land area is 11.02 km² with a population density of 345.7 people per square kilometre in 2006.
- The 2006 population of Golden is 3,811 with a decline in growth over the last 5 years of 5.2%
- Two major industrial businesses include CP Rail and Louisiana-Pacific
- The Town of Golden's is currently producing their OCP which is currently under review.

3.2.5 District of Sicamous

- The projected annual population growth rate is in decline by 1.6% from 2001 to 2006 with a 2006 population of 2,676.
- In 2006, the jurisdictional land area is 14.7 km² with a population density of 182.2 people per square kilometre.
- There are limited development opportunities to accommodate future community growth.
- It is a policy to develop an affordable housing strategy that encourages new multi-family development projects.

- A policy to support high-density residential use within or adjacent to the central commercial and waterfront commercial areas.
- Exclude major commercial development outside of the highway, waterfront or town center commercial areas.

3.2.6 First Nations

- There are 10 First Nation jurisdictional areas located throughout the CSRD including the: Salmon Arm Reserve, Okanagan Reserve, Chum Creek and North Bay Reserves, Hustalen, Scotch Creek, and Quaaout Reserves, and the Switsemalph Reserves.
- In 2001, the population on reserve totaled 760 residents with the largest population of 240 residents being located on the Quaaout Reserve.
- Despite lying outside the CSRD jurisdiction and the authority of the Solid Waste Management Plan, local First Nations are open-minded to future cooperative approaches to solid waste management. There are a number of servicing arrangements currently in-place within the CSRD.

3.3 References

Survey of Regional Districts (CSRD questionnaire), SurveyMonkey.com, November 16, 2006

Revelstoke and Area Community Portrait, Mountain Labyrinths Inc., 2007

Regional District 39 – Columbia-Shuswap, Statistical Profile, BC Statistics, 2006

Official Community Plan, District of Salmon Arm, July, 2002

Official Community Plan (Bylaw 1519), City of Revelstoke, 1991 and amended 1995

Electoral Area B, Official Community Plan, Draft 3, 2007, CSRD

Websites, Golden, Revelstoke, Salmon Arm, Sicamous, and CSRD, 2007

2006 Census Data, Statistics Canada, 2006

APPENDIX A

**CSRD SOLID WASTE MANAGEMENT PLAN –
ADVISORY COMMITTEE INPUT**

CSR D Solid Waste Management Plan Review
Advisory Committee – Needs and Opportunities – Summary of Questionnaire Answers
 September 20, 2007

Note: The comments presented here are a direct quote from completed questionnaires and do not necessarily reflect the opinions of the CSR D, their consultants, or the Advisory committee as a whole.

13. What are the most important issues you would like to see addressed in this Plan from a regional, provincial, or national in order of priority:	
Rural	<p>Reduction of materials destined for the landfill. This should be addressed at all levels of government.</p> <p>Responsibility for reduction of packaging to be placed upon manufacturers.</p> <p>Education of the public regarding the issues of solid wastes and their disposal.</p> <p>Excessive consumption of consumer goods and the consequences of increased wastes for our communities to deal with.</p> <p>Public awareness of how consumption is related to use of natural resources, CO2 emissions and solid waste production.</p> <p>Recycling is the token action that the public undertakes instead of reducing and reusing which are what we must be emphasizing.</p> <p>To find and use a system that actually does something besides defer the problem to a later date (has already submitted a comprehensive viable solution to this problem and where as I am sure there must be other alternatives, to this date I have not seen one that is comparable or as complete a solution)</p>
Golden	<p>Address recycling options, including organic wastes.</p> <p>Improved communication with local municipality and fees.</p> <p>Centralized location for contaminated wastes that require simple remediation i.e. minimal hydrocarbon contaminated soil.</p> <p>Education of all on the non-sustainable way of life we are pursuing</p> <p>Less consumerism as a corporate economic ethic</p> <p>Reduced packaging</p> <p>Monetary incentives for the public and businesses to divert or separate recyclable materials especially bulky construction materials. Also uniform provincially accepted materials at landfill sites example Invermere landfill accepts used tires, Golden does not.</p>

