

Wastewater Treatment Project: Construction Underway

The Wastewater Treatment Project will provide tertiary treatment for wastewater from the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood, and the Esquimalt and Songhees First Nations. The Project will be built so we comply with federal regulations by the end of 2020.

The Wastewater Treatment Project includes three main components: the Residuals Treatment Facility, the McLoughlin Point Wastewater Treatment Plant and the Conveyance System (which includes the pump stations and pipes).

CONSTRUCTION IS UNDERWAY ON THE MCGLOUGHLIN POINT WASTEWATER TREATMENT PLANT AND CROSS-HARBOUR UNDERSEA PIPE

The first phase of construction includes work at the McLoughlin Point Wastewater Treatment Plant and the cross-harbour undersea pipe from Ogden Point to McLoughlin Point.

At McLoughlin Point, site preparations are underway, and excavation and blasting will start in the coming weeks.

At Ogden Point, crews have installed a 5-metre high sound wall, and are installing the casing, or entry point, for the cross-harbour pipe between Ogden Point and McLoughlin Point. This is the nosiest part of the work at Ogden Point, and we thank local residents for their patience while this work is completed. Crews will begin the horizontal directional drilling for this pipe in the coming weeks, which will involve mobilizing equipment and running generators to power the equipment.

THREE COMPONENTS OF THE WASTEWATER TREATMENT PROJECT ARE IN THE PROCUREMENT PHASE

Competitive selection processes are underway for the Residuals Treatment Facility, the Clover Point Pump Station, and the Macaulay Point Pump Station and Forcemain. More information on procurement can be found on the website at: crd.bc.ca/project/wastewater-treatment-project/news-and-information/procurement.



Crews placing aggregate in a laydown area for the McLoughlin Point Wastewater Treatment Plant in Esquimalt.



The horizontal directional drill bit being used to drill the hole for the cross-harbour undersea pipe that will go from Ogden Point to McLoughlin Point.

Talking About Treatment

WHAT IS WASTEWATER?

Wastewater is the term used to describe water that has been contaminated by human activity such as dishwashing, doing laundry, and flushing the toilet. Some pollutants in wastewater include industrial and commercial waste, detergents, cooking fats and prescription drugs.

High concentrations of these pollutants can have negative effects on fish and wildlife.

The purpose of treating wastewater is to remove contaminants prior to releasing the effluent into the environment. There are three different levels of treatment: primary, secondary and tertiary. Each level of treatment removes a higher percentage of contaminants from the wastewater.

The McLoughlin Point Wastewater Treatment Plant will provide tertiary treatment for wastewater from the core area municipalities.

What's Happening in the Next Three Months?

- **Construction of the cross-harbour undersea pipe continues** from Ogden Point to McLoughlin Point using a process called horizontal directional drilling.
- **Geotechnical investigation work** to inform the design of the pipe to the Residuals Treatment Facility.
- The project team is looking forward to **meeting with the Saanich community** this fall, as we move into the next phase of project planning and construction for project components in Saanich.
- **Ongoing meetings with the Esquimalt Liaison Committee** and Victoria, Saanich and Esquimalt municipal technical working groups.
- **Continuing to engage with communities** to provide updates on current and future construction.

Wastewater Treatment Project Community Engagement Summary

OCTOBER 2016 – JUNE 2017

40 meetings with municipalities (Mayors, Councils, and staff)

21 meetings with funding agencies (federal government, P3 Canada, Infrastructure Canada, provincial government)

14 meetings with community associations

5 public open houses

14 meetings with stakeholders (such as the Department of National Defence, Tourism Victoria and Greater Victoria Harbour Authority)

211 responses to email inquiries

30 responses to phone inquiries

Meet a Member of the Project Team

ERNIE MASCHNER, PROJECT DIRECTOR FOR HARBOUR RESOURCE PARTNERS



Ernie enjoys a weekend afternoon with his dogs, Daphne and Zeke.

Ernie Maschner is the Project Director for Harbour Resource Partners (HRP). HRP is the contractor selected by the CRD to build the McLoughlin Point Wastewater Treatment Plant, cross-harbour undersea pipe, and marine outfall for treated wastewater at McLoughlin Point. As Project Director, Ernie has overall responsibility for delivery of this part of the project to the CRD. He has been involved in a variety of large wastewater treatment plants in Canada, the United States, and Europe. He is the winner of the Associated General Contractors project of the year award for the North Shoreline Protection Project on the Point Loma Wastewater Treatment Plant in California.

Which wastewater projects have you worked on?

I recently spent five years at the Point Loma Wastewater Treatment Plant in San Diego, California performing various projects (a 900 megalitre/day plant). I also have worked on the Beckton Sewage

Treatment Works in London, UK. Beckton is one of the largest sewage treatment plants in Europe, serving 3.5 million people. I have been involved in the construction of other plants in Canada and the United States.

What is your educational background?

I have a BSc in Applied Mechanics and Engineering Science from the University of California, San Diego and an MBA from San Diego State University. I also have executive education from the University of Michigan and University of California, Los Angeles.

What do you see as some of the challenges for the Wastewater Treatment Plant?

Construction in an urban area is always more challenging. We need to get the plant built while being respectful of the communities and try to mitigate impacts and disruption as much as we can.

What is the best part of your job?

Leading teams of the best construction and engineering professionals in the country.

What do you do in your spare time?

In my spare time I like to cycle, play guitar and visit my children and grandchildren with my wife.

What do you like about Victoria?

Since moving to Victoria, I've come to appreciate the proximity to outdoor recreation and have had a chance to cycle throughout the region. I like the ease and ability of bicycle commuting to work every day. I also like Victoria's strong sense of community.

How long have you had your Great Danes?

My wife and I have been raising Great Danes for six years, we have two with us in Victoria (Daphne is on the left in the photo, and Zeke on the right), and one has remained with my daughter. All three are rescue dogs.

By the Numbers: Project Facts



The project will cost **\$765 million**. The government of Canada is contributing \$120 million through the Building Canada Fund, \$50 million through the Green Infrastructure Fund and \$41 million through P3 Canada. The Government of British Columbia will provide up to \$248 million for the project and the CRD will provide the remaining \$306 million.



The Wastewater Treatment Plant at McLoughlin Point will provide tertiary treatment to **108 megalitres of wastewater per day**.

The Arbutus Attenuation Tank is an underground concrete container in Saanich which will provide temporary storage of wastewater during large storm events to prevent overflows at various points along the coastline of Saanich, Oak Bay, and Victoria. The Arbutus Attenuation Tank will have **a volume of 5,000 metres cubed**.



The cross-harbour undersea pipe from Ogden Point to McLoughlin Point is almost **1 kilometre long (940 metres)**.

The pipe under Dallas Road carrying wastewater from the Clover Point Pump Station to the McLoughlin Point Wastewater Treatment Plant will be approximately **1.2 metres in diameter, and 1.2 metres underground**.



The Wastewater Treatment Project will be **complete by the end of 2020**.



3 WAYS TO KEEP INFORMED ABOUT THE WASTEWATER TREATMENT PROJECT

Project Website: wastewaterproject.ca.

It is regularly updated with new information, including construction bulletins, media releases, and reports. There is a "Community Questions" section on the website that provides answers to commonly-asked project questions and is frequently updated.

24-7 Project Information Line: 1.844.815.6132

Residents can call to receive information or report a concern.

Email Address: wastewater@crd.bc.ca.

Submit inquiries or let us know you are interested in being on a distribution list to receive construction notices.

For More Information

Website: wastewaterproject.ca

Email: wastewater@crd.bc.ca

24-7 Project Information Line: 1.844.815.6132