

Bowser Village SEWER SERVICE AREA UPDATE

Information Meeting #2

June 26th, 2017

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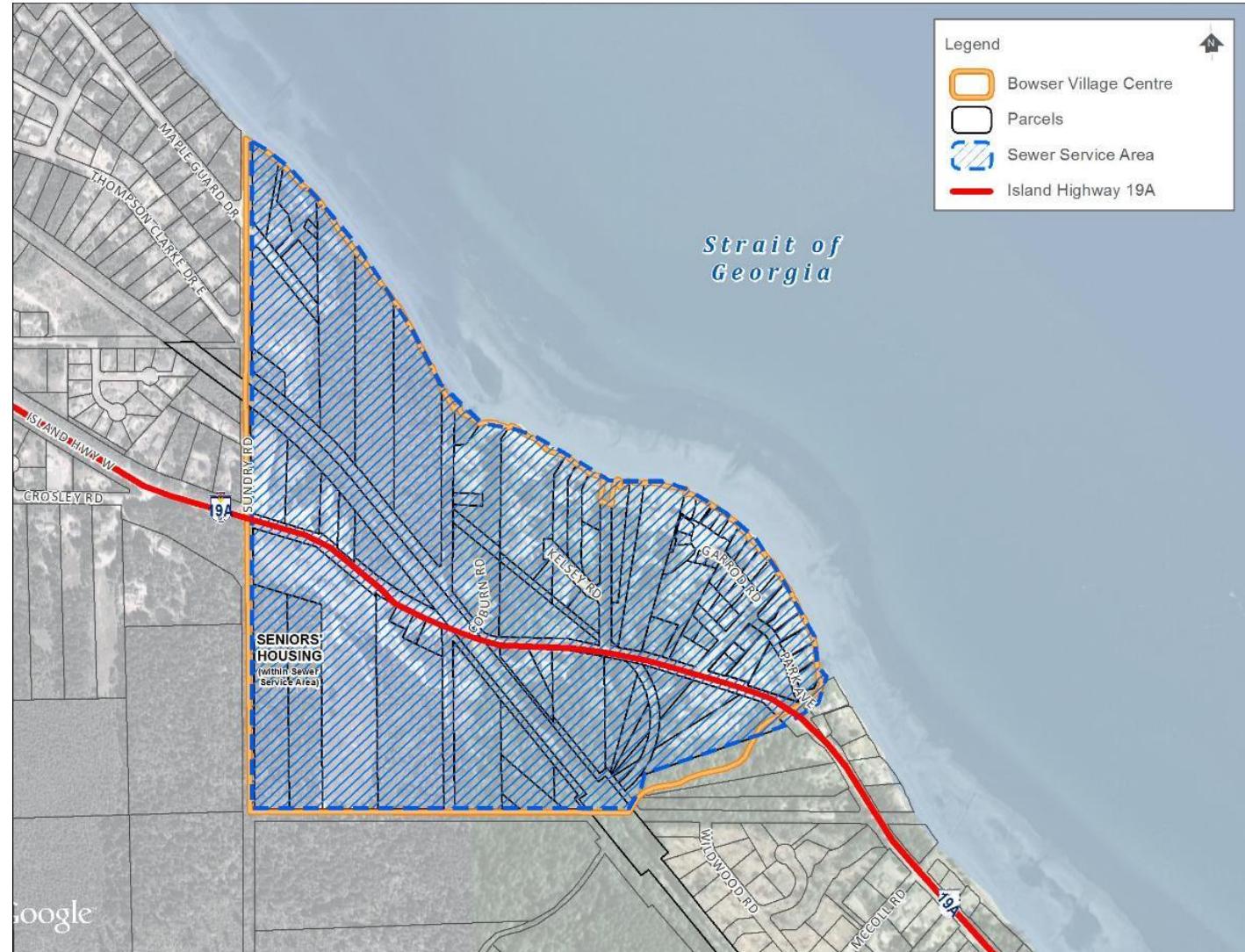
Welcome

Thank you for
Coming!

This meeting is specifically about sanitary sewer service in the Bowser Village Centre.

Anyone with interest outside of Bowser is welcome to stay, but this meeting will only focus on a discussion about sewer within the boundaries of Bowser Village Centre at this time.

Thank you



Purpose of this Meeting

The purpose of this meeting is to:

1. Provide an update to residents on the progress of the Bowser Village Centre Sewer Project, since the last Information Meeting on May 29th, 2017;

2. Provide another opportunity for residents to ask questions and find out more information about the details of the project.