<p>Revelstoke</p>	<p>I would like to see a real push on public education on the impact of over consumption and one time use products.</p> <p>Education of adults through advertising and media campaigns, and of children in schools.</p> <p>The David Suzuki Nature Challenge might be a good vehicle; it is shelf ready and covers a variety of related topics in the realm of environmental sustainability.</p> <p>Awareness of what other countries and places within Canada are doing would also help.</p> <p>A better plastic recycling set up.</p> <p>Also, making people pay for extra bags of trash, getting businesses on board, a lot of waste from restaurants could be redirected through recycling.</p> <p>Doing business audits to help small entrepreneurs know what they can do would be a start.</p> <p>Public garbage cans with choices like Nova Scotia. Every trash can in NS have compostables, recyclables and then a trash section. Every can!</p> <p>Provide possible answers to the deflection rates as far as recycling in curb side collection.</p> <p>Also to provide area wide solutions that may be workable for all parties concerned.</p>
<p>Salmon Arm</p>	<p>Increased recycling capabilities</p> <p>Increased public knowledge/transparency of life cycle path of recycling products</p> <p>#1 Packaging e.g. Styrofoam, there's no place to dispose of it</p> <p>#2 Hazard Waste no collection site</p> <p>#3 For those who hold a stewardship (e.g. Product Care) need to expand for other products that are related to the program and not make the collector be burdened with the cost of non-conformants.</p> <p>#4 The same with electronics, the public hears electronics and the collector get the kitchen clock and more to add to dumpster.</p> <p>#5 Change the mandate that no recycle containers are returned to retail, e.g. Milk containers, drink containers and plastic bags. (health reasons)</p>

<p>Sicamous</p>	<p>Waste reduction at the Sicamous landfill.</p> <p>Composting program.</p> <p>Making it easier to recycle.</p> <p>Make recycling part of being a good citizen.</p> <p>Use the methane gas [from landfill] to produce heat, generate electricity, or as fuel for vehicles.</p> <p>Look for new landfill sites well in advance of old sites being full.</p> <p>Better enforcement of non-disposal of cardboard by commercial entities.</p> <p>Cardboard recycling [opportunities] the same as for paper, glass, tin</p>
<p>MOE</p>	<p>Adopt a waste reduction goal and develop diversion strategies that would see more recycling of potentially recyclable materials.</p> <p>Use differential tipping fees, landfill bans, public education, social marketing and other creative incentives to achieve goals.</p> <p>The biggest source of complaints (by far) that we (MOE) receive related to MSW management in the CSRD is backyard burning of garbage and the associated air pollution concerns. There's excellent public education information available, e.g. http://www.epa.gov/msw/backyard, and a real effort need to be made to get the message out that this is a very harmful, illegal practice. If people understood how backyard burning of MSW seriously impacts the health of their families, neighbours, garden produce and how it contaminates their soil with dioxins/furans, etc., I believe the practice would be greatly reduced in short time.</p> <p>The next biggest complaint we receive is about illegal dumping and the littering that takes place along backroads, etc. Again, a combination of public education, community based social marketing and enforcement is needed to tackle this issue. E.g. If we can find out why a lot of illegal dumping is happening in a certain area, perhaps we can reduce the problem by changing the hours of operation for a nearby transfer station or landfill. CSRD should also consider plans for cleaning up illegal dumps.</p> <p>Reduction of greenhouse gas emissions is a Ministry priority. Various techniques and strategies can be employed to achieve this, including consideration of passive biofilter type methane reduction cover systems for small landfills.</p> <p>Adoption of a Zero Waste philosophy would be a good thing to do. While it's not yet officially a Ministry goal it is certainly one that's under consideration by the Ministry and is supported.</p> <p>Providing the client base with an efficient, affordable and user friendly waste management service</p> <p>Ensuring that there is flexibility in the plan to accommodate new and unforeseen issues</p>

14. Through your experience with community planning, economic development and growth management initiatives, what are the primary solid waste related issues you see within your own or other CSRD communities?

