

W A S T E W A T E R T R E A T M E N T M A D E C L E A R



SAANICH EAST – NORTH OAK BAY EDITION  
JULY/AUGUST 2009

# Wastewater Update

Core Area Wastewater Treatment Project Newsletter



Making a difference...together



## A Message from Judy Brownoff, Chair of the Core Area Liquid Waste Management Committee (CALWMC)

Welcome to the first issue of Wastewater Update, a new forum for information on the wastewater treatment project for the CRD's Core Area. This newsletter format was suggested by members of the public at a recent open house as an additional way to reach residents.

We are entering an important period of waste management in the region. The CRD has adopted a new Strategic Plan that supports waste management and environmental protection, including integration of our solid and liquid waste streams and resource recovery opportunities. I am confident that we are well placed to create a sustainable system that will serve us well today and into the future.

Public consultation is providing us with a deepened understanding of the issues and concerns most important to residents. Thus far, engagement has taken the form of open houses, dialogue and validation sessions, workshops, surveys, and traditional media. We will continue to engage residents as the wastewater project moves forward in the coming months.

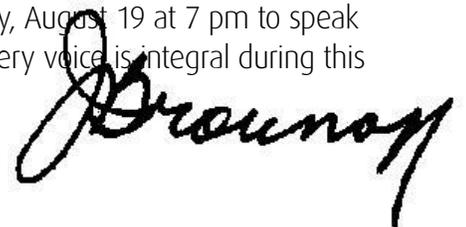
In June and July, the CRD held a series of open houses and neighbourhood workshops designed to educate and inform adjacent neighbourhoods on the three siting options for a Saanich East-North Oak Bay (SENOB) liquid only treatment facility. The CRD and its consultants listened to local community thoughts on candidate sites, heard alternative siting suggestions and recorded key points of concern for residents.

During the first phase of SENOB consultation, residents displayed their dedication and commitment to their local community. I would like to thank all residents for their time and effort during this phase. The success of this project lies in the awareness of informed residents, who live as part of the urban fabric of an area.

Each of the four plants in the future wastewater system will serve an integral role in the project as a whole. With all plants sharing infrastructure, SENOB represents only the first step in a Core Area wide siting process. Consultation will continue in Victoria, the Westshore and Esquimalt McLoughlin/Macaulay Point through late Fall.

The Core Area Liquid Waste Management Committee (CALWMC) received several reports at its July 22 meeting, including a public consultation report, an ESR (Environmental and Social Review), a summary of alternative sites selected by the public and the CRD's triple bottom line analysis of the candidate sites. You can read about these reports in the following pages. In the near future, CALWMC will make a decision on which candidate site best serves community and technical interests. Check [www.wastewatermadeclear.ca](http://www.wastewatermadeclear.ca) for updates. The second phase of consultation, scheduled for Fall 2009, will focus on specific issues related to the site, including design, fit, mitigation and possible community benefits.

**On August 12 and 19, the CRD is holding special committee meetings to allow the public to comment directly to CALWMC.** No registration to attend is required. Those wishing to speak at the meeting are required to pre-register online at [www.wastewatermadeclear.ca](http://www.wastewatermadeclear.ca) or by calling 250.360.3001. I encourage you to stay involved and attend the City of Victoria's Council Chambers on Wednesday, August 12 at 8:30 am, or Emmanuel Baptist Church on Wednesday, August 19 at 7 pm to speak to the Committee. Every voice is integral during this historical process.





# Wastewater Treatment in the Core Area

The Capital Regional District is working toward providing cost effective, innovative and environmentally responsible wastewater treatment for its residents. This project will see the upgrading of treatment practices in the Core Area to account for the demands of our increasing population. At every step of the way, we will be carrying through triple bottom line community principles, considering the social, environmental and economic impacts of treatment options.

On June 2, 2009, CALWMC voted in favour of proceeding with Option 1, a distributed management system which includes three treatment plants plus wet weather flow management. This treatment option has three variations (1a, 1b, or 1c), as recommended by the Peer Review Team in May, 2009.