Ground Rules

For tonight's meeting, we would like to suggest a few ground rules:

1. Although everyone is welcome to attend, this meeting is for the residents / taxpayers of the Bowser Village Centre.
2. Tonight is an Information Meeting only; there will be another meeting in July to begin the petition process.
3. Please be respectful of everyone's opinions and ideas, and make sure you get your questions answered, either during or after the presentation.

Background

2013

An RDN-wide Rural Village Centre Study identified Bowser as one of the Rural Village Centres with the most potential to evolve into a compact, complete community.

Background

2014

The RDN was awarded \$300,000 of Federal Gas Tax Grant Funding to undertake a sewer servicing study for Bowser Village Centre.

The sewer servicing study led to the creation of a detailed engineering design and costs for a potential community collection and treatment system

Background

2015

2016

- Concepts for sewer servicing developed
- Treatment plant siting and sizing
- Service area was defined
- Number of units for servicing determined
- Community presentation July 11, 2016

Bowser Village
Wastewater Servicing Design
Report

 Stantec
Prepared for:
Regional District of Nanaimo
Prepared by:
Stantec Consulting Ltd.

April 7, 2017

Background

MARCH
2017

The Bowser Village Wastewater project was awarded a Clean Water and Wastewater Fund Grant of approximately \$7.6 million. This represents 83% senior government funding up to project costs of \$9.15 million. Any amount over \$9.15 million would be funded at 100% **local** dollars.

Background

**APRIL
2017**

Urban Systems Ltd. was retained to advise on the process to establish the Service Area and seek elector approval for borrowing for the construction of the Treatment Plant, Collection System and Outfall

Background

MAY
2017

On May 29th, the RDN and Urban Systems Ltd. presented two preliminary options and costs for the sewer system.

In this meeting we heard a wide range of feedback, including:

- **More information** is needed about project and financing costs.
- Other project **financing options** need to reviewed (i.e. developer contributions, DCCs, etc.)
- **Greater clarity** is required in answering technical questions about the system and environmental impacts.
- Need to **simplify** the proposed scenarios (i.e. there were a lot of numbers to digest)
- Of those who attended and filled out the survey **62%** of Bowser Village Centre residents supported this initiative with the costs presented at the time.