Rural	<p>The general attitude of acquiring more and more stuff of limited value and usefulness and hence the tendency to throw stuff away.</p> <p>Need for more recycling and Re-Use It depots for the public and for businesses.</p> <p>An impending loss of physical space for waste disposal which necessitates a strategy for reducing overall waste production.</p> <p>A lack of public awareness of the relationship between waste production and consumer consumption.</p> <p>Establish a composting site for the public.</p> <p>Create regulation to minimize toxins in the “dump” e.g. Paint and thinners, batteries, animal wastes.</p> <p>Dealing with solid waste as an ongoing and serious problem that requires a permanent long term solution, not one that just buries it and hopes that someone in the future will do something.</p>
Golden	<p>Sustainability of existing site, reduced impact on the footprint. Reuse options for the community i.e. Composting and reducing capacity of landfill. Also separation of other construction or demolition wastes such as concrete.</p> <p>Lack of education, we have not yet fully understood we are the challenge and the solution. Our recycling efforts are just the tip of a huge opportunity to avoid/reduce/reuse/recycle etc.</p> <p>We need to set community targets to work towards zero waste.</p> <p>Vehicles that are no longer functional need to be addressed.</p> <p>Local business's need to develop sustainable plans to address their waste disposal options</p> <p>Increased amounts of construction waste, new people moving to the community that have a hard time to understand small town waste management procedures.</p>
Revelstoke	<p>In Revelstoke recycling is a big hassle; even the most committed people have trouble. Storage of recyclables is an issue, and then in winter getting to the bins is a hassle. Neighbourhood bins would be a good start.</p> <p>In Revelstoke tourists aren't great recyclers, all their waste goes into the trash. We need signage and recycling near the main tourist venues.</p> <p>Businesses need to be compelled to not use disposable products for eat in and take out. They should be encouraged to charge for bags, take out cups, plates etc.</p> <p>To manage the growth that is going to happen within the Revelstoke area and provide usable terms and conditions that will solve not only curbside collection issues but also commercial needs and diversion rates.</p>
Salmon Arm	<p>The most visible issue is the garbage on the streets, side roads, and Forest Service Roads, likely caused by tipping fees that people don't want to pay.</p> <p>Using recycling sites for dumping waste that is not part of program offered</p>

Sicamous	Limited access to landfill sites i.e. Not open on a daily basis. Fees charged for depositing waste at landfill sites.			
MOE	Septage disposal and composting of green material			
15. Do you have specific publication/report excerpts to support these issues that could be included in the Plan (the intent here is to reduce effort duplication)?				
Compiled from all Questionnaires	Yes, as mentioned above, there's lots of excellent material on the health and environmental effects of backyard burning of MSW on EPA and other websites. Also, there's excellent material on how to change public behaviour contained in the book <i>Fostering Sustainable Behavior, An Introduction to Community-Based Social Marketing</i> , by Doug McKenzie-Mohr and William Smith. Has already submitted information (gasification).			
16. How can the Regional District best provide additional information to keep residents and business informed about waste management programs (outside of this Review process)?				
Newsletters – 7	Open House – 3	Public Meetings – 2	Media Releases – 5	
Combined initiatives/ forums/outreach..... please briefly explain	There are occasions when the public can be informed through displays at the mall or a trade show being held in the community. Open houses and public meetings should be combined as open houses provide information but no forum for public comments and vice versa for public meetings. Getting the public to pay attention in the first place is the greatest challenge. Additions to Regional District websites, handouts with customer receipts and with commercial customer billing. Education through the schools and public forums. Layout plans that will show residents that reducing or reusing will extend the life of current landfill and therefore benefit the environment and costs. Build an electronic distribution for newsletters or an exciting website Once a year have recycling fair with information booths and inform the public what is available and how to reduce products to landfills Education in schools, assemblies are a good venue, school newsletters, and guest speakers going to each school. Public meetings provide opportunity for all parties to bring forward information of concern. I really don't think people as a general rule give a damn, as long as we come up with a real solution that is going to work and not cost them a lot of extra money. Local newspapers/mail out flyers			

17. Where could the final Plan and program promotional material be placed for community outreach efforts (e.g. special community functions or groups, schools, libraries)? Please be specific i.e. names and addresses.	
Rural	<p>Few areas exist in the North Shuswap</p> <p>OK Regional Library, Scotch Creek</p> <p>North Shuswap Elementary School, Celista</p> <p>Encorp Recycling, Scotch Creek</p> <p>Anglemont Seniors' Centre, Anglemont, also employees at local hospitals, grocery stores etc should be more knowledgeable about waste reduction.</p>
Golden	<p>Schools in Golden./Nicholson</p> <p>Convenience Stores in Field/Nicholson/Parson and the Moberly Pub</p> <p>Referral to internet access at recycle depots and landfills.</p> <p>Churches in Golden through the various church leaders</p> <p>Library in Golden</p>
Revelstoke	<p>Revelstoke Community Centre</p> <p>Revelstoke Senior's Centre</p> <p>Mountain Goodness Health Food Store</p> <p>Cooper's and Southside Grocery stores.</p> <p>Canada Post</p> <p>Farmer's Market</p>
Salmon Arm	<p>CSR D can provide names and addresses.</p>

