

October 10, 2013

Workbook

YOUR CONTACT INFORMATION

Name:

Organization name:
(if applicable)

Mailing address:

City:

Email:

Phone:

Metro Vancouver will provide ongoing opportunities for public input throughout all phases of this project.

Please complete and return this form by **October 17** to:

Metro Vancouver
Public Involvement Division
4330 Kingsway
Burnaby, B.C. V5H 4G8

Phone: 604-432-6200
Fax: 604-432-6297
Email: icentre@metrovancover.org

This survey is also available on the Metro Vancouver website at www.metrovancover.org/lionsgate

Note: Personal information and input contained in this feedback may be compiled with other public responses and included in a report to the Metro Vancouver Board of Directors. Such reports are available to the public. All submissions will be treated with confidentiality by Metro Vancouver staff and contractors; however, information that identifies you as the source of those comments may be publicly available if a Freedom of Information request is made under the Freedom of Information and Protection of Privacy Act.



A. Project Background

Sewerage systems and wastewater treatment plants prevent the spread of waterborne diseases and protect the receiving environment so that liquid waste does not harm water quality and living things in fresh and marine waters where treated effluent is released. Secondary treatment is an additional treatment step that takes place after primary treatment and removes about 95 per cent of the organic materials in wastewater.

Primary treatment is a mechanical process that removes materials that settle or float. It removes 50 to 60 per cent of the total suspended solids (TSS) and 30 to 50 per cent of the biochemical oxygen demand (BOD).

Upgrading to secondary level treatment has been a federal and provincial requirement since the 1990s, when Metro Vancouver was ordered to upgrade the Annacis Island and Lulu Island treatment plants.

The existing Lions Gate Wastewater Treatment Plant opened in 1961 to serve the North Shore municipalities of the District of West Vancouver, the City of North Vancouver and the District of North Vancouver. The plant, which has provided primary treatment for over 50 years, is one of two remaining primary treatment plants in the region.

In 2011, the B.C. Environment Ministry approved Metro Vancouver's Integrated Liquid Waste and Resource Management Plan. The plan confirmed that the Lions Gate primary plant would be upgraded by 2020 and the Iona Island primary plant would be upgraded by 2030. These are the last two remaining primary treatment plants in the Metro Vancouver region. To meet the requirement for the Lions Gate plant, Metro Vancouver will build a new secondary treatment plant at a site approximately two kilometres east of the existing treatment plant.

Construction of the new facility, expected to be completed by 2020, will protect public health and the environment, and fulfill the commitment made in Metro Vancouver's Integrated Liquid Waste and Resource Management Plan.

Project Phases and Timeline

- Project Definition: Jan 2012 - Dec 2013
- Design and Construction: Jan 2014 - Dec 2020
- Existing Plant Decommissioning: 2021

B. Project Objectives

- **Secondary Wastewater Treatment:** The facility will meet the requirements for secondary level treatment as defined in the new Canada-wide Strategy for the Management of Municipal Wastewater Effluent while incorporating Operations & Maintenance efficiencies for Metro Vancouver.
- **Integrated Resource Recovery:** After assessing the potential project costs and opportunities -- referred to as business case analysis -- the project will optimize generation and capture of valuable materials that can be repurposed for fuel, water, fertilizer and heat, assisting Metro Vancouver in reducing its energy costs, carbon footprint, effluent discharge and environmental impact.
- **Sustainability Targets:** Driven by the business case analysis, the project will demonstrate Metro Vancouver's values and commitment to sustainability, while fulfilling its mandate to provide a core service.
- **Community Integration:** The project team will work with stakeholders to create an inclusive process, resulting in a strong community asset benefiting the ratepayers and municipalities of the North Shore and the region.