Background

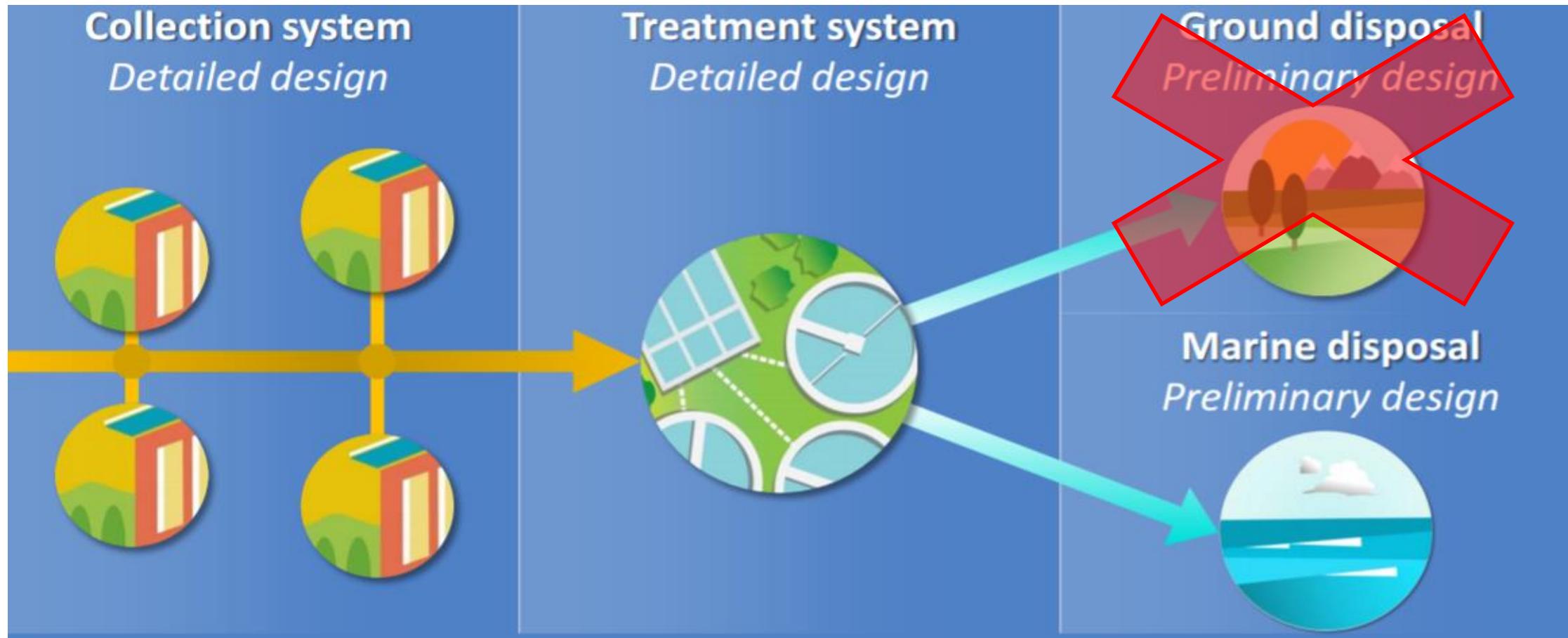
JUNE
2017

The project team (RDN and USL) reviewed several cost scenarios and have started to explore options to recover the majority of costs not covered by the grant through **Development Cost Charges (DCCs)**.

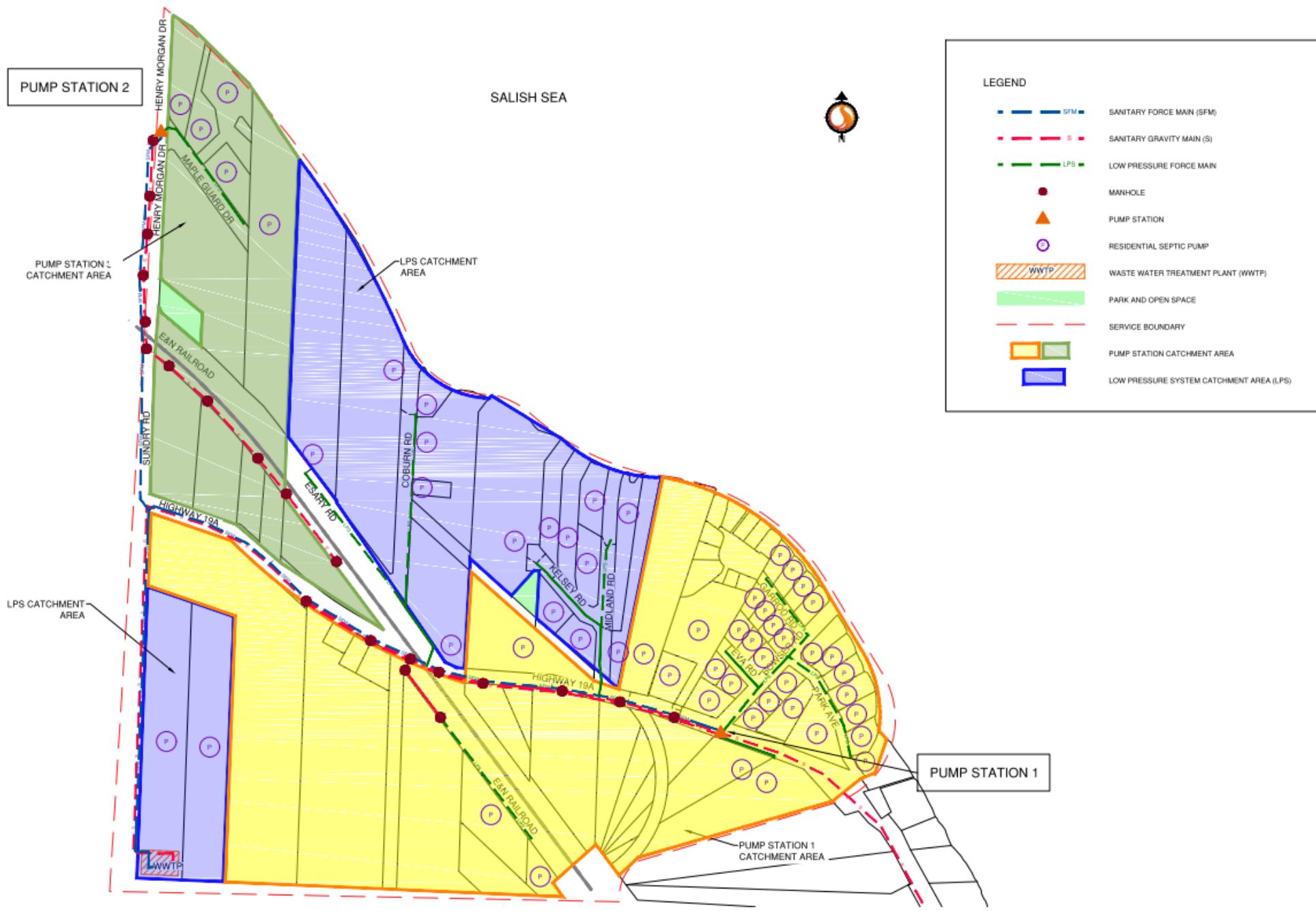
This would allow current parcel owners to pay a reduced one-time charge based on the area (m^2) of their property.