Of the three treatment strategies originally proposed, Option 1 provided the most economical approach for meeting regulatory requirements today while providing flexibility to take advantage of future changes in technology and region-wide resource recovery opportunities. Option 1 includes the construction of a facility in the West Shore, in Esquimalt, a wet weather plant at Clover Point and a liquids only treatment plant in Saanich East-North Oak Bay.

## Why is a plant needed in Saanich East-North Oak Bay?

Early in its study of wastewater treatment questions CALWMC recognized that a facility would be required in the SENOB region. There are many advantages to building a plant in this area.

- The size of the downstream central wastewater treatment plant can be reduced, as upstream plants will reduce the flow reaching the central plant
- Local opportunities will be created for heat and energy recovery and reuse
- Capacity can be freed to handle a greater portion of the wet weather flow, reducing the frequency and volumes of sanitary sewer overflows
- The plant will increase future flexibility when planning for population increases
- Attenuation tanks and upgrades to the trunk sewer will not be required

## What type of plant will be built in Saanich East-North Oak Bay?

The SENOB wastewater treatment plant will be a liquid only processing plant. This means that solids will be reintroduced into the sewer pipes for conveyance to the central wastewater facility. Grit and screenings removed from the waste stream will be trucked to Hartland Landfill about once a week. The plant will be built using the highest standards for noise, odour and light pollution control--there should be no noticeable noise or odour at the property line.

# You spoke, we listened.

Community response is the backbone of public input. Public engagement for SENOB siting is the fourth pillar in a framework endorsed by CALWMC in April 2009. The CRD has already engaged in substantial public consultation across the Core Area, including

- General information open houses (March-April 2009)
- Community dialogues, which identify triple bottom line principles (April 2009)
- Public validation sessions (May 2009)
- SENOB siting open houses and neighbourhood workshops (June-July 2009)

## What we've learned.

Siting consultation for SENOB gathered a number of repeating themes, heard at the open houses and the neighbourhood workshops. Public opinion was evenly divided on which site would be most suitable.

## Repeated Concerns

- Questioning or affirming the need for treatment
- Facility placement, design and fit
- Financial impacts to property values, issues around mitigation
- Increased traffic, noise and odours from a treatment facility
- Lack of written confirmation for government funding
- University of Victoria's lack of participation in the public process and a need for transparency between the CRD and UVic

## Identified Opportunities

- A need for Core Area secondary treatment and continued public processes to ensure good decisions are made
- Partnerships with UVic for heat and energy recovery
- Public input into treatment facility placement and design post site selection
- Integrating facilities into the natural landscapes and green public amenities

# Key Community Concerns & Opportunities for Each Candidate Site

## UVic Fields Site

### RESIDENT VOICED CONCERNS

- Requirement of additional piping
- Proximity to dense residential areas
- Loss of community recreational space
- Restriction of established walk/cycle paths
- Additional land purchasing and pumping costs

### RESIDENT VOICED OPPORTUNITIES

- Existing main transportation route for construction and access
- Minimal environmental impact (area is open and disturbed )
- Potential for visual design barriers
- Academic and public education opportunities
- Financial inputs from resource recovery



## **Finnerty-Arbutus Site**

### **RESIDENT VOICED CONCERNS**

- Ecological impact and loss of urban forest
- Lost community efforts in invasive species control
- Existence of a fault line
- Proximity to daycares and schools
- Traffic impacts
- Loss of social and recreational community space
- Future of the site if not chosen for a treatment facility

### **RESIDENT VOICED OPPORTUNITIES**

- Ability to protect remaining portions as urban forest/green space
- Natural buffers to screen a facility and address odour concerns
- Social amenities legacy (public facility with treatment facility underground)
- Lower cost (CRD owned, with infrastructure in place)
- Geography assisted gravity flow would prevent additional piping

Residents also repeatedly identified that any treatment facility on the Finnerty-Arbutus site should be shifted to the Saanich-owned Arbutus property and not only the CRD-owned property. The Saanich property is considered to be environmentally disturbed and holds less ecological value.