C. Indicative Design

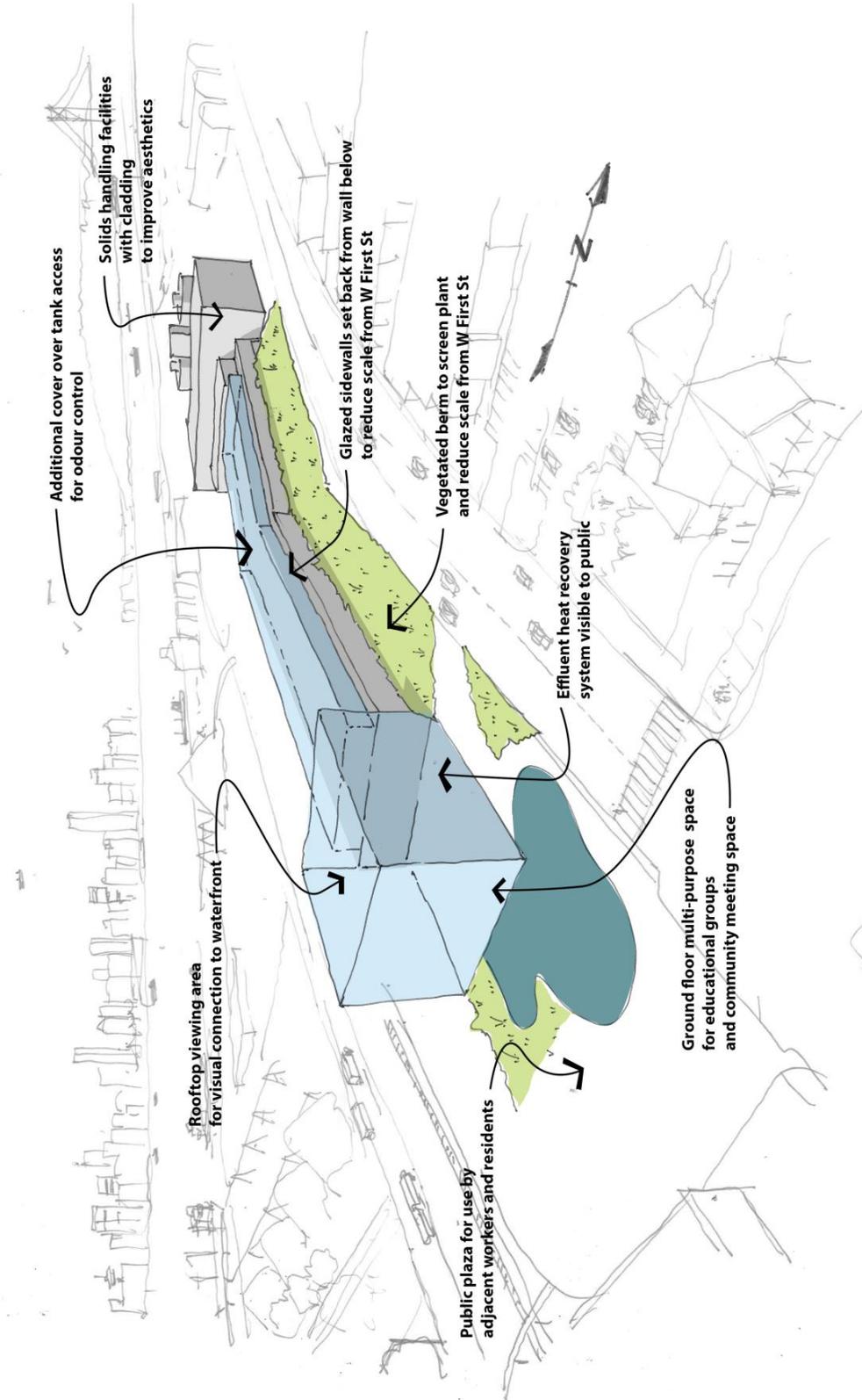
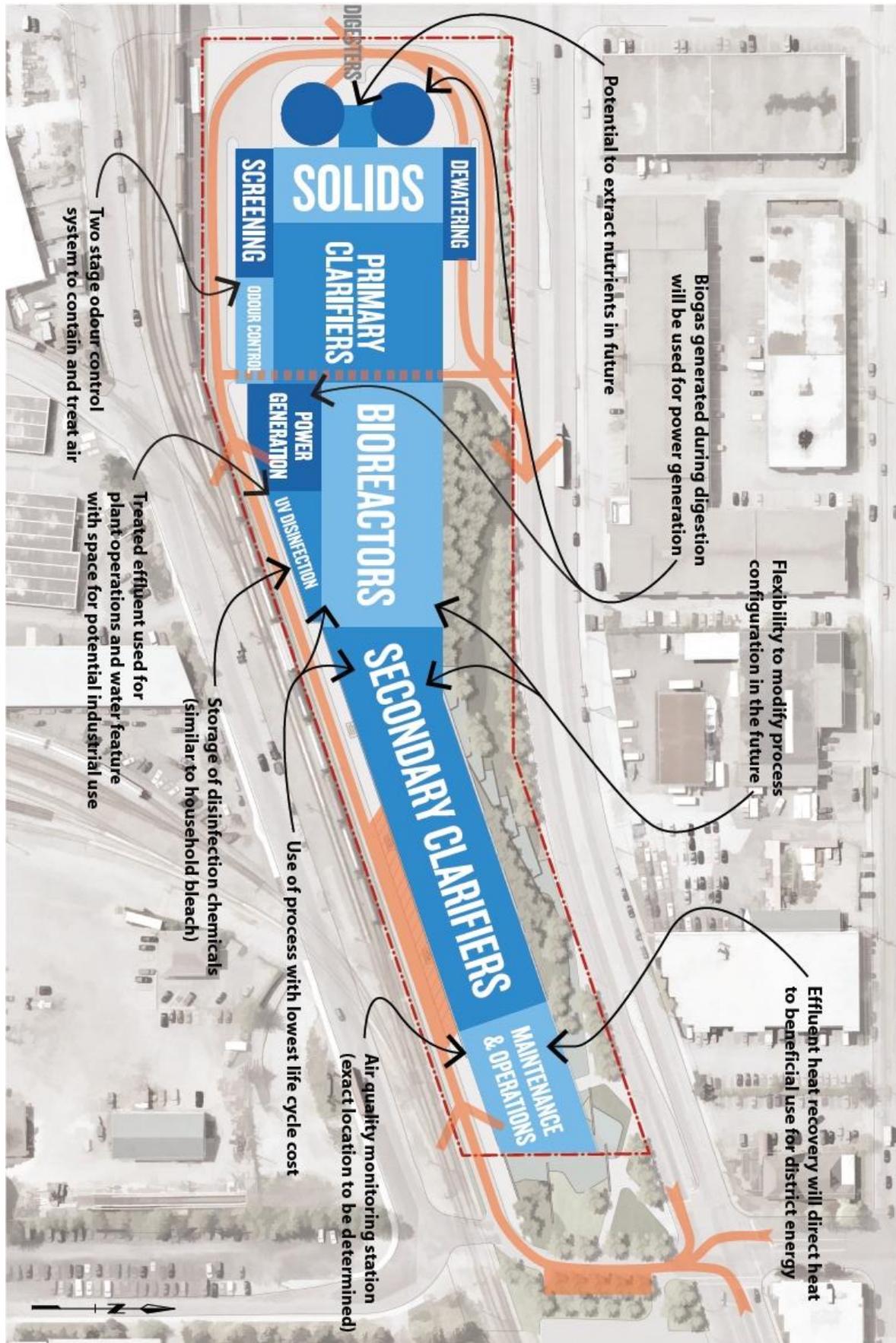