That brings us to today.

Project Components

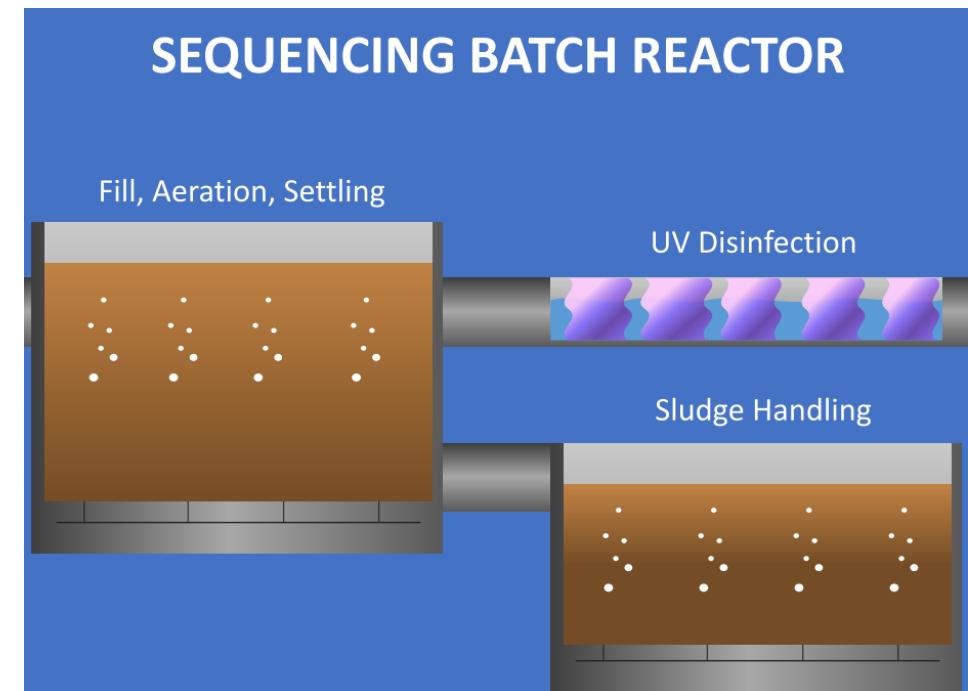


- The sewer systems can be broken into three major components – Collection System, Wastewater Treatment Plant (WWTP), and Outfall.



Wastewater Treatment Plant

- The WWTP capacity is based on a 2036 (20 year) design population of approximately 625 people. (revised from 600 from the previous presentation).
- Based on an average of 2.1 people per household (Statistics Canada) it is estimated the proposed sewer system could support a total of 298 equivalent single residential units.
- The plant is designed for secondary wastewater treatment using a Sequencing Batch Reactor (SBR) treatment process.
- The plant will meet all provincial and federal guidelines for wastewater treatment, and can be expanded in the future (Phase 2) through the addition of treatment cells.



Collection and Pump System

- The collection system has been designed to accommodate all current and future flows.
- Two pump stations will be required to transfer the wastewater to the treatment plant.
- Due to concerns from residents the pump station at the bottom of Bowser Road will be relocated to near Bowser Road and Highway 19A. This change would mean 6 additional properties will require individual pumps.
- Individual pumps will be paid for by the RDN, installation will be paid by the property owners.