Sicamous	Eagle Valley Community Resource Centre Eagle River Secondary School Sicamous and District Chamber of Commerce Parkview Elementary Malakwa Elementary Sicamous Post office (Main Street) Seniors Activity Centre on Shuswap Avenue in Sicamous Eagle Valley News in Parkland Mall
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18. Are you aware, from your perspective, of any properties that would be suitable for waste management infrastructure (e.g. depots, transfer stations, waste-to-energy, etc.)? [yes] [no] If yes, please provide contact information and location.

Land directly north of the existing landfill in Revelstoke.

Town of Golden sewage treatment site

I suppose if the City of Revelstoke Energy Plant is taking waste wood, it could be partnered with the CSR D to use paper waste for high energy burning to make electricity. Each public school could have bins for recycling.

Owlhead Mountain should be investigated for a future site for a landfill.

I believe I may now of a couple of places that would fit for my proposal however I would need to know if we have a real interest first and then I would contact them for their response.

19. Would you like to see waste management issues such as collection methods, infrastructure, as well as principles, policies and programs of the Solid Waste Management Plan become part of the Official Community Plans? [yes] [no] If not, why? And if yes, how do you see this happening?

This would be most appropriate when the OCP comes up for review. At the moment that is happening in areas F and C. Forums or Open House times would help in getting people involved in the process

Each community periodically reviews its OCP, this is certainly an excellent opportunity for the CSRD to be an agency that is a referral agency during the process with the view for commenting on waste management, thereby making waste management policies part of the OCP.

Yes, is mentioned in the current draft of the Area F OCP. The wording/emphasis could be made stronger. There could also be integration of waste reduction policies in with growth and development policies/regulations.

Yes, it becomes the responsibility of the community as a whole.

Absolutely yes. We need to spend considerable effort on education so that the participants in the next OCP cycle for Golden are knowledgeable and able to demand appropriate actions to include waste management items in the OCP.

Pay per use of the landfill by making a one bag per household the maximum, over that you would pay for each additional bag.

Provide curbside recycling pickup every second week, on the alternating week pick up trash.

organic city composting facility developed

Reward or encourage the use of businesses that do a lot to divert waste. One big example is Comfort Zone Delivery in Revelstoke. Tim Dolan delivers milk in GLASS jars and takes them back each week. This is a local food source in a reusable container! Delivery is not bad for the environment, in fact if we had more delivery and less people going to the grocery store 5 times a week we would have less pollution.

No, OCP is a very large based document as it stands.

Yes. By increasing or reallocating the taxation priorities to enhance and expand existing services. Driveway collection services, expanded recycling services including collection. Encouraging or requiring onsite composting for medium to high density housing developments. Not allowing compostable materials to be picked up by collection services unless an extra fee is paid and then provide central composting facilities for commercial pickup.

I am not sure that the existing collection of waste need to be changed very much, the big thing is what to do with it after it is collected. Transporting it all over the country and then burying it is not a solution over even could be considered as an option. There are much better ways if we are prepared to consider what other countries do, and do very successfully.

No, because of the potential clashes between Regional District, municipality and private business.

MOE – Yes, it is an integral part of planning future community needs.

20. Do you envision waste management issues being included and, if they already are, with greater emphasis, in other planning initiatives such as? Check what you feel are the appropriate initiatives.