Figure 1

Thank you for your time and comments
7913381



Thank you for your time and comments
7913381

Figure 2

Through the public engagement process, Metro Vancouver has heard about local community values such as:

- A livable and prosperous neighbourhood for residents and businesses
- Clean air and water for everyone
- A safe, quiet, and accessible community for people to walk, cycle and drive
- Greenspace and recreation places
- Education is important for adults and children alike
- Resiliency to changing requirements
- Good value for money.

1. Does the Indicative Design respond to community values? (Mark one)

Strongly
Agree

Agree

Neither Agree
nor Disagree

Somewhat
Agree

Do not agree
at all

Is there anything missing?

Throughout the Project Definition phase, Metro Vancouver has heard community feedback on many issues including odour control, visual aesthetics, truck traffic, and noise, resiliency to sea-level rise and changing regulations, as well as costs to taxpayers. These potential community impacts have been considered in the development of the Indicative Design (please refer to Figure 1 and 2).

2. Does the Indicative Design address potential community impacts? (Mark one)

Strongly
Agree

Agree

Neither Agree
nor Disagree

Somewhat
Agree

Do not agree
at all

Is there anything missing?

D. Project cost

The new secondary treatment plant is estimated to cost between \$500 million to \$700 million to construct (in 2018 dollars). Future decisions during the detailed design and construction phase, along with other factors, will have an effect on the cost. Metro Vancouver is seeking federal and provincial funding to help pay the capital costs of secondary treatment, so local taxpayers do not have to pay the entire bill. In the past, the federal and provincial governments have made substantial funding contributions to wastewater treatment upgrades.

Metro Vancouver does not yet know how much money the federal and provincial governments will contribute to help pay for wastewater treatment upgrades required by both the provincial and federal governments. Metro Vancouver will inform the public when federal and provincial governments make a decision regarding funding support.

Currently, all member municipalities help pay for the capital costs of upgrading regional wastewater treatment facilities. A long-standing cost allocation formula determines what percentage of capital costs are paid by the North Shore, and what percentage of capital costs are paid by the region as a whole. Currently, the Metro Vancouver Board is reviewing the cost allocation formula for secondary treatment upgrades.

The utility fees that residents, businesses and industries pay for the regional sewerage system and wastewater treatment will increase. The additional cost cannot be estimated yet because many cost-related decisions have yet to be made. Metro Vancouver and its North Shore member municipalities will notify the public of the estimated increase in utility fees once the funding information is available.

Project delivery (procurement)

In order to obtain federal and provincial level funding for this project a Public-Private Partnership (P3) business case is required. As part of the Project Definition phase, work has been done, in consultation with Partnerships BC and P3 Canada, to assess if a P3 option provides value-for-money that would indicate a preferred alternative project delivery method.

The Metro Vancouver Board will consider the business case, policy and cost-related issues and determine whether the new plant will be designed and built using the traditional delivery method (Design-Bid-Build), Design-Build, or a P3 (such as Design-Build-Finance-Operate-Maintain).

F. Next steps

- The project team will review and finalize the current indicative design in light of feedback from the public and decision makers.
- Metro Vancouver staff present the recommended indicative design and project delivery method (including feedback from North Shore Councils and the public) to Metro Vancouver Utilities Committee (November 7), before it is presented to the Metro Vancouver Board (November 15) for a final decision on whether to move forward to the next phase of the project.
- After an indicative design is approved by the Metro Vancouver Board, the Project Definition phase will be complete.
- Consultation will continue with the broad community and stakeholder groups during the second phase of the project: Design and Construction.

Thank you for your time and comments

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