Nanoose Pump Station #2 Electric Kiosk



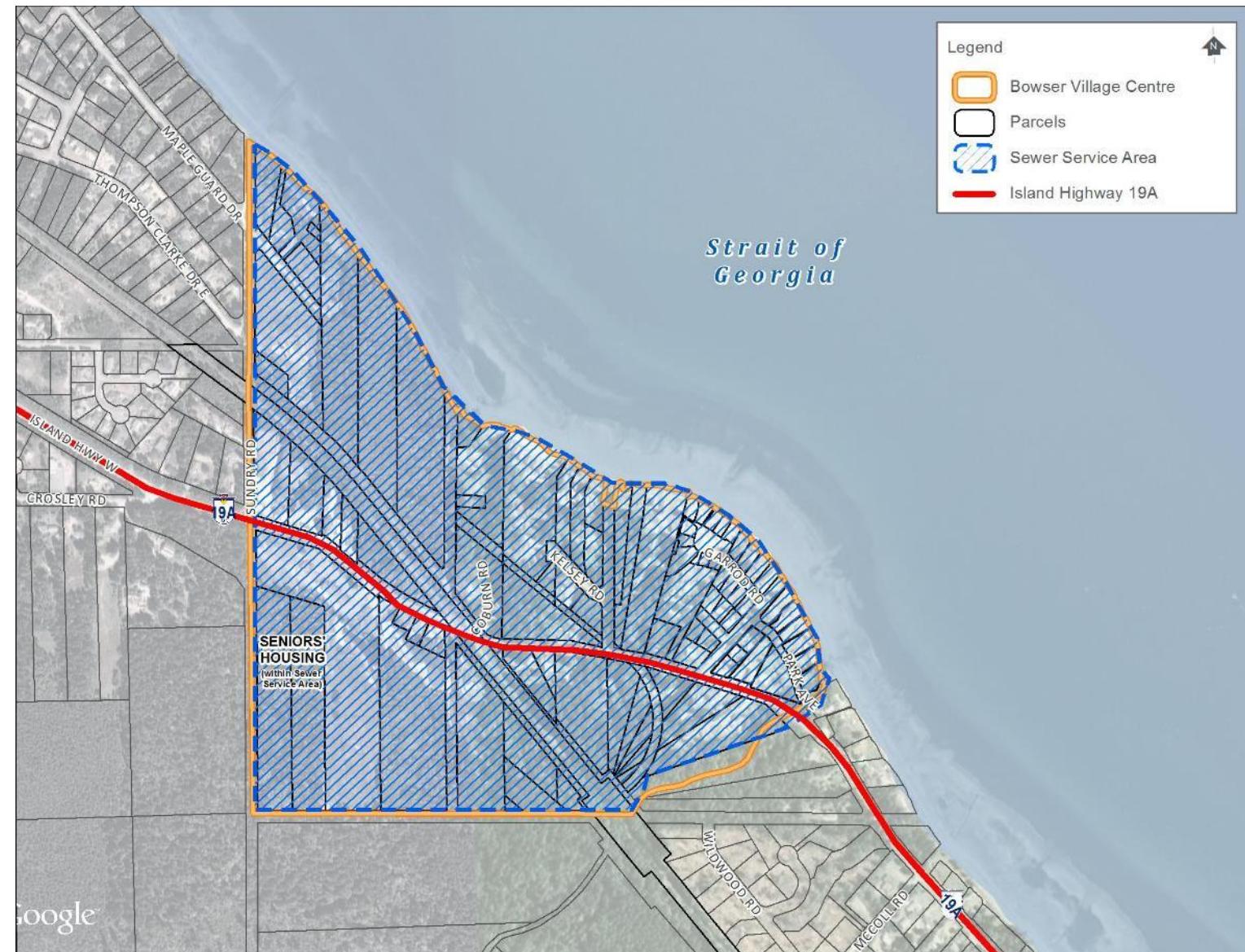
Nanoose Pump Station #2 Generator

Marine Outfall

- Several options for effluent disposal were evaluated. Due to ground and soil conditions, no suitable option was found for ground disposal.
- The engineering consultant (Stantec) has recommended marine disposal, to be designed to meet all environmental regulations.
- The proposed marine outfall will be approximately 2.3 kilometres in length, at a depth of approximately 55 metres.
- The proposed outfall will be outside the 400 metre offset from any aquaculture leases.
- The design will be further refined during the detailed design phase (throughout 2017).