Zoning Bylaws – 6	Comprehensive Bylaw 4	Application for Subdivision 4	Parks Plans 4	Development Permits 7	Building Regulation Bylaw 6
Other: please identify	<p>Waste management should become a topic of wider discussion and attention than it currently gets.</p> <p>There is a fine line between providing adequate waste disposal facilities for multi-family housing and not making it costly for residents to not recycle. If the facility provides big bins with no alternate for differentiating between “garbage” and recyclables, then recycling will not happen. Recycling bins should be mandatory in all establishments.</p> <p>Make each residence pay for their garbage disposal by weight but not charging for recycling would make recycling a better option.</p> <p>It is usually inexpensive to purchase property near a landfill, railroad, airport etc. then later becomes issue when attempting development.</p> <p>Waste reduction bylaws need to be strong and enforced in new (especially) developments. For example, quotas on amount of garbage per unit, mandatory recycling, reuse of materials in building projects, penalties for excessive or unnecessary waste production. Parks should all have recycling containers available for the public.</p> <p>Developers and new industry need to recognize our community expectations for reducing/reusing/recycling. Successfully achieving goals could result in rewards such as a revised tax rate.</p> <p>More information needed – unfamiliar with this area.</p> <p>Making it easier for undeveloped land to be used for large scale composting</p>				
MOE	All, are associated with land use				

21. Are you aware of any private companies that would entertain the possibility of entering into a public-private partnership (P3) arrangement with the Regional District to manage and/or process the CSRD’s solid waste?

No specific companies although it is a good idea for retailers who sell a product should be required to accept returns. For example, grocery stores should accept pop cans, hardware stores should take back paint cans etc.

Bresco? (Revelstoke)

Yes – see information provided on gasification company.

22. Do you have any suggestions for integrating air quality goals into the solid waste management plan (for example, education on harmful effects of burning garbage and recycling alternatives).

Greater education on a wide variety of environmental impacts of our lifestyle is a good idea. There should be cooperation with the school jurisdictions so that our younger citizens are included in such education. Cooperation from the media would be good. In this area, the media are regularly helpful in getting the message out to people. For example, Patrick at EZ Rock does interviews with people to tell about their issues. There are PSA's for all the local media and if you send them press releases that are not so long, they will try to include them. At the same time, some local advertising would be good. The CSR D has done a good job of advertising to inform the public of issues such as the recycling opportunities.

Obviously I do not favour incineration. CO2 emissions need to be minimized in the SWMP. If it becomes an issue with trucking reusable /recyclable materials, an alternative should be found.

Anti-burning bylaws that are actively enforced.

Making recycling easy with lots of recycling areas.

The opportunity to chip wood waste should be made available on an attractive basis for rural residents/communities. In town locations the same chipping facility/capacity could be used to provide compost materials for residential gardens.

In the Golden area biomass for heat generation at central facilities such as Louisiana Pacific needs to be seriously evaluated.

People really don't understand that smoke from burning contains Volatile Organic Carbon (VOC's) and that VOC's are proven cancer causing agents. Don't overwhelm people with high level vocabulary. Tell them straight out that burning creates substances that cause cancer. We had issues with people not knowing this about the burner that burned waste wood. They thought it was bad for people with allergies, they had no idea that the burner was spewing out carcinogens....

We should set local air quality targets that exceed any other in the country. We should be national leaders. This would also help with tourism in conjunction with the "natural" state of the Shuswap.

Yes, as discussed above, improved air quality through elimination of backyard burning of MSW is a high priority from Ministry's perspective. Also, reduction of GHG emissions (MOE)

Ban the burning of brush piles/land clearing debris with the exception of a trench burner.

Ban all burning with in city limits

23. What are the most common general comments you hear within communities about waste collection, disposal, recycling/diversion, composting, etc.

Rural	All of the people I talk to would like to see someone that the initiative and come up with a real solution that has a permanent solution other than burning it.
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Golden	<p>Most general comment is hours of operation. Next would be the cost. There are free dump periods for various items, but organics and yard waste should be encouraged. Home composting is great, but not entirely encouraged as it is a bear attractant. People may be confused with this. Inquiries about Curbside recycling often.</p> <p>Plastics/cardboard recycling must be available on a day to day basis.</p> <p>We the residents are way ahead of the politicians on this issue.</p> <p>We take our recyclables to Banff/Calgary/Cranbrook when we make a trip that way</p> <p>I want to know more about what happens to the materials from my recycling efforts.</p> <p>Good local governance and healthy relations will help us to arrive at good for the planet solutions.</p> <p>Landfill hours of operation should be 24hours a day.</p> <p>Tipping fees, no incentive to separate because it is the same rate per tonne and more work is involved to separate.</p> <p>Composting has become an issue with Bear Aware/Bear Smart programs.</p>
Revelstoke	<p>People say over and over again that they want plastic recycling, curbside recycling, and organic composting.</p> <p>Why depots are not provided throughout the entire community for all recycling goods.</p>
Salmon Arm	<p>“Why doesn’t the city have garbage pickup?”</p> <p>“why can’t we recycle plastics other than #2?”</p> <p>All Positive</p>
Sicamous	<p>Most of the comments are geared towards community composting (lack of an area).</p> <p>Cost to the resident for disposal.</p> <p>The landfill sites and transfer stations not being open everyday.</p> <p>Recycling areas inconvenient or hard to find.</p>
MOE	<p>Most common comments we receive come in the form of complaints about 1) the health, nuisance and environmental concerns associated with backyard burning, and 2) illegal dumping/littering along the backroads</p>
<p>12. Once the Plan is adopted and we begin implementation, do you think a new SWMP Monitoring Committee should be formed to monitor progress? If no, do you envision some other form of public accountability for Plan implementation outside of the Regional District Board? Please explain.</p>	
<p>yes 7 no 2</p>	