## **University of Victoria Cedar Hill Corner Site**

### **RESIDENT VOICED CONCERNS**

- Potential ecological impacts to nearby Mystic Vale
- Additional piping required for the site
- Impacts on wildlife
- Loss of social and recreational community space
- Decreased university expansion potential
- Proximity of UVic housing and homeowners
- Higher cost (with additional costs for mitigation, design and fit)

### **RESIDENT VOICED OPPORTUNITIES**

- Minimal environmental impact (site is already disturbed)
- Natural buffers to screen the facility
- Academic and public education opportunities
- Financial inputs from resource recovery

# How We've Used Your Input

CRD consultation activities aim toward creating transparency in CALWMC's decisions as well as improving awareness of the diversity of resident's opinions and concerns. Public consultation findings from the SENOB siting process are based on data collected and analyzed from:

- 117 comment forms
- 3 recorded workshop discussions
- 41 online inquiries
- 81 questions posed during three workshop question and answer periods
- 3 neighbourhood siting workshops

The information we gathered during SENOB siting consultations was used as a representative public voice. It was captured in four studies and passed to CALWMC for consideration at the July 22 committee meeting. The SENOB studies include:

- Comparative Environmental and Social Review of Candidate Sites
- Triple Bottom Line Analysis of Candidate Sites
- Alternative Treatment Facility Sites Suggested by the Public
- Public Consultation Summary Report on Siting

You can read summaries of each study in this newsletter; the full reports are available on the wastewater website:

**[www.wastewatermadeclear.ca](http://www.wastewatermadeclear.ca)**

# Comparative Environmental & Social Review (ESR) of SENOB Sites

The ESR provides guidance to CALWMC during site selection through examination of the potential environmental and social effects associated with construction and operations of a wastewater facility. Impacts and opportunities for mitigation were identified based on considerations of public input, literature reviews, field inspections, discussions with local government and direction provided by CALWMC.

## What were the findings of the ESR?

### COMMUNITY

- Noise, vibration and lighting impacts are expected to be significant at the UVic Fields site. The proximity of residences constrains the ability to mitigate these effects. Relocation of the facility to another portion of the site would reduce these impacts, though relocation could affect use of Wallace Field.
- Visual impacts could be reduced by improving design quality of the treatment facility and minimizing views from surrounding properties. Mature screening vegetation will reduce visual impacts.
- Facility operation may occasionally release odours under the existing project design. Improving the treatment levels and ensuring backup systems are installed would reduce odour impacts.
- Archaeological impacts cannot be determined until an Archaeological Impact Assessment (AIA) is conducted on the selected site. Under BC legislation, a proponent is required to lessen a project's impacts on identified archaeological features. Operational impacts would need to be less than significant.





## ENVIRONMENT

- A treatment facility at the Finnerty-Arbutus site would result in significant environmental and social impacts. Mitigation would reduce all of these impacts to less than significant levels during facility operation.
- Under the present design, the forcemain and gravity main route for the Cedar Hill Corner site crosses Upper Hobbs Creek drainage. This crossing would cause significant environmental and social impacts. Soils and hydrology impacts can be mitigated through construction techniques, but reducing the vegetation, wildlife and visual aesthetics impacts would require relocation of the pipe route.

## CONSTRUCTION

- All three sites would require supporting facilities, including gravity mains and forcemains. The Cedar Hill Corner and UVic Fields sites would require a pump station on the Finnerty-Arbutus site. Construction could create substantial disruption for nearby residents unless hours of work are limited and street sweeping, dust control and effective traffic management is employed. Vegetation, wildlife and community use impacts of constructing an auxiliary pump station would be unmitigable.
- For all sites, application of standard design, construction and operational practices would limit health and safety impacts. The UVic Fields site would result in disruption of public access from McCoy Road to UVic and loss of planned recreational opportunities are considered to be unmitigable impacts of construction. Impacts would lessen during facility operation.