Proposed Sewer Service Area

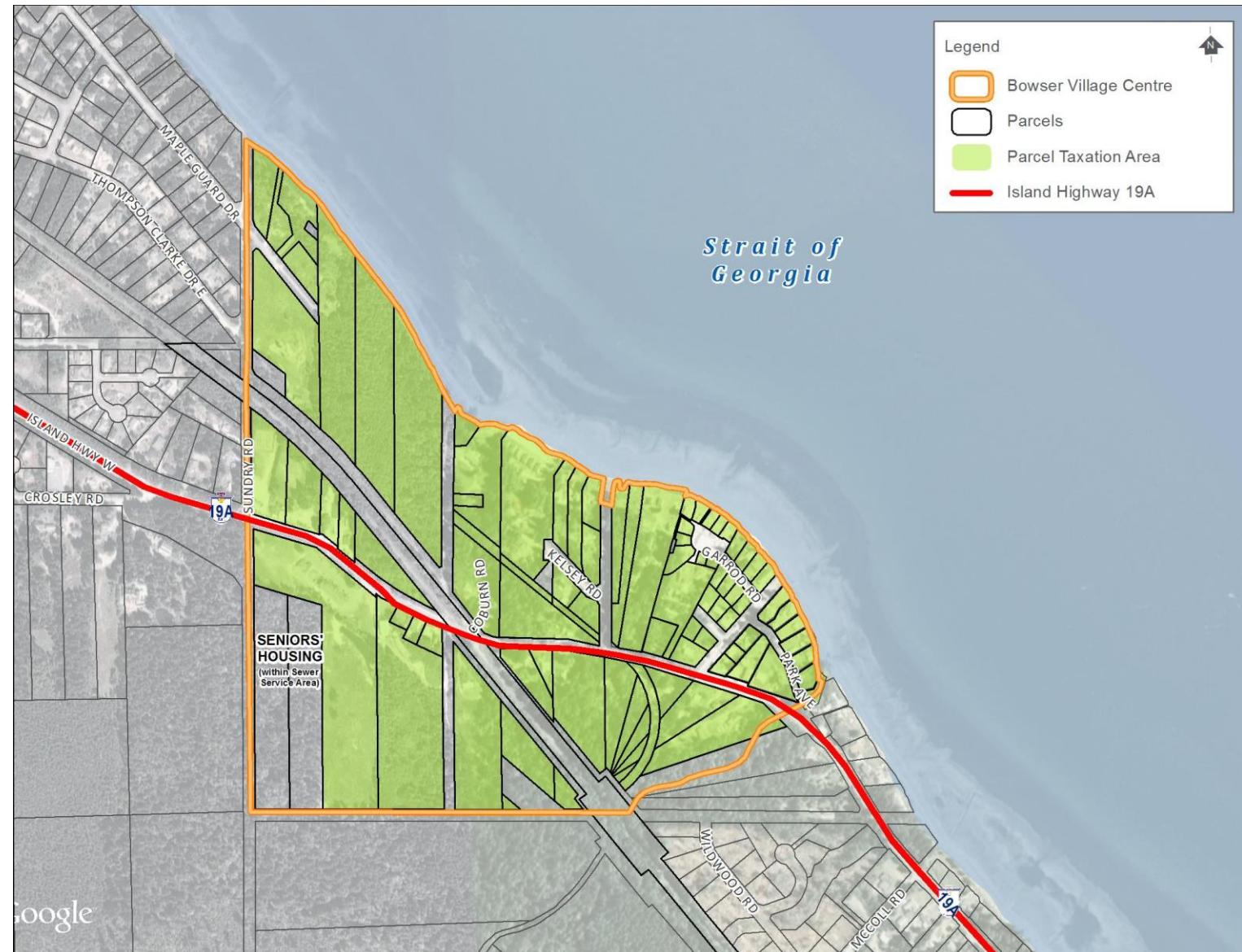
The proposed service area covers all of the parcels located in the Bowser Village Centre



Proposed Taxation Area

The proposed taxation area will cover 99 parcels located in the village centre.

The increase from 80 parcels (at the last meeting) to 99 is due to the fact that all strata properties in the service area will be required to pay parcel taxes.



Cost Overview

Project Component	Cost (\$)
Wastewater Treatment Plant (WWTP)	\$ 4,262,962
Collection System	\$ 3,877,154
Marine Outfall	\$ 2,541,395
Total Cost	\$10,681,511
Total Number of Parcels	99

Proposed Cost Recovery Method

- We are recommending that the Regional District look to recover the majority of costs not covered by the grant through **Development Cost Charges (DCCs)**.
- Potential developers would enter into a front-ender agreement with the RDN and ‘**pre-buy**’ **development units**, which would allow future development to pay for a large portion of the sewer system in advance.
- The remaining costs not covered by DCCs or the grant will be significantly reduced and paid for by existing parcel owners.
- Parcel taxes will be levied on existing parcel owners on an per area basis because it is more fair for current users who occupy properties with limited development potential.

