

Wastewater facilities: designed to fit the surroundings

A wastewater treatment facility can be designed to fit seamlessly into any setting. There are thousands of facilities around the world, each one unique in design and technology. The size of the site depends upon how much wastewater flows into it and the technology used to treat it. Many sites incorporate amenities such as water features, recreational trails, greenhouses, educational centres or residential & commercial uses.

Things to consider when assessing sites:

- community plans and input
- a design that complements the surroundings and controls odour
- proximity to existing sewer lines
- reasonable access to an outfall or inground disposal of treated water
- opportunities to reuse reclaimed water for irrigation or toilet flushing
- opportunities for reuse of heat and energy generated during treatment

Examples of successful wastewater treatment facilities in other communities:

1 Blaine, WA



Size: 0.4 hectare (1 acre)
Population Served: 5,000 people
Treatment Plant Cost: \$34 million

- Advanced treatment with high quality effluent
- Biosolids recycled for use as fertilizer for grass fields
- Reclaimed water used for golf course and street sweeping
- Integrated into public park with pedestrian bridge to beach

2 Saanich Peninsula, BC



Size: 1.9 hectares (4.7 acres)
Population Served: 37,000
Treatment Plant Cost: \$20 million

- Serves North Saanich, Central Saanich, Sidney, Victoria Int'l Airport, Institute of Ocean Sciences and area First Nations
- Produces Class A Biosolids for beneficial use
- Recovered heat from effluent heats the water at Panorama Recreation Centre pool
- Tipping fees generate \$115,000/year

3 Edmonds, WA



Size: 1 hectare (2.4 acres)
Population Served: 80,000 people
Treatment Plant Cost: \$34 million

- Compact site integrated with the community
- Thermal reduction of solids
- Public plaza, green space, artistic water feature
- Close proximity to residential neighbourhoods and businesses

Reaching out to community members

Westside Solutions has been reaching out to inform and involve community members in the decision making process. To date, we have invited input in several ways:

- **Open Houses:** in Esquimalt, View Royal, Colwood, Langford and Songhees First Nations
- **Public Survey:** available at open houses and online
- **Innovation Days:** industry experts presented case studies on successful wastewater treatment and resource recovery projects
- **Roundtable Discussions:** in Esquimalt, Colwood and Songhees to explore siting and neighbourhood integration; resource recovery opportunities; and cost and level of treatment
- **Technical Analysis:** to identify potential sites based on size, proximity to existing sewer lines and outfalls, suitability for a range of possible technologies and community considerations.

What we have heard

Throughout the public engagement events, several themes emerged:

- A facility must fit with the aesthetic and plans for the community and must control odour, noise and transportation traffic.
- Support for advanced levels of treatment & potential water reuse.
- Support for the treatment of solids for beneficial use.
- Lowest support for transportation of solids for processing.
- Support to minimize costs to taxpayers.

Next steps

There will be additional opportunities to provide input into potential sites and a proposed regional plan in the fall. Ultimately, proposed sites will need to go through a public municipal process where community members can provide input before any final decision is made. Subscribe for updates at www.WestsideSolutions.ca.

Responsible wastewater treatment is one of the most important issues our region faces.

The Westside communities of Esquimalt, View Royal, Colwood, Langford and Songhees Nation, along with Esquimalt Nation, are working together on solutions to ensure we are treating our wastewater in a responsible way.

Westside Solutions is committed to significant public engagement and providing sound technical information.

- Making clear and concise information about possible solutions readily available to the public
- Providing thorough evaluation of the net benefits of innovative and workable technologies for proposed treatment facility(s)
- Engaging Westside residents and businesses in developing options through meaningful consultation
- Determining an economically and environmentally viable solution for wastewater treatment

Finding the right solution is not only possible – it is paramount. Together we can do it!



Your input is important. Find information, subscribe for updates and offer feedback at www.WestsideSolutions.ca



TOWARD A SOLUTION FOR
WASTEWATER TREATMENT
AND RESOURCE RECOVERY

What you
need to know

www.westside-solutions.ca