# Triple Bottom Line (TBL) Analysis for SENOB

## What is the TBL Analysis?

The TBL analysis provides CALWMC with a way of comparing the suitability of each site based on weighted scores of socio-community, economic and environmental ratings. These ratings help support the selection process, in conjunction with consultation results, technical studies and the ESR.





### How were sites rated and scored?

Weighted scores determined a site's potential to achieve a particular goal. Scores of 1 to 3 were assigned, with 3 indicating the greatest suitability for a treatment facility, and 1 being least suitable. For example, under the category of "Economic", one of the goals is to "minimize the operating cost of the project."

- A site with an operating cost of \$2.4 - \$2.6 million/year would receive a score of "1"
- \$2.2 - \$2.4 million/year would receive a score of "2"
- \$2 - \$2.2 million/year would receive a score of "3"

The highest possible score a site could receive is 900 points, which would be attained if a site scored a "3" for every criterion.

### What were the results?

**The Finnerty-Arbutus site** achieved the highest overall score of 655, due to its lower economic costs (both capital and operating) and fewer social impacts. Despite informal recreational use, the site is not a protected park, and is zoned for large lot residential. The site received the lowest environmental rating, as the site currently supports second growth forest, whereas the other two candidate sites are already cleared of native vegetation. The forest, however, also reduces visual impacts, noise and smell.

**The UVic Fields site** scored second highest, with 577. It is a cleared site with a high potential for resource recovery, however the high economic costs of additional required facilities, such as a pump station in Finnerty-Arbutus coupled with proximity to high density housing resulted in an overall lower score.

**The Cedar Hill Corner site** scored lowest with 497. High capital and operating costs associated with a Finnerty-Arbutus pump station and additional piping, a lower potential for resource recovery than at other candidate sites, and community disturbances contributed to this score. Despite being a cleared site, environmental scores were reduced due to disturbances from piping through a mature forest in Upper Hobbs Creek drainage and the additional pump station needed on the Finnerty-Arbutus property.

# Alternative Treatment Facility Sites Suggested by the Public

During the first phase of SENOB public consultation, a number of residents suggested alternative sites for a local treatment plant. The majority of suggested sites had either been previously reviewed during the initial site selection process; Westland Resource Group investigated any previously unstudied sites.

## **What were the suitable alternatives?**

The only site which was technically feasible, when considering construction and operation, and which offered some potential advantages over the three identified candidate sites, was the Saanich-owned Arbutus property. Westland recommended further investigation of this site.

The Saanich-owned Arbutus property has several siting advantages, including topography and previous disturbance to the forested character of the site. Many local residents expressed a preference for locating the treatment facility on this site rather than the adjacent CRD-owned parcel. Future plans for this and other large land holdings in the Arbutus Road corridor will be examined in a study recently authorized by Saanich Council.

If the Finnerty-Arbutus site is selected as a preferred location for the facility, a more detailed site planning exercise will be conducted, accompanied by discussions with the District of Saanich, to determine if all or a portion of this site could be obtained. The relocation of the Finnerty-Arbutus site has been recommended by participants in public engagement and by biologists involved in the ESR and TBL.