How do DCCs Work?

DCC pay for the costs of developing and upgrading community infrastructure to meet the needs of growth.

In Bowser, Sewer DCCs will be paid by developers on a per unit basis for access to the excess capacity in the sewer system required to support their new developments.

Fee will be paid by:

1. Applicants for **subdivision approval** to create single family development sites (including single family sites that allow for suites)
2. Applicants for **building permits** to construct multi-family, commercial, industrial, institutional and congregate care development.



Proposed Charge for Current Parcel Owners

- DCCs will pay for the majority of the remaining money to develop the sewer after the \$7.6 million dollar grant is applied.
- **Existing Parcel owners will be required to pay for a much smaller portion of the remaining development costs (i.e. target less than \$5,000 for small parcels) – still a work in progress.**
- It is recommended that this money is recovered from current parcel owners in two ways based on the **area (m^2)** of each parcel.
 1. Parcels **one acre or less** will be charged a flat fee (74 parcels).
 2. Parcels **greater than one acre** will pay on a per metre (m^2) basis at a rate **per acre** (25 parcels).

Operations and Maintenance Costs

- Operations and maintenance costs are still required to pay for the ongoing operation of the wastewater treatment plant, pumps and collection systems, as well as replacing parts of the system as they age.
- Operations and maintenance costs are not included in the project costs presented. These will be in addition to the proposed cost estimates.
- Operations and maintenance costs will be split between a parcel tax (33%) to be paid by all parcels and a user fee (66%) charged as a separate fee on all properties and units receiving sewer services.
- Vacant properties will not pay the separate O+M fee.

Operations and Maintenance Costs

- Annual operations and maintenance costs are currently estimated at \$120,000 for the first year and \$150,000 for each subsequent year.
- With 99 parcels covering 90 connections this works out to approximately \$1,280 per parcel for the first year.
- As new development occurs operations and maintenance costs will be spread out amongst a larger number of properties.

Operations and Maintenance Costs

- The table below shows how O+M costs per unit could go down depending on the number of units develop between now and 2020.

Year	Total Annual Cost	Total O+M Costs
Year 1 (2019) - Base Scenario	\$120,000	\$1,280
Year 2 (2020) - Scenario 1 (+ 30 units)	\$150,000	\$1,220
Year 2 (2020) - Scenario 2 (+ 60 units)	\$150,000	\$980
Year 2 (2020) - Scenario 3 (+ 90 units)	\$150,000	\$820

- At full capacity of Phase 1 of WWTP (298 units) it works out to about \$500 per parcel per year (about \$42 per month).

On-site Costs

- A number of properties will require on-site pumps due to topography and design restrictions.
- On-site pumps will be provided by the RDN, but property owners will be required to pay for installation and ongoing maintenance.
- The cost of ongoing maintenance for an on-site pump is usually fairly low - approximately \$100 per year.
- All property owners with buildings will be required to pump out their septic tank, fill it with sand and connect to the sewer main at their property line within one year of sewer availability.
- On-site costs vary widely depending on the location of the building on a property and topography of the parcel receiving the sewer service. The typical on-site cost of installation for a single-family residence ranges from \$1,000 - \$5,000; this is a one-time cost.