13. Is the current waste disposal system and recycling services in the various communities generally thought of as sufficient? [yes] [no] If not, which community and why?	
Rural	For the most part I think people in the South Shuswap think services are sufficient but they may be pleasantly surprised to hear that more are possible!
Golden	Absolutely not, see 11 above Recycle materials are limited and there are only private blue bag recycle programs in place which are expensive.
Revelstoke	A regular evaluation of landfill operator performance may be beneficial. City staff is willing to help with this task. People in Revelstoke definitely feel that what we have for recycling is inadequate. No! Hear repeated comments in regards to all recycling materials can not be disposed of on a daily basis and must be retained until recycling fairs.
Salmon Arm	Perhaps for many people it is fine but I live in an apartment so I can't save my various recycling items for the semi-annual recycling fairs, therefore, they go to the landfill. Also living in an apartment I have nowhere to compost as there is concrete all around me. I imagine there are more people than just me in a similar situation, and even with my busy work schedule, I'm not sure if 2 weekends/year is sufficient to recycle all of my not-normally-recyclable goods. I would prefer the facilities to be available all year.
Sicamous	No, as far as recycling of cardboard and plastics. Most homeowners do not have the room to store cardboard and plastics for up to six months. Therefore there should be permanent recycling facilities for these commodities just like there is for paper, glass, and cans. Commercial establishments should not be allowed to put cardboard into their large [garbage] bins. The haulers can enforce this.
Any other comments?	
<p>Just read on the CSRD website that they will be taking organic yard waste Oct. 20-28th at the dump for free. Curious since the city site takes this stuff for free year round....strange.</p> <p>Also took a look at the City of Revelstoke Website - couldn't find anything about recycling and where to take it, fairs, or even a link to CSRD (there is a link to NCES!!). Our website doesn't mention it either. It says that the website is there to present information on recycling, etc, yet I couldn't find any actual info on recycling in the whole website.</p> <p>Also it would be really great if we could have a list of products or a list of locations where items can be recycled. This could also be published in the paper or in one of their annual supplements or even in one of the city's annual releases.</p> <p>Why isn't there plastic recycling? A storage facility is what the city or the CSRD needs so plastic can be collected on a regular basis.</p> <p>Plan should include mechanisms for ensuring landfill contractors are maximizing and preserving available airspace – can incentives be provided in contracts? Ideas include compaction, daily cover choices.</p>	

APPENDIX B

**CSRD SOLID WASTE MANAGEMENT PLAN
– ADJACENT REGIONAL DISTRICT INPUT**

CSRD Solid Waste Management Plan Review
Adjacent Regional Districts – Needs and Opportunities Questionnaire and Conference Call
 September 19, 2007