**Alternative WWTF Sites Identified  
at SENOB Public Open Houses  
and Workshop June-July, 2009**

15  
Houlihan  
Park



Gordon Head Rd  
Edgelow St



McKenzie Ave



Finnerty Rd



Sinclair Rd



Arbutus Rd



Henderson Rd



Cedar Hill Cross Rd

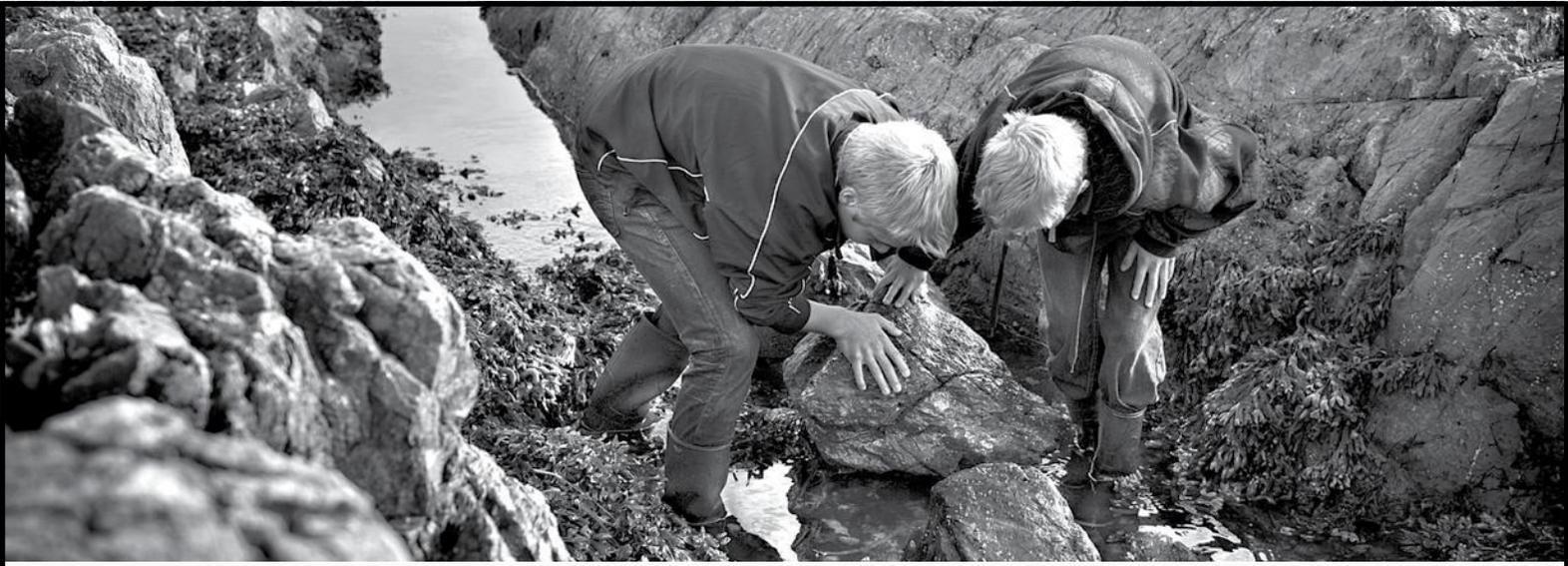


Cadboro Bay Rd

14  
Uplands  
Park

 Candidate sites  
 Sites suggested by the public  
 Suggested sites subject to further study  
 Sewer trunk





# What happens next?

## Upcoming Public Consultation

Throughout the public siting process, several suggestions for future community engagement were made by residents. It was recommended that we enhance our communication tools, using a newsletter format, and provide regular progress updates on the wastewater project. As well, residents asked that we diversify future public engagement to engage all facets of a population. The CRD will be taking these recommendations into account when planning for future consultation in the SENOB area.

The CRD is holding two special CALWMC meetings to provide opportunity for the public to comment directly to the committee regarding SENOB siting.

- Wednesday, August 12, 8:30am, City of Victoria Council Chambers, 1 Centennial Square
- Wednesday, August 19, 7pm, Emmanuel Baptist Church, 2121 Cedar Hill Cross Road

Registration to attend the meetings is not required. Registration is required for those who wish to speak to the Committee. To pre-register, please visit

**[www.wastewatermadeclear.ca](http://www.wastewatermadeclear.ca)** or call **250.360.3001**.

## How to Stay Informed

The most comprehensive source for information on the wastewater project is the CRD's wastewater website, **[www.wastewatermadeclear.ca](http://www.wastewatermadeclear.ca)**. Designed to spearhead the project, the website is continually updated with the latest discussion papers, reports, notices on upcoming consultation sessions and general advancements of the project.

You can also contact the CRD to submit comments or ask a question. Fill out our online feedback form, call or write to us:

**Wastewater Treatment**  
**625 Fisgard Street, Box 1000**  
**Victoria BC, V8W 2S6**  
**Tel: 250.360.3001**



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