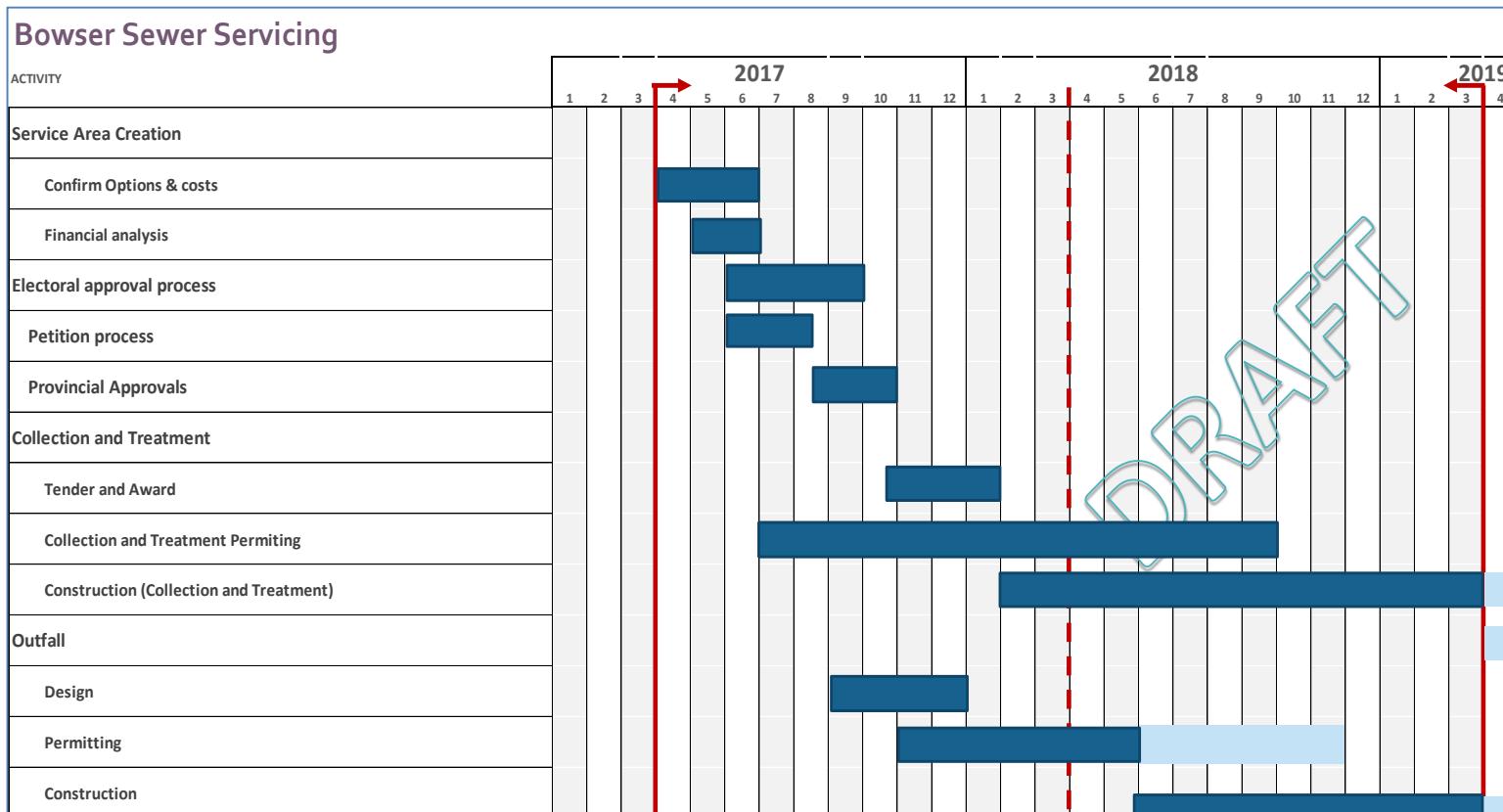
Local Service Establishment Process

Property owners in the proposed service area will decide if this project goes ahead.

- Based on our review, given the potential impact to property owners, the timing, and cost of a referendum, the RDN has selected the **petition process** to establish the proposed sewer service.
- In order for the petition to be valid, it must be signed by the **owners of at least 50% of the parcels** to be charged for the proposed service, and the persons signing must represent **at least 50% of the net taxable value of all land and improvements** within the proposed service area.
 - Residents get one vote for every property they own.
 - If a property is jointly owned, the majority of owners must agree to sign the petition.
 - For strata properties every unit or share owner gets a single vote.

Project Timeline

- Time is a very important factor in this process.
- The grant is only available for a limited time. The RDN is seeking a 1-year extension on the initial completion deadline of March 2018.
- Even a deadline of March 2019 will require a focused effort.
- A decision to proceed by property owners needs to be made this summer.



Next Steps

1

Continue discussion with all owners / developers within the potential Local Sewer Service Area to answer any questions and prepare a petition to establish the sewer service.

Follow-up meeting tentatively scheduled for **Wednesday, July 19th**

In the next meeting residents who support the Bowser Sewer project will be given an opportunity to sign the petition.

Next Steps

2

If proceeding with the establishing the sewer service:

- Owners introduce a petition to the RDN.
- If the petition is approved, develop a Local Service Establishment Bylaw and Loan Authorization Bylaw with confirmed local service area and collection method.
- Bring bylaw(s) forward for review and adoption by the RDN Board at the August meeting.

Next Steps

3

If **not** proceeding with establishing the sewer service:

- The sewer project will not be approved and will not be constructed

Thank You

For more information

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www.urbansystems.ca