Regional District	Central Kootenay	Thompson-Nicola	East Kootenay	North Okanagan	Columbia-Shuswap
1. Are there any specific opportunities for improving relations and service that you would like to see addressed during the CSRD Plan Review?					
harmonization of tipping fees (or within competitive range)	Yes	Yes; used to have East Kootenay system but in new plan did a 180 turn and will be proceeding with the implementation of incentive-based fees.	No tipping fees; rural transfer stations open 24/7; issue is a non-starter. Board wants system to be tax-based and not User Pay. May need to introduce access cards. MOE has backed off on User Pay direction in RDEK's SWMP. EK also experiencing imports from CK.	Yes – tipping fees are already unified with CSRD. Issue is more about distance to closest facility. RDNO is increasing fees by \$3 next year.	Yes. Is a challenge for TNRD and EKRD.
harmonization or introduction of material bans	Yes	Yes – no bans outside of landfill criteria other than tires, batteries and scrap metal.	Yes – as long as there are options. Have bans on materials already – oil, paint, commercial OCC. Provide OCC bins to ICI at no cost. For co-mingling, either a double fee or fine. Have a fee for construction and demolition waste so this is doubled at monitored sites. Looking at ICI paper products too.	Yes - Ban everything that has a recycling program or if EPR program is adequate. No organics yet.	Yes - Ban everything as per MOE landfill criteria plus commercial OCC. Everything in a stewardship program in theory would be included but options must be truly viable. Concern that this material might just go to another facility – what about differential fees?
harmonization of User Pay curbside collection programs	No	Yes – have container limits. Kamloops uses a mandatory container system. No service in electoral areas.	Non-starter. No garbage limit in Cranbrook. Still pushing for bag limits in general as a way to increase diversion.	Yes. 100% user pay. Idea included in SWMP.	Yes, starting with integrating regional programs with member municipality programs.

Regional District	Central Kootenay	Thompson-Nicola	East Kootenay	North Okanagan	Columbia-Shuswap
inter-jurisdictional coordination of waste hauling routes to reduce transportation requirements	No	Possibly. This would require coordinating contracts, which may be a good idea to get economies of scale, but would mean standardizing infrastructure to some extent.	Golden landfill is the only facility close to EK. Doesn't make sense.	Possibly.	Yes. Political boundaries are used to define waste sheds instead of triple bottom line approach. Some boards also have a policy that waste will not be imported.
harmonization of waste reduction targets (Please state your current target or related guiding principle?)	Yes	Possibly. Current goal of the new TNO COMMENTD RSWMP is 30% reduction in per capita disposal in 5 years from a 2004 baseline – we recognize zero waste, but it is not a target of the new TNO COMMENTD plan. Waste generation numbers going up.	Unlikely. Have three subregions each responsible for solving own issues although now have RD wide recycling. Have not embraced zero waste – board “more pragmatic than that”. Will continue to support EPR programs. Board is disappointed with EPR performance – EK is a long ways from Vancouver. Likes idea of focusing on diversion instead of waste generation.	Yes. 50% target is still active and Plan review is showing old target should be met before new target adopted. Residential waste volumes not growing even though population is – issue is with C&D material increasing.	Yes. 50% target is still active and Board is more likely to support old target should be met before new target adopted in new Plan. Have focused on per capita numbers more but should be looking at waste diversion per capita. Problem with how data is tracked by province. “will always be producing waste, even if handled by stewards.” Need to think about waste shed concept.
organics management – please elaborate (i.e., joint studies for solutions, implementation of solutions, etc.)	No. initiative with RDKB recently fell apart.	Yes. Co-operation in developing composting opportunities (i.e. slaughter house waste issue) has already been discussed with the CSRSD and RDNO. The City of Kamloops is was considering a pilot scale operaton using Transform Composting Systems – has been cancelled. Now looking at community solutions. Close the loop as close to home as possible. Working with John Paul on this one.	Yes. Economies of scale always favourable.	Yes. Have funding applications in for “regionally significant” projects. Slaughter-waste is an issue. Will need to establish tipping fees for this type of material. Would prefer landfill alternative. Bifano farms ramping up to implement on-site digester for cow manure – and may be able to accept outside organic materials (but not wood).	Requests for accepting SRM waste at landfills will be forthcoming as a result of slaughterhouse meeting last night. Other options are available that are better than landfilling. Limiting factor of bulking agent so may be opportunities for joint solution in composting arena.

Regional District	Central Kootenay	Thompson-Nicola	East Kootenay	North Okanagan	Columbia-Shuswap
EPR program performance, expansion and education	Yes	Yes. it makes sense to share common messages and the costs of education materials and advertising like we do with the weed management program.	Yes. Net cost to taxpayers is not acceptable.	Yes. Stewardship Council is not mature yet – each RD still has to get support of Board before initiatives can be implemented. i.e. bans on EPR programs.	Yes. Role of local government not covered yet, and this was also apparent at Stewardship conference – framework was global not local. Perhaps a collective contract to site at landfills or overall round-ups? Need to identify all costs and net costs to local government and be open to partnerships.
Transition/exit strategies for financing and handling future existing and future EPR products	Not sure	Yes.	Maybe. Skeptical about EPR programs right now.	Yes. Inter-regional policies on specific products i.e. tires. Full-cost recovery.	Standardizing waste composition studies.
integration with other RD and environmental goals	Yes	Possibly. This is a wide ranging goal and covers such topics as liquid waste management and airshed plans. This is not part of his job description – handled through planning.	Willing to look at it, but not a lot of discussion on this topic. Concerned about “muddying waters”.	Yes. Already do with airshed.	Yes although lots of work to be done.
Other – Note: all agreed that a BC stewardship conference with local government focus – agreement on this idea. Talk about strategies.	No comment	more shared contracts and better cooperation/communication on trans-border issues, “melting the RD borders” approach to gain the maximum reduction, reduce environmental impact and reduce costs of the overall system. Should consider implementing provisions under section 25 of the Environmental Management Act to allow tracking and control of inter-regional and cross border waste and recycling.	Have a big problem with illegal dumping and this is why they are trying to make system as accessible as possible. Different “time zone”. Access to crown land is too easy.		A shared transfer station might be a possibility – Tony Sperling to give talk on this concept.

Regional District	Central Kootenay	Thompson-Nicola	East Kootenay	North Okanagan	Columbia-Shuswap
2. Do you have specific publication/report excerpts that more fully reflect your current situation and thoughts on cooperation with adjacent Regional District that could be included in the CSRD Plan?					
Note: Interregional Disposal Alternatives Study done by CH2M HILL, dated April, 2006 included TNO COMMENTD, RDNO, CORD, & RDOS.	No comment	Draft TNO COMMENTD RSWMP – it is with the Ministry for approval at this time – will e-mail a copy – also on our website.			
3. How can the CSRD cooperate with your Regional District to best provide additional information and to keep residents and business informed about similar waste management programs?					
Short articles for use on websites, newsletters and local newspaper	No comment	Yes			
Shared Media Releases	No comment	Yes			
Distribution of brochures at events	No comment	Yes			
website links	No comment	Yes.especially cross border waste exchange such as Reuses.com through RCBC.			Members only section on RCBC or BC Stewardship Council to share reports?
Joint contract with EPR stewards for outreach program funding and delivery	No comment	Yes.			
Other combined initiatives/ forums/outreach.....please briefly explain	SWIMA – informal meeting twice per year.	All of the above. Makes sense to cooperate.	Pretty limited public education budget – e.g. garbage burning. Programs are very local, would need to identify overlap.	Have shared some things like mosquito control.	Blog site?

Regional District	Central Kootenay	Thompson-Nicola	East Kootenay	North Okanagan	Columbia-Shuswap
Are you aware of any properties that would be suitable for shared waste management infrastructure (e.g., depots, transfer stations, waste-to-energy, etc.)?	No, not really. The topography and distribution of communities doesn't allow for this.	In process of siting various facilities throughout the region to handle new initiatives of the plan – some could be cooperative efforts. Highland Valley site might be food for many things i.e. eco-depot idea being discussed with First Nations. Avoid tunnel vision. Just keep each other in the loop. WTE being looked at in Kamloops.	Can't think of any specific sites although EPR ideas make sense – i.e. landfill sites. Looking for waste to energy solution in Elk Valley.	Industrial land in Grindrod is available. Bifano. Plastics as part of EFW could have net benefits vs hauling for recycling.	Waste to energy facility potential in Malakwa area – private sector initiative.
4. Do you envision waste management issues being included and, if they already are, with greater emphasis, in other planning initiatives such as? Check what you feel are the appropriate initiatives.					
Zoning Bylaws	Yes	Yes	Not yet, OCPs has harmonization.	Yes.	Not yet, and sadly lacking in zoning bylaws and SWM integration. OCPs.
Comprehensive Bylaw (sustainability)	Yes	Yes – haven't done it yet.	Nothing envisioned.	Is in action plan but not implemented. Nags other managers about integration.	Not yet but can look at as part of Plan review i.e. Green procurement.
Application for Subdivision	No comment	No comment	No comment		
Parks Plans	No comment	No comment	No comment		
Development Permits	No comment	Yes	No comment		
Building Regulation Bylaw	Yes	Yes	No comment		
Airshed management plans	No comment	No comment	No comment		